Keynote speakers

Scott Diener

Scott is the Associate Director, IT Services (Academic & Collaborative Technologies) at the University of Auckland. Over the past two years he has led the development of the University of Auckland's simulation island in *Second Life*, and is active in many international groups related to the use of virtual worlds in higher education. Scott's keynote will explore the use of *Second Life*, and other virtual worlds, as a medium for simulations in the teaching of medical sciences

Grainne Conole

Grainne is a Professor of e-Learning at the Open University, UK. She previously held positions of leadership in Education Innovation and Learning Technology at the Universities of Southampton and Bristol. Grainne has an impressive history of innovative thought and publication in the areas of educational and organisational change, and has been a past presenter at ascilite conferences

James Clay

James Clay is and has been passionate about the use of learning technologies to enhance and enrich the learning experience since 1991. He has used, developed, managed and inspired others in a range of technologies, from DTP, CD-ROM, mobile devices, the internet, the VLE, the MLE, mobile learning through to Web 2.0. James has been ILT & Learning Resources Manager at Gloucestershire College since November 2006. He is responsible for the VLE, the use of learning technologies, e-learning, mobile learning, the libraries, digital and online resources and the strategic direction of the college in relation to the use of learning technologies.

Invited speakers

Mark Nichols

Has a BMS (Management Studies, Hons) and an MA in Open and Distance Education (Distinction) from the Open University, UK. He has worked as an e-learning specialist in New Zealand's polytechnic and university sectors, and is currently working on a doctorate through the University of Otago. In 2005 Mark was recognised as a flexible learning leader in New Zealand, and he proposed and chaired the eCDF project that resulted in Mahara (an open source ePortfolio platform) during 2006-7. Mark is currently employed as e-learning specialist at Laidlaw College, Auckland.

Peter Mellow

Peter is from AUT University in Auckland. He was awarded a NZ National Tertiary Teaching Excellence award in 2007 and is well known around NZ for his informed, passionate and energetic presentations on the use of technology in learning

Rick Bennett

For the last 18 years, Rick has been part of the School of Design Studies at the College of Fine Arts (COFA), University of New South Wales, while more recently he is also Visiting Professor at De La Salle University in Manila.

In 1998, Rick founded The Omnium Research Group, an ongoing research initiative which explores online collaborative creativity (OCC) for educational and professional settings in the visual arts and design. Five years later, he was also appointed head of COFA Online, a newly formed academic unit established to design, produce and host fully online education courses across a range of art and design disciplines.

Over the last decade Rick's work through Omnium has evolved from directing numerous global online projects, to a recent series of online outreach projects to help communities in less fortunate parts of the world. Such projects have included designing visual public awareness campaigns of critical health issues for villagers in Kenya and Uganda, as well as producing contemporary designs for urban installations and home ware products made by embroiderers and woodworkers in remote, rural regions of the Philippines.

Rick has presented his work widely, both nationally and internationally, and received numerous commendations and research grants for his work in online learning and teaching, and design studies. Rick was the recipient of the ascilite President's Award in 2005

Abstracts of full and concise presentations

(in alphabetical order of first author)

Blended spaces, different places: Getting the blend of ingredients right in a cross-cultural learning context

Anne Abraham
School of Accounting, University of Western Sydney

As an increasing number of tertiary institutions are providing more blended learning spaces in an increasingly diverse cross-cultural space, it is imperative that the appropriate ingredients are blended in such a way as to satisfy the needs of these international participants. Since technology in itself is insufficient to meet this need, consideration must be given to the effect of culture on the various components of blended unit delivery. This paper reports on a research study of an accounting subject presented to two cohorts of engineers, one in Australia and one in Hong Kong. In terms of delivery of a blended subject in a cross-cultural context, it is proposed that one of the most important ingredients is the amount of face-to-face contact time to which students are exposed, with Chinese students performing significantly better as this is increased. Cultural differences also presented implications for assessment with students achieving better results when they worked in smaller groups, contrary to their stated choices.

An examination of learning design descriptions in an existing learning design repository

Shirley Agostinho, Sue Bennett, Lori Lockyer, Lisa Kosta, Jennifer Jones and Barry Harper
Faculty of Education, University of Wollongong

The past decade has seen a significant expansion of flexible learning in higher education as new communication technologies have broadened the scope and potential for online learning. With this expansion has come the need for pedagogically sound learning experiences and an interest in reusing effective pedagogical designs. The concept of a 'learning design' - a formalism for documenting educational practice to facilitate sharing and reuse by teachers, is being researched as one way of supporting dissemination of 'best practice'. This paper reports an analytical study that sought to advance understanding of what constitutes an effective learning design description based on an analysis of learning designs in an existing repository. The study contended that an effective learning design description comprises a clear description of the pedagogy, a quality rating and advice on potential reuse. Six, from a repository of 32, were identified as effective learning design descriptions.

Blogs as protected spaces for language learners

Antonie Alm
Department of Languages and Cultures, University of Otago

This paper discusses the idea of blogs as protected spaces for language learners. Gumbrecht (2004) suggested that blogging provides the writer with more control over the communication episode and is therefore the preferred mode of interaction for some people. This study investigates the suitability of this concept for language learning. The discussion is based on the experience of 15 language learners who used a blog for self-reflection and peer-to-peer interaction as part of a tertiary German language course. The experience of these learners shows that blogging can provide language learners with a personal space in which they feel safe to express themselves and to interact with other learners. Blogging can therefore have a positive effect on their willingness to communicate, which is one of the main objectives in second language education.

Investigating online museum exhibits and personal cognitive learning preferences

Asmidah Alwi and Elspeth McKay
School of Business Information Technology, RMIT University

Web-based technologies offer opportunities to enhance the design of online learning environments. As a result, many museums around the world are now adopting ICT tools that emphasise the use of Web-based multi-media, which enrich and fulfil their visitors' learning experiences. Nevertheless, awareness of the complexities of human computer interaction (HCI) has presented a new dilemma that challenges the design and development of content for online learning systems. As tempting as it is, the adoption of these emerging ICT tools in a museum needs to be aligned with appropriate instructional strategies to ensure the effectiveness of their visitors' learning outcomes. This paper describes the research in progress that investigates the interactive effects of information systems interface (ISI) access with students' cognitive style preferences when participating in museum learning experiences.

Introducing a learning repository using a blended professional development approach

Kim Atkinson, Gail Fluker, Leanne Ngo, Mary Dracup and Patricia McCormick
Institute of Teaching and Learning, Deakin University

This paper outlines the professional development program used to introduce a learning repository at Deakin University. Providing appropriate, timely and effective professional development programs to support academic and other

staff is one of the objectives of the *Deakin University Teaching and Learning Functional Plan 2008*. Our blended program combines web-based and face-to-face training with a wide variety of resources to support staff. Issues noted in the literature relating to the introduction and use of learning repositories informed the planning and development of our program. Challenges and issues we experienced at Deakin are also outlined.

Teaching statistics using a blended approach: Integrating technology based resources

Norhayati Baharun and Anne Porter
School of Mathematics and Applied Statistics, University of Wollongong

This paper presents the results of a study investigating the use of face-to-face components of teaching and technology-based resources in teaching statistics via a blended approach. The student perspective is the focus of investigation which involved 38 on-campus students who enrolled in an introductory statistics subject at University of Wollongong. Assessment items and the laboratory manual and tasks that precede assessment were found to be of greatest importance in assisting students to understand. Students' perceptions were that learning outcomes were positively impacted by both traditional and technologically based resources both in terms of student understanding of topics and increased their confidence in learning statistics.

Seventeen years in the evolution of an online instructor's views about ICT innovation

John Barnett
Faculty of Education, The University of Western Ontario, Canada

This paper is a narrative account of the author's online learning first as a student then as an instructor from 1992 to the present with specific attention to the years from 1999 to 2009. During this time frame the author was constantly teaching/researching his own online courses in New Zealand and Canada with colleagues from New Zealand, Canada and the United States to draw out some of the meanings of online learning and teaching. In this narrative inquiry (Lieblich, Tuval-Mashiach, & Zilber, 1998), he argues that the cycle of innovation, development, and standardization, although rational, produces a negative affect for early adopters due to the strains that develop as a new technology is adopted and used throughout mainstream education. He also proposes a model called DRAGS to account for his experiences.

The indicators project identifying effective learning: Adoption, activity, grades and external factors

Colin Beer and David Jones
Curriculum Design and Development, Central Queensland University
Ken Clark, Arts, Business, Information & Ed, Central Queensland University

Learning management systems have become almost ubiquitous as a technical solution to e-learning within universities. Extant literature illustrates that LMS system logs, along with other IT systems data, can be used to inform decision-making. It also suggests that very few institutions are using this data to inform their decisions. The indicators project aims to build on and extend previous work in this area to provide services that can inform the decision-making of teaching staff, management, support staff and students. Through an initial set of three questions the paper offers support for some existing critical success factors, identifies potential limitations of others, generates some new insights from a longitudinal comparison of feature adoption of two different LMS within the one institution, and identifies a number of insights and ideas for future work.

Use of the Bonedoc DHS simulator by fifth year medical students: A pilot study

Phil Blyth and Prerna Sehgal
Faculty of Medicine, Otago University

To date virtual reality simulations of operative procedures have been extensively tested and utilised by advanced surgical trainees. The increasing number of medical students has meant that the amount of exposure to surgical procedures is reducing, and direct involvement of the medical student within those procedures is decreasing. The Bonedoc DHS Simulator for fixing hip fractures was trialled within the orthopaedic attachment. An online questionnaire was completed by 31 fifth year medical students, the control group of 17 students had no exposure to the simulator, and 14 students had access to the simulator. Despite similar operative exposure, the intervention group scored significantly higher on understanding key aspects of hip fracture. The simulator did not in itself stimulate interest in orthopaedics (3 of 14 students). Unfortunately tight security on hospital computers restricted students' use of the simulator. Twenty-four hour access to the simulator was deemed important (9 students agreed, 0 disagreed, 5 unanswered).

Where are the learning spaces on the scientific inquiry landscape?

Anna Boin and Kristine Elliott, The University of Melbourne
Helen Irving, Monash University
Victor Galea, The University of Queensland
Elizabeth Johnson, Latrobe University

Today's science graduates are more likely to become scientists without postgraduate research training, yet they seldom possess the skills to work as scientists. There is therefore a need for undergraduate students to not only learn scientific concepts, but also be able to inquire using scientifically sound methods. This ALTC funded project has investigated how Australian university educators are teaching scientific inquiry and what roles educational technologies play. A range of approaches for teaching scientific inquiry have been identified. Similarly, technology has played diverse roles in these teaching activities. In the Australian context, we have technologies affording the following learning experiences: guided learning spaces; virtual learning spaces that facilitate communication; and giving students exposure to the technologies used by professional scientists. There are, however, various reasons why educators do and do not choose to embrace educational technologies in their teaching of scientific inquiry. This paper reviews educators' choices and thus questions the perceived advantages and disadvantages using technologies to teach scientific inquiry.

Developing online training materials in molecular biology: Enhancing hands-on lab skills

Rachel Boulay, Cynthia Anderson and Alex Parisky
Center for Cardiovascular Research, University of Hawaii
Chris Campbell
School of Education, The University of Notre Dame Australia, Sydney

A well-accepted form of educational training offered in molecular biology is participation in active research laboratories. However, this approach to learning severely restricts access. Addressing this need, the University of Hawaii launched a project to expand this model to include newly developed online training materials in addition to a hands-on laboratory experience. This paper explores the process of material development and assessment plans. A pilot case study of a science teacher who embarks on learning molecular biology over a four-month period through online training materials and working side-by-side with medical researchers in a laboratory is described. Feedback suggested that the initial online materials over-emphasized abstract concepts and laboratory techniques and did not adequately connect to the active research problems and local context of most interest to teachers and students. The implications for improving blended learning experiences from this specific case are suggested.

Conceptualising Web 2.0 enabled learning designs

Matt Bower, John Hedberg and Andreas Kuswara
Department of Education, Macquarie University

This paper describes an approach to conceptualising Web 2.0 enabled learning design based on the TPACK model of educational practice.

Anderson and Krathwohl's Taxonomy of Learning, Teaching and Assessing, along with different types of constructive and negotiated pedagogies are related to a range of contemporary Web 2.0 based learning tools. The model is resilient to the emergence of new Web2.0 tools in so far as it views technology as only a mediator of pedagogy and content. A framework of typical use cases is offered to illustrate the range of learning designs that may be applied for different purposes, in order to promote more expedient application of Web2.0 technologies in teaching and learning.

Increasing flexibility for staff development:
Modelling good practice at the University of Western Sydney

Tom Bowring and Lynnae Rankine
University of Western Sydney

Crafting a quality online learning and teaching environment requires specialist skills and knowledge that can be achieved through well designed and engaging staff development activities. However, as many academic staff have busy workloads balancing the design of e-learning environments, teaching students, undertaking administrative tasks and pursuing research endeavours, engaging these staff in e-learning staff development activities is a challenge. Complexity is added to this scenario when academic staff are geographically dispersed across campuses and staff development programs are centrally provided. This paper describes the staff development approaches of a multi-campus university to engage academic staff in the development of their e-learning knowledge and skills.

Open educational resources: A new creative space

Tom Browne and Matthew Newcombe
Education Enhancement, Academic Services, University of Exeter UK

Several agencies in the UK are funding a national programme to develop an infrastructure to support Open Educational Resources (OER). Policies and procedures are being defined and repositories and metadata are being established. Much of the graft involves Intellectual Property Rights (IPR) clearance. But the greatest challenges are with the educational value of the material that is deposited and how they can facilitate and enhance learning. The ambition is for OER to contribute to the teaching-research nexus, where staff and students can meet in a creative space, co-creating resources within an active, co-dependent and interactive curriculum. This paper describes how one University in the UK is currently developing an OER at the institutional level and the challenges that are being encountered.

Using generic learning designs to promote good teaching and learning practice

Leanne Cameron
Macquarie E-Learning Centre of Excellence, Macquarie University

If an effective learning design could be transferred from lecturer to lecturer, from discipline to discipline and/or from university to university, then good teaching and learning practice could be shared. Effective learning designs promote student engagement, productive learning and optimise student retention (Scott, 2005). The aim of this study was to establish whether academics and educational designers considered effective learning designs could be used to introduce different teaching and learning approaches. The results from this pilot indicate that this is not only feasible but it will also facilitate the promotion of quality teaching and learning throughout the higher education sector. This study is the initial phase of a broader ALTC project, details of which are also outlined in this paper.

Using learning activity management systems with pre-service secondary teachers: An authentic task

Chris Campbell
School of Education, The University of Notre Dame Australia, Sydney
Leanne Cameron
Macquarie E-Learning Centre of Excellence, Macquarie University

Within an authentic learning framework, second year pre-service teachers were introduced to LAMS (the Learning Activity Management System) as part of one of the information and communication technology (ICT) units they are required to complete as part of their course. Using case study methodology, the students returned some interesting results: LAMS helped the students plan all aspects of their lesson and allowed them to preview their lesson from the learner's perspective. Additionally, the software provided a visual overview of the lesson which assisted them to identify the learning styles that were addressed with the activities employed. Students also saw the benefit in the production of standardised templates of activities that could easily be modified for future re-use.

Using 3D-3D-virtual worlds to teach decision-making

Matthew Campbell
School of Education, Australian Catholic University National

This paper presents the results of a pilot study of a project that uses 3D-3D-virtual world technologies, namely *Second Life*, as a platform for learning simulations through role plays with the intent to improve the development of professional decision making amongst pre-graduate teachers undertaking a unit in professional ethics. At present students engage in discussion of

ethical issues and case studies within the classroom environment as tools for learning decision-making and developing moral sensitivity. However, the effectiveness of these are limited by the already existing identities and social relationships of the students and the scenarios lack the social complexities evident in the professional world. This pilot study reflects on the first use of the 3D-3D-virtual world to teach in this manner and highlights some of the limitations and possibilities that are to be considered in the larger research study.

Exploring the R2D2 model for online learning activities to teach academic language skills

Helen Cartner
Faculty of Applied Humanities, Auckland University of Technology
Julia Hallas
Education and Professional Developm't, Auckland University of Technology

This paper explores the R2D2 model for online learning activities – a cycle of Read, Reflect, Display and Do. Its application to an English for Academic Study programme, provides a framework for the development of a constructivist environment which supports collaborative and active learning experiences in a blended space. Using a questionnaire, students evaluated four learning activities based on the R2D2 model. Although limited in terms of its data gathering method, the evaluation of the R2D2 model was an initial enquiry into its perceived benefits by students. Analysis suggests that the results were favourable, giving insights into the importance to learners of real-life activities, which assist the learning of academic skills for vocabulary acquisition, pronunciation, note taking and presentations.

Bachelor of Professional Communication learning network: Creating an online community for lifelong learning

Ken Clark and Colin Beer
Central Queensland University

One of the shaping influences in the student journey is the Learning Management System (LMS) used by universities. The Bachelor of Professional Communication (BProfComm) Project at CQUniversity aims to provide students, staff, and industry practitioners with a discipline wide, online learning network, enabled by Web 2.0 technology. This may alleviate some of the inherent problems associated with the LMS, and in so doing, may aid in the construction of discipline based and professional networks. This document is reporting on the development phase of what an educational action research project and its subsequent failure to engage with students.

E-learning in industry: Case studies from New Zealand

John Clayton
Emerging Technologies Centre, Waikato Institute of Technology

In an increasingly Information and Communication Technology (ICT) dependent world, industry leaders are recognising the critical need to investigate the potential of ICT in developing workplace competencies. It is considered a strategic imperative to be aware of effective processes, procedures and plans to improve workforce capability through the implementation of e-learning applications, strategies and techniques. The aim of the "Using e-learning to build workforce capability: A review of activities" project was to produce a series of research reviews which would increase awareness in industry of the development, delivery and impact of effective, cost efficient and educationally sound work-based and work-placed e-learning. This paper presents the findings of the third phase of that research project and outlines the key findings from six case studies undertaken. The findings indicate there will be a steady, but notable, increase in the use of ICT and e-learning applications to enhance traditional training methods in industries.

Smartphones give you wings: Pedagogical affordances of mobile Web 2.0

Thomas Cochrane
Te Puno Ako (Centre for Teaching and Learning Innovation), Unitec
Roger Bateman
Product Design, Unitec

Built on the foundation of four years of research and implementation of mobile learning projects (mlearning), this paper provides an overview of the potential of the integration of mobile web 2.0 tools (based around smartphones) to facilitate social constructivist pedagogies and engage students in tertiary education. Pedagogical affordances of mobile web 2.0 tools are evaluated, and student usage and feedback is outlined via an interactive multimedia timeline (using YouTube videos) illustrating how these mobile web 2.0 pedagogical affordances have transformed pedagogy and facilitated student engagement in a variety of course contexts. A rubric for evaluating appropriate smartphone choices is provided, and a model for implementing mobile web 2.0 pedagogical integration is presented.

Discovering aesthetic space online?

Tracey-Lynne Cody
College of Education, Massey University

In this concise paper, I present an account of my recent experience designing blended-delivery pre-service teacher education in drama and

dance. The challenges of space and the role of the teacher in arts pedagogy are examined and reconceptualised in order to develop learning experiences that have greater equivalence across delivery modes. The question of "can we create drama and dance together without ever being in the same room?" is explored.

Student use of web based lecture technologies in blended learning: Do these reflect study patterns?

Pippa Craig, Muru Marri Indigenous Health Unit, University of NSW
Helen Wozniak, T & L Quality Group, Charles Darwin University
Sarah Hyde, School of Biomedical Science, Charles Sturt University
Daniel Burn, IT Unit, Faculty of Medicine, The University of Sydney

Recording of lectures and providing web based access to them is becoming mainstream in higher education courses despite the debate about the value of such delivery modes. How students access these materials and use the affordances provided by the various outputs has largely been reported by surveying students and lecturers about their experiences. This study reports on the provision of web based lecture technology to medical students studying in a blended learning space. Log data files over a 2 year period were used to investigate the usage patterns of students and derive greater understanding about how students make use of electronic media. This analysis reveals some of the different ways in which students used the online materials; thus providing some evidence for mapping the effectiveness of blended learning spaces.

Virtualisation: A case study in database administration laboratory work

Greg Cranitch and Michael Rees
School of Information Technology, Bond University

This paper discusses the issues involved in using virtual machines to teach database administration concepts and the associated issues in a university student environment. Previous work on using virtual machines in system/network administration university labs is reviewed as well as the use of virtual machines in a database development environment. A virtual machine project for a Virtual Information Technology Teaching Laboratory (VITTL) using central servers offering a potential solution is described. This solution provides a secure environment with each student isolated from others with their own virtual machines.

Design patterns for computer supported groupwork

Kashmira Dave
CoCo Research Center, University of Sydney

This paper describes work-in-progress in the area of educational design patterns. More specifically, the paper highlights a relatively neglected area in educational design for technology-supported learning – the various ways in which students can be grouped together to work collaboratively on study activities. Thus, it looks at the 'people' component of the 'task, tools and people' design model. The paper outlines this design model, sketches the 'people' component and offers an example design pattern to illustrate how design knowledge can be shared through design patterns and pattern languages. The research has implications for anyone who is concerned about sharing good ideas for technology-supported collaborative learning, whether in small, medium-sized or large groups (from dyads to learning communities).

Adapting social media as a scaffolding tool for teaching health informatics

Karen Day and Stewart Wells
National Institute for Health Innovation, University of Auckland

Health informatics is an applied hybrid discipline of health and life sciences, computer science and business. Teaching this subject to undergraduate students, presents the challenge of learning without the assistance of internship or work experience that enable placing the learning in context. We used the university's learning management software as a form of social medium to stimulate discussions in preparation for two assignments, while creating an environment in which scaffolding could occur for both students and teachers. An iterative action research process was used, which included an assessment of student digital mindedness, scaffolded online discussions that were assessed as part of each of the two assignments, and a questionnaire at the end of the semester. We found that the online discussions were valued by the students and added value to their learning, because they could use their social presence in a format familiar to them, and also use a process of collaborative knowledge creation about health informatics.

Learning or performance: Predicting drivers of student motivation

Shane Dawson
Graduate School of Medicine, University of Wollongong, Australia
Leah Macfadyen
Science Centre for L & T, University of British Columbia, Canada
Lori Lockyer
Faculty of Education, University of Wollongong, Australia

There is substantial research demonstrating that a student's motivation for learning can be largely explained in terms of their preferred achievement orientation. This paper explores a case study investigating ICT derived lead indicators of student achievement orientation, and therefore underlying motivations. The study incorporated Tan's (2009) research on learning dispositions to quantify student achievement orientations. These findings were then correlated with student LMS data to identify if patterns of online behaviour are indicative of the observed achievement orientation scores. The results suggest that there is a significant correlation between student achievement orientation and participation in discussion forums. Students reporting a strong learning orientation were more inclined to utilise the unit's 'learning forum'. Conversely, students tending towards a performance orientation were more prone to use the 'administration forum'. The findings and data harvesting methodology employed, represent a novel, scalable and automated approach for rapidly identifying the drivers of student learning motivation.

A simple time-management tool for students' online learning activities

Michael de Raadt and Stijn Dekeyser
Dept of Mathematics and Computing, University of Southern Queensland

Student time-management practices are a significant contributing factor to success in tertiary education, particularly in online and blended learning. In courses where many tasks are set to involve students continuously, a learning management system can be used to structure and assist time-management. This paper reports on the successful development and testing of a simple time-management tool that can assist students within an LMS.

New design approaches to repurposing open educational resources for collaborative learning using mediating artefacts

Yannis Dimitriadis
School of Telecommunications Engineering, University of Valladolid
Patrick McAndrew, Gráinne Conole and Elpida Makriyannis
Institute of Educational Technology, The Open University

In spite of high expectations and the support given by prestigious funding and educational institutions, open educational resources (OER) have not been adopted widely by teachers and learners in practice. From a cultural historical activity theory perspective, we argue that Mediating Artefacts (MA) such as OER learning design visual representations and rich narrative pedagogical patterns may enable a more effective OER cycle of creation, design, use and evaluation. More specifically, two main arguments are analysed in this paper: first, that making the inherent design of OER more explicit will make them more understandable and hence reusable; second, that offering a small set of simple patterns will encourage new ways to

interpret OER and inspire re-purposing in new challenging contexts. A series of successful workshops was carried out and qualitative data gathered which provide initial evidence that a set of CSCL pedagogical patterns were found very suitable in order to repurpose resources intended for individual use and adjust the focus to make them suit new collaborative learning contexts. Interpretation of the data will form the basis for further workshops that aim to extend the idea of using targeted mediating artefacts to guide the design and repurposing of OER.

Educating educators in the purposeful use of Web 2.0 tools for teaching and learning

Iain Doherty and Pauline Cooper
Learning Technology, Medical & Health Sciences, University of Auckland

Our paper reports on the provision and evaluation of continuing professional development workshops to teach educators how to use Web 2.0 applications and services constructively in their teaching. We describe the design research approach that we took to developing the workshops and we present the research results that led us to re-design the workshop format to the point where we are now delivering semi-structured, project-based workshops. Our paper concludes by discussing whether the project-based approach to teaching the workshops will result in higher levels of implementation by participants. We also consider whether introducing the university promotion process into the workshops will increase the incentive for participants to put what they have learned into practice.

Supporting ways of learning for Indigenous Australian pre-undergraduate students using Moodle

Thomas Duggan
Nulloo Yumbah, Central Queensland University

This paper discusses the way in which the ways of learning and learning strengths of Indigenous Australian university students can be supported by the Moodle learning management system (LMS). Moodle is currently undergoing a pilot phase at CQUniversity before it fully replaces Blackboard and Webfuse as the sole university LMS. Several courses from Nulloo Yumbah, CQUniversity's Indigenous Learning, Research and Spirituality Centre, are participating in this pilot phase. The literature highlights the way that information communication technologies (ICTs) align with Indigenous ways of learning when learning materials are designed and presented in a way that is culturally relevant. The paper outlines Indigenous learning styles and presents a discussion based around what Moodle does and does not offer to benefit Indigenous learners. From this, a number of the potential benefits and constraints of Moodle are presented and future research directions identified.

Interactive classroom mLearning and the experiential transactions between students and lecturer

Laurel Evelyn Dyson, Andrew Litchfield and Ryszard Raban
Human Centred Technology Design, University of Technology, Sydney
Jonathan Tyler
Business Faculty, University of Technology, Sydney

This paper seeks to address a major deficit in understandings of mobile learning, that is, its lack of a solid theoretical foundation. An overview of existing theoretical concepts of mobile learning is presented, followed by an analysis of interactive classroom systems and the learning that they provide. The implementation of a specific interactive system *mInteract* in the lectures of a large accounting subject is described. *mInteract* is a Web-based system using no-to-low cost data-packet technology and provides for interactions from students' own Internet-enabled mobile devices. The paper examines, by means of reflections from the lecturer and students, the learning which took place during the implementation. The analysis demonstrates that interactive mobile learning can be interpreted using experiential learning theory, and that both students and lecturers engage in experiential learning. Furthermore, they enter into transactions of knowledge which are facilitated by the mobile learning system.

Capacity constraints in developing countries: A need for more e-learning space? The case of Nigeria

Samuel Moyosore Ekundayo
School of Information Management, Victoria University of Wellington
John Moyo Ope Ekundayo
University Tun Abdul Razak, Malaysia

More often than not, economic growth and social development demands educational expansion. However, capacity building for higher education in developing countries is being thwarted by seemingly long-lived constraints of brain drain, political unrest, access, finance, quality, governance, efficiency, human capital and so on. It is becoming apparent that higher education reform cannot take place without paying attention to Information and Communications Technologies (ICTs) in support of teaching, research, and lifelong learning. This paper reviewed potential constraints affecting the capacity of the Nigerian higher education system to accommodate more students. Given the several opportunities and promises of ICTs in addressing some of these challenges; it suggested the strategic use of ICT in Nigerian higher education to increase its capacity.

How does assessment design shape the learning space of a distance course?

Irina Elgort
University Teaching Development Centre
Victoria University of Wellington

What are the consequences of encouraging students to develop an independent learning path through a course? Is the learning space of a course shaped by the type of assessment chosen? How do students interact with feedback? These questions are addressed in a pilot action research study of a postgraduate course in computer assisted language learning offered in a distance delivery mode. The paper details course design underpinned by the view of assessment as a key driver and vehicle of learning, with particular attention to the role of feedback in student learning. The outcomes of this approach are reviewed in the light of the analysis of student submissions, their engagement with feedback on assessment and student perceptions of the course.

Designing an educational sim environment: Critical success factors

Allan Ellis, Commerce and Management, Southern Cross University
Amanda Hassett, Top Dingo
Steve Rowe, Commerce and Management, Southern Cross University

Few educators ever have the chance to design and manage an online environment that replicates the educational, social, support and administrative elements of their University. Recent developments in virtual world platforms such as *Second Life* ® now makes this possible. Designing and building a virtual university demands knowledge of a new range of concepts, issues and skills specifically relevant to virtual environments and immersive learning settings. A case study of the vision, strategies and processes used to design, build and commence operation of a virtual campus is presented. A checklist of critical success factors is presented as a guide to others attempting to use this powerful technology to extend the reach and effectiveness of their university. The conference presentation will include an in-world tour of the features of the virtual campus and a demonstration of its interactive features.

Tug-o-where: Practising mobilities of learning (t)here

Judith Guevarra Enriquez
Department of Learning Technologies, University of North Texas

This paper explores 'mobilities' as a research framework for learning not so much in terms of what has to be done to enhance learning using mobile technologies. Instead it focuses on our ways of knowing and learning by

'being mobile'. It suggests a practice perspective for learning by 'setting in motion' not just technologies, but also bodies and spaces. It seeks to understand *what is being done* - the re-configurations of bodies, spaces and technologies through the increasingly dialectic links between absence and presence, proximity and distance, and individualism and community. More importantly, such relations are merged in the consumption of mobile devices, producing ambivalent realities of absent presence, public privacy and isolated connectivity, which would commonly be considered oxymorons. To *move* educational research, this paper turns to the mobilities paradigm for a practice perspective to circulate bodies and spaces in motion and articulate other possible metaphors for framing learning in this mobile age.

A quest for the Holy Grail: Tactile precision, natural movement and haptic feedback in 3D virtual spaces

Helen Farley
Innovation and Educational Technologies, The University of Queensland
Caroline Steel
Teaching and Education Dev Institute, The University of Queensland

Three-dimensional immersive spaces such as those provided by virtual worlds, give unparalleled opportunities for learners to practically engage with simulated authentic settings that may be too expensive or too dangerous to experience in the real world. The potential afforded by these environments is severely constrained by the use of a keyboard and mouse moving in two dimensions. While most technologies have evolved rapidly in the early 21st century, the mouse and keyboard as standard navigation and interaction tools have not. However, talented teams from a range of disciplines are on serious quests to address this limitation. Their Holy Grail is to develop ways to interact with 3D immersive spaces using more natural human movements with haptic feedback. Applications would include the training of surgeons and musical conductors, training elite sports people and even physical rehabilitation. This paper reports on the cutting-edge technology projects that look most likely to provide a solution for this complex problem, including the Wiimote and the Microsoft's Project Natal.

Virtual Spaces: Delineating the private and public spaces in online discussions

Santha Fernandez
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This paper outlines an effective and pedagogically sound approach to designing the virtual space of an assessable online discussion forum. Through an innovative use of Blackboard's 'Journal' tool I outline how to design a two-phased time-driven virtual forum to scaffold students' learning and to enhance their learning experience. There are pedagogically sound reasons for such an instructional design. In the first private phase, students

are provided privacy and freedom to reflect upon, draft and post their own work. This phase potentially assures students that their peers cannot see their work and consequently are not in a position to 'plagiarise' their creative thoughts and ideas. The second public space enables students to read and learn from each others' postings and to participate in further discussions and collaborations. Implicit in this assessment design is the need for the online instructor to intervene twice during the discussion to reset the forum's system switches.

Performance pedagogy through research in 'real' and 'virtual' spaces

Russell Fewster and Denise Wood
University of South Australia

This paper explores strategies for incorporating practice-led research into the undergraduate performing arts curriculum at the University of South Australia. There has been considerable interest in strategies for integrating teaching and research in the undergraduate curriculum as evidenced by the growing body of literature documenting the potential benefits of engaging students in research activities designed to foster active learning and problem-solving. However, studies reporting strategies for incorporating research in undergraduate programs with an applied focus, and performing arts courses in particular, are more difficult to find. This paper presents a case study of a second-year visual theatre course in which students undertook practice-led research activities involving the design and implementation of a performance in the physical space of a theatre and 3D virtual environment. Students, tutors and researchers as well as technical staff were drawn together as a research community in which students engaged in critical reflection in the company of scholars. Students were encouraged to act on the feedback they received from their peers and staff. Through these varying research activities, the course aimed to engage students in practice-led research activities involving collaboration and reflective practice within the disciplinary field of performing arts.

Podcast in higher education: Students' usage behaviour

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At German universities, podcasting is still a relatively new method of teaching and learning, on which only few studies are available so far. The present report aims to describe students' usage behaviour and their assessment of podcasting. The findings are based on a survey of students at the University of Flensburg. A total of 148 students took part at the two survey sessions. The majority of the surveyed students are inexperienced in the use of podcasts. The lecture podcasts were their first contact with this medium. Mainly a notebook is used to listen - at home - to the recorded lecture. The focus in this regard is on playing back or catching up on the

lecture at a later point in time. The main purpose is to systematically prepare ahead of written tests. Slightly more than half of the respondents consider the opportunity to use podcasts to be no substitute for attending lectures. A factor in the success of lecture podcasts is that the students can reuse the recorded lecture. Podcasts are considered a possibility to assimilate the contents of lectures better and more efficiently.

Professional development online: Ethics education for accountants and business managers

Josie Fisher and Cathryn McCormack
University of New England

The teaching of business ethics is well-documented in the literature. However, in nearly all studies participants were undergraduate or postgraduate students without professional work experience, with little information on the professional development of practising professionals. This research, sponsored by the Australian National Institute of Accountants, goes some way toward addressing this gap. Students in this project were professional accountants and business managers studying the course *Business and Professional Ethics* online, in which a community of learners approach was central. Results from a pre- and post-course questionnaire designed to measure students' ethical sensitivity and attitudes showed improved understanding of their responsibilities as professionals and greater sensitivity to three of five aspects of the Code of Ethics for Professional Accountants. Furthermore, students were highly satisfied with the course. This study, whilst not generalisable, provides a case study that may be transferable to professional studies in other disciplines.

Student perspectives of eportfolios: A longitudinal study of growth and development

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Electronic portfolios (eportfolios) offer different ways to support learning through their capacity to collect evidence and demonstrate development, especially over time. Their potential ability to support reflection and learning and to respond to assessment and evaluation settings across a range of settings suggests their value for formal study and lifelong learning contexts. This technology has come to prominence as one of the new Web 2.0 technologies and much of the literature to date provides accounts by teachers of the introduction of eportfolios, there being far less research which places students and their experiences at the centre of the investigation. This paper describes the establishment of a longitudinal study of student perspectives and discusses some early data.

Academic literacy development: A multiple perspectives approach to blended learning

Katherine Gilliver-Brown and E. Marcia Johnson
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This paper describes how the interaction of different research perspectives – multiliteracies, academic literacy, student engagement – combined with the practicality of an open source software environment has influenced the implementation of a blended approach to student learning development. It discusses affordances and constraints that we have faced in our instructional context, describes the changes that have been implemented, and reflects on the value of a multiple perspectives approach to creating a blended learning academic support environment.

Identifying the characteristics of e-learning environments used to support large units

Kathie Goldsworthy and Lynnae Rankine
University of Western Sydney

The AUTC Large Classes Project articulates specific strategies aimed at improving student learning in large classes. Successful teaching involves good practice in the design of learning activities and assessment, the provision of feedback and support materials for learners. These practices apply to small and large classes, however in large classes the expanding student numbers increase the complexity of teaching these students. At the University of Western Sydney there are 40 units that have student enrolments exceeding 400 students up to over 2000 which all utilise the e-learning environment to support a range of blended learning and teaching activities. This paper will present an institutional case study of how the online environment is used with large classes using the strategies outlined in the AUTC Report.

Teaching in 'blended' learning environments: How are conceptions of teaching and eTeaching associated?

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Combining face-to-face learning and teaching experiences with online tasks and activities has become an increasingly common practice for a growing number of university teachers. This phenomenon, known as 'blended' learning, has become part of the educational provision of most 'conventional' on-campus universities. The present study investigated how conceptions of teaching and eTeaching, both sides of the 'blended' experience, are associated. Three conceptions of 'blended' teaching were proposed as emerging from these associations: 1) as a disintegrated way of

supporting transmission of information, 2) as a 'dissonant' way of combining face-to-face and online tasks and activities; and 3) as an embedded way of supporting students' learning. Conceptions one and three suggested that teachers tended to conceive of teaching 'consonantly' both face to face and online. Conception two represented an un-expected pattern of association. These results have important implications for eTeaching development programs. Not only technical skills should be emphasised, but also teachers' pedagogical awareness as those who held student-focused conceptions of teaching seemed to be more likely of conceiving of eTeaching as a medium for supporting quality learning experiences.

Developing competence portfolios in engineering undergraduates

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Centre for Academic Development and eLearning, Massey University

This evaluation aimed to identify the student view of activities based around engineering graduate attributes and the presentation of these to potential employers. This included the introduction of an ePortfolio, activities to identify students' strengths and a reflection framework to help students analyse their strengths. Students are required to do work experience throughout this degree. It was thought that this would motivate the students to collect evidence of their strengths so they could present them to potential employers. Overall the ePortfolio activities had a limited impact. The evaluation collected evidence about the ePortfolio aided activities and the barriers and enablers to students learning. The questionnaire had a section to identify the level of student reflective thinking. Students who were straight from school had a similar level of reflective thinking to older students.

Using virtual meeting spaces for work integrated learning

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Work integrated learning activities provide students with the opportunity to apply the knowledge and skills they have developed through their tertiary education to authentic work place problems. This paper reports on the outcome of a virtual work integrated learning activity undertaken by third year IT students. Students used a synchronous communication tool to participate in meetings with their virtual teammates. They were required to produce minutes and a report of their meeting. The majority of students completed the exercise successfully with some student groups using the

meeting facility for subsequent collaboration during the remainder of the unit.

Twenty first century edgeless universities: Designing community spaces for connectedness across degree programs

Elizabeth Greener and Shannon Johnston
Queensland University of Technology

Flexible learning approaches within university spaces is a feature of the Edgeless University (Bradwell, 2009). By allowing flexibility in place and time, universities are better able to meet the needs of 21st century learners. However the issue of disconnect resulting from a lack of community in such environments needs consideration. The issue may be addressed in part by designing virtual community spaces for degree programs that enable social, educational and professional connectedness. In this concise paper we discuss the design of two Master of Business community sites within the QUT Business Faculty Flexible Learning Initiative. We also consider the strengths and challenges in effective implementation of the sites in university environments that are only now grappling with the concept of being "edgeless."

Introducing Jass Easterman: My *Second Life* learning space

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Belinda Tynan
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Virtual worlds are an emerging technology being used by an increasing number of educational institutions around the world. It is a technology, environment, medium, learning (or elearning) and teaching tool (ie a shared social space). A pilot study was conducted in *Second Life* with postgraduate education students to ascertain student perceptions of learning in a virtual world. Results and methodology of this study will be discussed and the implications and impact for students learning in a virtual world from the perspective of the student will be explored. A number of themes have emerged from the study. There have been a variety of studies undertaken on virtual worlds with very little on their implications for the academic who is teaching in this environment. The implications of these findings will be the foundation for future research.

Role of the online tutor in a large enrolment unit

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Rosemary Thomson
Teaching Development Unit, University of Western Sydney

This paper describes effective practice in online tutoring in a first-year, large-enrolment undergraduate unit. The role of the Online Tutor is to complement face-to-face learning and to support students who are new to online learning and starting to develop independent learning skills appropriate to university study. The paper explains a set of effective practice principles for online tutoring, which underpin the role and have emerged through several iterations. The principles are discussed and exemplified, and parallels are drawn with the online tutoring qualities articulated by Macdonald (2006). Evidence for effective practice is presented in the form of usage data and student evaluations. The paper provides support for the concept of the Online Tutor as a facilitator of student independent learning in a context where the online interaction occurs primarily between students and the tutor.

Adding value to first year student learning with embedded library pod/vodcasts

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We begin with the premise that pod/vodcasts add an engaging and innovative mix to the university learning environment; they put the control of when and where to access information in the hands of the student and can be delivered through the university's learning management system (LMS). In this paper, we describe a semester-long trial in which library pod/vodcasts were provided to first-year teacher education students in the belief that basic library skills development is vital for academic success and an essential component of good information literacy practice. The pod/vodcasts were offered to support students at point of need in their learning and were optional. We used the learning activity management system (LAMS) developed by Macquarie University to deliver the library modules alongside the existing academic unit podcasts. The paper reports on students' usage and perception of the library pod/vodcasts and how they responded to this new approach.

Blending technologies in ESL courses: A reflexive enquiry

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Despite persistent calls for a fuller integration of technologies in second and foreign language teaching, particularly in English as a Second Language (ESL) courses, pathways that lead to the effective blending digital resources remain both unclear and complex. The aim of this paper, then, is to explore the blending of technology in second language teaching contexts. To achieve this aim, we undertook a longitudinal and reflective action research project. As part of a self-styled 'community of innovation' involved in reflexive action research, we collectively produced and made use of podcasts in two different ESL settings for one year. The podcasts served as emblematic digital resources in a 'case study' of new technologies to focus our efforts. During the year, we met to discuss our experiences with relation to professional development, classroom use and curriculum change. Starting with a brief review of the literature, we then present our work these themes and set out a research agenda focused on the blending of technologies in second language programs.

Supporting an institutional blended learning mission through a structured change management programme

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University of Hertfordshire, UK

The University of Hertfordshire was selected as one of nine Pathfinder pilot institutions to develop a new model for strategic change and staff development at a school level to support its institutional blended learning mission. This pilot was built upon ‘Change Academy’, a change management programme run by the Higher Education Academy. The pilot was a great success, resulting in more widespread development of blended learning within, and between, Schools and Faculties. The initial model was subsequently refined and has led to the creation of a programme which has now been extended for its fourth term at Hertfordshire and has influenced new models at a national and institutional level. This paper describes the background to the ‘local’ change management programme, its approach to meet the needs of managers and practitioners in supporting the enhancement of learning through the use of technology, and some outcomes from the programme.

Enhancing reflective professional practice through the use of an ePortfolio: A UK case study

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The professional bodies, in subjects allied to medicine, have always required evidence of continuous professional development in order for members to maintain registration. Although the manner in which these submissions are required by different bodies varies in most instances these have been paper based. This paper provides a brief background to the development and use of eportfolios in Universities in the UK and then examines the reasons behind the decision to adopt an electronic portfolio during undergraduate degree programmes in Pharmacy and Biomedical Sciences. The paper goes on to discuss the way the electronic portfolio is being used to support the development of reflective and professional practice on these programmes. It reports feedback from staff and students during the pilot phase before discussing the current developments that are taking place with the Royal Pharmaceutical Society and the Institute of Biomedical Science to use electronic submission in order for members to demonstrate professional competence through evidenced continuous professional practice.

Disorienting spaces: Engaging the multiple "student" in online learning

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Effective student engagement in learning is not a simple transposition of practices from the traditional classroom to the online environment, and strategies for engaging students may work less well in the unbounded spaces of interaction of the Internet where assumed understandings of teaching and learning have less hold. Even experienced practitioners encounter unexpected outcomes when designing pedagogies to engage students online, and in a range of studies students have been found to show great variation in how they engage in online learning. This study explores the complexities of shifting teaching practices to online spaces and the effects on the interactions of participants. One of these effects is the disorientation reported by practitioners in their attempts to apply strategies to engage students online. This paper investigates the mismatch between expectations of teaching academics and students by focussing on what the "student" is online. I use two analytical moves: a discourse analysis of practitioners interviews to identify "ways of talking" about students, and Annemarie Mol's (2002; 1999) concept of *enactment* to understand student activity and identity in the interactive spaces of online learning. My argument is that understanding the category of "student" as enacted in multiple

versions offers a way to approach the "potentially disorienting spaces" (Bayne and Ross, 2007) of teaching practices in online spaces.

Positioning university students as leaders of the learning process within a peer e-learning environment

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Capacity and interest in the use of computer conferencing techniques, such as online discussion forums, remains modest amongst most academics. This paper offers a conception of the online discussion forum as a framework that encourages student centred peer e-learning. In particular, it presents research findings on the experience of university students as leaders of the learning process as a central element of this approach to discussion forums. Data were collected through semi-structured interviews with students. The findings provide insight into how students view the approach and indicate it represents a workable means to position students at the centre of an online peer learning experience. Such an approach will be of interest to academics who want to incorporate computer conferencing techniques into their teaching and maintain meaningful peer learning opportunities for their students.

Factors undermining motivation in place-based blended learning

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This paper reports on one aspect of a case study that explores the nature of motivation to learn in an online distance environment. The study adopts self-determination theory (SDT) as a theoretical framework and focuses particularly on the underlying concept of autonomy. This is used to explore ways in which certain social and contextual factors, that fail to accommodate the autonomy needs of learners in a blended learning environment, can undermine perceptions of personal agency. This, in turn, has a detrimental effect on self-determined types of motivation including intrinsic motivation. Results from one collaborative group of learners, situated in a co-located blended learning context, are presented here. They illustrate how differing circumstances of students need to be accommodated if we wish to support autonomous types of motivation among learners.

Intuition, evidence-based guidelines and user-feedback in multimedia teaching: The *Physclips* project

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Physclips is a suite of online multimedia resources for the learning of physics and represents the most recent outcome of an ongoing collaboration between an intuitively oriented content expert and an educational-multimedia designer. The multimedia project has evolved from an earlier successful project on special relativity and a number of improvements regarding segmentation, user-control, re-usabiliy, content representation and hands-on laboratories have been incorporated. An examination of the research literature reveals that the current design fulfills many of the cognitive design principles recommended for multimedia learning whilst also stretching some of the traditional boundaries regarding the style of animations and their implementation in a broader learning context. Innovative characteristics of the design, including a visually enhanced scrollbar, emanate from a characteristically creative process that involves input from the content expert, multimedia designer, educational researcher and the end-user. *Physclips* is one example of how intuition and creativity combine with responsiveness to user feedback and an awareness of the research literature to produce an educational website that has received acknowledgement from various elements of the learning and teaching community. In this paper, we report our experience and what we have learned from teacher-developer collaboration, cognitive design principles and user-feedback. We do this by tracing the evolution of the multimedia design from its predecessor, Einsteinlight, through to the current volume of *Physclips*.

In what ways do the media we shape, shape us in return?

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The concept of young people being negatively affected by the ubiquitous mobile telephone ("mobile"), has taken firm hold in the public consciousness. Unfortunately, an instrument blaming perspective fails to consider the relational issues involved. Questions of how we are both shaped by and shape our technologies are neglected when questions collapse to binaries of good or bad. This paper draws on the work of French sociologist Bruno Latour as a means to understanding the discourse positioning the mobile as an object of harm, and for strategies considering how the mobile might be positioned otherwise. In an attempt to redress the negative evaluative imbalance associated with mobile phones, an example taken from research in progress involving Youthline's text messaging for counselling is explored. Implications for teaching and learning are suggested, including strategies for text messaging and for positioning the mobile as an adjunctive instrument supporting students through their studies.

Leading practitioners stepwise through the murky waters of reflective practice

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In this paper, a case study methodology and an intervention, a Three-Step Reflective Framework and template, used as part of a qualitative research design is described. Seven participants, Masters of Education students, were asked to use a teaching and learning innovation, when preparing their electronic portfolios; a Three-Step Reflective Framework and template which was designed specifically for a multimedia design subject. The purpose of the intervention was to support the reflective writing of the participants when they prepared evidence for inclusion in an electronic portfolio. Initial findings indicate that participants found the intervention useful for guiding their reflective writing which was predominantly at three levels of reflection – Descriptive, Explanatory and Supported, and that the framework supported their reflective practice.

Language acquisition in *Second Life*: Improving self-efficacy beliefs

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Hui Huang and Scott Grant
Faculty of Arts, Monash University
Lyn Henderson
School of Education, James Cook University

This study found that collaborative language activities in an immersive virtual world improved students' self-efficacy beliefs about their capacity to use Chinese language in a variety of real-life contexts. However, the complex relationship of in-world and real-life interactions, instructional design, construct validity and other critical issues clearly argue for continuing research in this area. This paper describes a quantitative study of 100 university students enrolled in Chinese language and culture studies at Monash University, Australia. This study focuses on one of the lessons conducted in *Second Life* which engaged students in a collaborative activity to identify and order food in Mandarin in a Chinese restaurant setting. The results indicated significant improvements between students' pre and post self-efficacy ratings. In addition, it is proposed that the change in self-efficacy ratings can be explained by the degree of relevance of enactive mastery experiences. This in turn has implications for instructional design.

Supporting the co-generation of work-based learning designs

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Learning Enhancement and Tech Support, University of Gloucestershire

Through workforce development policies, universities are being encouraged to develop flexible support and delivery mechanisms. This includes moving from university-led curricula to demand-led and co-generated curricula. The University of Gloucestershire, in partnership with the University of Winchester and Pebble Learning Ltd, is developing mechanisms and tools to enable such approaches. These include the development of a vocabulary to bridge occupational and academic standards and a toolkit to support curriculum planning. This paper reports on this project and the innovative approaches that are being implemented to create new curriculum development opportunities.

Leveling the playing field: Exploiting technology to enhance tertiary learning

E. Marcia Johnson, Waikato Pathways Coll, The University of Waikato
Bronwen Cowie, Institute of Educ Research The University of Waikato
Willem de Lange, Earth & Ocean Sciences, The University of Waikato
Craig Hight, Det of Screen & Media Studies, The University of Waikato

This paper reports on an on-going case study project to explore ICT/ eLearning across several disciplines and with students from diverse backgrounds at tertiary level in New Zealand. The project has been designed to address issues of tertiary-level pedagogy, e-pedagogy, and research with the goal of building eLearning capacity, leveraging pedagogical change, and closing participatory gaps for students and lecturers. Initial design decisions, the pedagogy that has informed the case studies, and the challenges and benefits of working across subjects and levels in a multi-disciplinary team are described. We also discuss research knowledge mobilization within our own instructional context and more broadly elsewhere.

Effective practice with e-portfolios: How can the UK experience inform practice?

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Lisa Gray, Joint Information Services Committee, UK
Elizabeth Hartnell-Young, Victorian Dept of Ed and Early Childhood Dev

This paper introduces the background to the JISC work within the e-portfolio domain in the UK and presents an overview of past and current activities and the drivers for these developments. This is followed by a review of

JISC's approach at drawing out the learning and implications for e-portfolio practice from this extensive collection of work and its dissemination. The analysis of twenty one recently funded projects involving the use of e-portfolios in the UK is introduced. The findings suggest that e-portfolio implementation is particularly complex in part due to the number of stakeholders involved, the contexts in which e-portfolios can be applied and the number of purposes they can have. This research suggests that there are threshold concepts related to e-portfolio implementation and that the journey in developing an understanding of effective practice is not straightforward. However a means of supporting this journey is suggested.

Designing blended spaces to maximise student learning in work integrated learning programs

Friederika Kaider, Kathy Henschke, Joan Richardson and Mary Paulette Kelly, RMIT University

This paper describes a case study at a large metropolitan university in Australia where a range of technology-enabled blended spaces are used for interaction, communication and reflection between the work and university environments to enrich students' learning experiences during their work placement year. Blended space design requirements to maximise the learning experience of students undertaking work integrated learning are identified.

Where is the wiki in Wiki?

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This is a small scale case study of a group of graduate students exploring the use of wiki for meaningful interaction and learning community-building. The wiki was used to facilitate communication, cooperative work and to support each other to reach the course assignment objectives and goals. A general analysis of the wiki reveals that while the students were highly interactive in the discussion and comments part of the wiki, the real publishing of content and editing were found lacking in this group interaction. However, though there were lacking activities in the new page creation and editing, the interaction among the students in the comment's section was found to be highly engaging and meaningful, exhibiting the substantial amount of in-depth level processing while a reasonable amount of cognitive and meta-cognitive skills were present. Other issues were also highlighted and discussed.

The role of collaborative online tools in business and community engagement with course design/delivery

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'The Trialling of Collaborative Online Tools for BCE' JISC-funded project is investigating the use of collaborative online tools to support Business and Community Engagement (BCE) in a variety of contexts via a number of trials situated in colleges and universities within the UK. BCE is the strategic management of interactions, partnerships and transactions with partners and clients external to the institution. This includes the commercial and public sectors (including charities and trusts), the cultural landscape and the social and civic arena. Three of the eight trial projects are working with partners in the design and/or delivery of curricula. Two have an international dimension and one is a large regional partnership with The Regional Health Authority. These three are trialling very different approaches and tools to support their BCE activities and through their activities and experiences, future BCE collaborative ventures will benefit..

Don't dilly dally on the way: Driving towards digital information literacy capability

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Dawn Coburn, Otago University
Bronwyn Hegarty, Educational Development Centre, Otago Polytechnic
Lynn Jeffrey, Department of Management, Massey University
Merrolee Penman, Occupational Therapy Dept, Otago Polytechnic

Digital information literacy (DIL) is a vital capability in the changing spaces of tertiary education. In this paper the approach taken in a collaborative research initiative investigating how teaching staff and students acquire digital information literacy skills through action learning and the development of personal learning environments is described. The methodology is outlined, and as this is still a work in progress, some preliminary results are shared, which demonstrate that participants made important shifts in their capability as a result of the project.

Productive failure in inquiry learning in a multi-user virtual environment

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This research focuses on analysing the impact of structure in inquiry learning activities in a Multi-User Virtual Environment. Productive failure is a learning strategy that has shown that using a low structure initial activity in inquiry learning can result in better learning outcomes than using an initial

high structure activity. *Virtual Singapura* is a multi-user virtual environment that presents learners with the opportunity to engage with a visually rich, authentic and dynamic environment that enhances a student's engagement with inquiry learning. This research aims to inform research on productive failure and the structuring of inquiry based activities in virtual environments.

Developing an online learning community: A model for enhancing lecturer and student learning experiences

Elaine Khoo, Centre for Science and Technology Education Research
Michael Forret and Bronwen Cowie, School of Education
University of Waikato

This paper reports on a study aimed to better understand teaching and learning in an online learning environment through the development of a learning community to facilitate successful learning experiences. To achieve this aim, a qualitative interpretive methodology was adopted to case study an online lecturer and his 14 students' experiences in a semester long fully online asynchronous graduate course in a New Zealand tertiary institution. Based on the findings, a model for understanding and developing an online learning community for adult tertiary learners is proposed. In accord with sociocultural views of learning and practices, the model depicts successful online learning as a mediated, situated, distributed, goal-directed and participatory activity within a socially and culturally determined learning community. The model informs our understanding of appropriate conditions for the development of online learning communities and has implications for the design and facilitation of learning in such contexts.

Positive partnerships web space usability: What does the think aloud protocol tell us?

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Australian Autism Education and Training Consortium

"Positive Partnerships" is a flexibly delivered, government supported training initiative, which incorporates an interactive learning platform customized for Australian teachers, parents, and carers of school aged students with autism. This cohort forms a diverse working group, possibly requiring more accommodations than the norm, so it is essential to determine whether the site meets their varying needs. In the current study a "Think aloud" protocol was used to determine the usability of the site for participants with varying computer access and competence. It was found that most of these users quickly accomplished a range of online activities and enjoyed the site's interactive nature and its time-saving features. It was concluded that the site should be promoted, and its potential would be maximized with deeper menus, an internal search capability, and explicit information about generic computer functions.

The development of an integrated learning environment

Alexandra Knight and Fiona Bush
ANU College of Law, Australian National University

This paper examines the integration of a Simulated Professional Learning Environment (SIMPLE) with a Learning Management System (Moodle), an E-portfolio System (Mahara) and other learning technologies to create an Integrated Learning Environment (ILE) in the Graduate Diploma in Legal Practice (GDLP) at ANU. The focus is on the work undertaken by Educational Developers and IT Consultants to develop and integrate the technical aspects of the new environment so that students and lecturers experience a comprehensive integrated teaching and learning environment.

Using the development of eLearning material as challenging and authentic learning experiences

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Eva Cheung, Information Technology Services Centre
Carmel McNaught, CLEAR, The Chinese University of Hong Kong

Students can contribute to the design and development phases of eLearning projects, and also learn through the process. This study focused on two projects at a university in Hong Kong (development of Pharmacy eCases, and the establishment of an eLearning Assistants scheme) in which students designed, wrote and developed teaching materials with space to show initiative. Evaluation strategies included a survey, communication logs with teachers, and a self-reflective student blog. Learning benefits from such student-centred, authentic eLearning projects include consolidation of knowledge, and development of skills (including independent learning, critical thinking and creative design) and attitudes (about professional work and ongoing personal development). The projects also led to enhanced course learning environments, thus benefiting other students. However, there are significant challenges in preparing such learning opportunities for students, including training and scaffolded supervision. Our overall reflection is that students' learning was different from that achieved in many traditional university courses.

Laying *Second Life* foundations: Second chance learners get first life skills

Merle Lemon and Oriel Kelly
Manukau Institute of Technology

This paper examines the use of a MUVE (Multi-User Virtual Environment) to train foundation students in interviewing skills. Foundation students at

Manukau Institute of Technology are the first students to utilise the build on Kowhai in *Second Life*, designed and constructed as part of the SLENZ (*Second Life* Education in New Zealand) project. Research has suggested the potential efficacy of *Second Life* for education and that interview skills can be enhanced through virtual training in role-playing scenarios. Academic engagement and social engagement have already been displayed in early sessions in *Second Life*. The educational gains of using *Second Life* for interview skill development will be demonstrated through this pilot study and in future the build on Kowhai can be further developed and offered to many departments in institutions throughout New Zealand where interviewing is an essential part of the professional training package.

Virtual benchmarking as professional development: Peer learning in authentic learning environments

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Leena Vainio, HAMK University of Applied Sciences, Finland
Jan Herrington, Murdoch University

The creation of a virtual benchmarking model as a tool for professional development of teachers is examined in this article. The process employed authentic learning criteria as reflection and dialogue tools in a peer review of e-courses. The learning space the virtual benchmarking process provided and its effectiveness in supporting professional development as experienced by teachers are described. Strengths and development challenges of the model are discussed. The project itself became an authentic learning environment in which elements structuring authentic learning promoted peer learning and collaborative construction of knowledge. Virtual methodologies were tested and developed with the use of Adobe Connect Pro and Ning. Teachers felt new knowledge could immediately be transferred to their work and authenticity in e-learning fostered by increasing collaborative construction of knowledge, strengthening reflection and deploying interactive social media. While considered useful and a time-saver, further improvements to the multiphase model should focus on process instructions and role clarification.

The learning design collaborative space through role play glasses

Tim Lever, Engineering and Information Tech, The University of Sydney
Elizabeth Devonshire, Faculty of Medicine, The University of Sydney
Melinda Lewis, Faculty of Nursing, The University of Sydney
Fran Everingham, Faculty of Health Sciences, The University of Sydney

The paper describes the initial design and testing of an alternative approach to learning design classification in the form of a small-group activity for use at teaching and learning conferences and showcase events. The learner role classification approach uses small scale comparative surveys as a basis for exploratory discussion of relationships among different learning

design options. 'Role-play glasses' are employed in both real and figurative senses in the observation and analysis of learning design examples. The approach aims to develop a relatively simple way of situating particular learning designs in relation to the overall field by using one specific learning aspect, the learner role, as common point of reference. The outcomes of this exploratory exercise point to the importance of including learner role descriptions in design classifications.

SimPharm: Authentic immersion and reading the world as a pharmacist

Swee Kin Loke, Stephen Duffull, Jenny McDonald, June Tordoff, Peter Vlugter and Michael Winikoff, University of Otago

Learning to become a pharmacist involves, beyond acquiring knowledge, learning to "read the world" as a pharmacist. This value-laden act highlights what counts as salient for pharmacists and forms the base upon which they make professional decisions. In this paper, we contend that our case-based method, based on an in-house developed computer simulation *SimPharm*, offers a virtual world that can guide students in adopting the shared values of pharmacists. Using data gathered from three sources (pharmacists who had trialed *SimPharm*, postgraduate students who were assessed using this simulation, as well as undergraduate students who had engaged with *SimPharm* in a classroom context), we suggest that *SimPharm*'s virtual world features a level of authenticity that has the potential to enculturate students to interpret the world as pharmacists do.

Identifying discriminating variables that determine mobile learning adoption by educators: An initial study

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Lynn Jeffrey, Massey University, Albany

Given the prevalence of mobile devices in everyday life and recent interest in using mobiles in education, it is critical to understand teachers' perspectives regarding mobile technology and its possible integration in their teaching. Therefore a small scale study (n=42) was conducted on a group of tertiary educators from around NZ in order to provide an initial idea of the attitudes, characteristics and variables that best discriminate educators attitudes towards the inclusion of mobile technology into learning. The study was also aimed at highlighting some of the key advantages and barriers that mobile technology offers to education from an educator's perspective. The concepts highlighted in this study aim to identify key areas that play a part in educator's adoption of mobile technology and will provide the basis for a wider survey.

Quality management and the web-enhanced learning space: Report from an on going case study

Mary Jane Mahony, Ann Applebee, Stephen Sheely, Beatrice Johnson, Alison Blair and Paula Williams
Australian Catholic University

While quality assurance is often spoken of in terms of a single institution-wide approach, the diversity of spaces, places and players signals that reality is more complex. This paper reports on an on-going case study conducted within an action research framework of a middle-sized Australian university concerned with quality assurance in regard to supporting the learning of campus-based students using online environments. The tensions that arise between the need to foster the spread of enthusiasm and skill and the need to monitor and record, and between top-down and bottom-up approaches are considered. Five broad dimensions of quality assurance are identified. Recognition and support of diversity in strategy to both meet local needs and to achieve university-wide standards are considered.

Designing for complex ICT-based learning: Understanding teacher thinking to help improve educational design

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The work involved in designing good learning tasks is becoming more complex. This is partly because the changing needs of the knowledge society are placing greater demands on the ability of graduates to work with knowledge in more versatile ways. It also arises from the growing complexity of arrangements for learning: involving new and more fluid distributions of learning activity across time and space. Efforts are being made to improve the design resources available to teachers in higher education, yet little is known about how teachers actually engage in design work: what they think about, what experience and expertise they draw upon, what goes on when they create new learning tasks. This paper presents some outcomes of a small scale study of teacher thinking during educational design. It focuses on the teacher design thinking in the context of systems thinking and modelling course. In particular, it explores some ideas about the mental resources that need to be activated and combined in coming to good design decisions – especially when ICT tools are an important part of the educational mix.

Crossing the ditch: Applying the e-learning maturity model to Australian institutions

Stephen Marshall
University Teaching Development, Victoria University of Wellington

The e-learning maturity model (eMM) provides institutions with detailed information on their e-learning activities. This paper describes the pilot application of the eMM to two large Australian universities and suggests that disciplinary differences taking place in different spaces may be more consistent in their use of e-learning than is generally acknowledged. The eMM is also compared with the Australian developed ACODE benchmarks and the complementary benefits of both processes discussed.

Using social media to enhance the first year experience

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This study explores blending virtual and physical learning environments to enhance the experience of first year by immersing students into university culture through social and academic interaction between peers. It reports on the progress made from 2008 to 2009 using an existing academic platform, the first year design elective course *Imaging Our World*, at the University of Adelaide. Over one semester, 120 design students engaged with their peers through an online forum within the host site *Facebook*, in addition to the traditional teaching mechanisms of lectures and tutorials. Students were required to submit work online to Facebook and provide critiques of peers' submissions. Resulting discussions were then transferred into the physical classroom with the aim of building meaningful relationships between peers based on the embryonic online connections. The evaluation process involved pre and post semester questionnaires, weekly feedback from students and project-specific reflections at the completion of the semester.

Personalised learning spaces and self-regulated learning: Global examples of effective pedagogy

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Mark J.W. Lee
School of Education, Charles Sturt University

Recent educational research attests to an increasing awareness of the need to encourage learner control over the entire learning process. Web 2.0 and social software tools are capable of supporting informal conversation, dialogue and collaborative content generation, enabling access to a wide raft of ideas and representations. Used appropriately, they can shift control to the learner by promoting agency, autonomy and engagement in social networks that straddle multiple real and virtual learning spaces independent of physical, geographic, institutional and organisational boundaries. However, in order for self-regulated learning to come to fruition, students need not only to be able to choose and personalise what tools and content are available, but also to have access to appropriate scaffolding to support

their learning. Emerging practices with social software, examples of which are showcased in this paper, signal the need for pedagogies that are more social, personal and participatory. The paper concludes with a discussion of the implications for practice, including current challenges faced by tertiary educators.

Using the DODDEL model to teach serious game design to novice designers

Mark McMahon
Edith Cowan University

Instructional Design is often defined as a complex and ill-structured problem solving process. Research has shown that for novice designers, a clear structure is required to develop expertise goes beyond instruction on the problem solving process. There are many Instructional Design models that are used to explicate the process. However, there are few in the growing area of Serious Games that provide an adequate level of prescription, while accommodating the broad range of contexts and philosophies that underpin their design and development. The DODDEL Model (McMahon, 2009) has been developed to address this. This paper describes a study involving the implementation of the model with a group of undergraduate students in Serious Game design. It's value as a tool to promote expertise in novice designers is discussed.

The digital divide between university students and teachers in Hong Kong

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The Chinese University of Hong Kong

A study presented at ASCILITE 2008 (Kennedy, Dalgarno et al., 2008) suggested that the digital divide between students and staff has been overestimated. This study, conducted at The Chinese University of Hong Kong, investigated the ownership and use patterns of a range of digital technologies by a stratified sample of 689 Year 1 Hong Kong students and 56 of their teachers. The study illustrated that our students on the whole are 'digitally ready'. However, these so-called digital natives are not a homogeneous group and there is variation both in the level of ownership of digital devices and of perceived acquisition of appropriate digital skills. The digital divide between teachers and students is not straight-forward and appear to relate, not to ownership, but to preferences and prior experiences with technology. Factor analysis revealed seven categories of technology-based activities with students reporting higher use and confidence in most areas. Implications for staff development and student-support services are noted.

A conceptual framework for assessing interaction quality in online discussion forums

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The use of discussion forums in education has long been a hot topic in tertiary education. Discussion forums' activities help learners to share and gain knowledge from each other. However, setting up discussion forums does not ensure that learners interact with each other actively and grading of discussion forum participation is done to ensure qualitative learner participation. Currently, a major focus has been put onto the better use of discussion forums, but the way in which quality of participation can be evaluated has yet to be adequately investigated. This paper presents a conceptual model, based on an extensive review of current literature in related areas, as a way forward in looking at the assessment of quality in online discussion forums. The main benefits of the proposed framework are towards facilitators, as a way to assess learners' online contributions, while students may use it to understand what is expected of them as participants in online discussion forums.

Engaging students in a multimedia cooperative-learning environment: A Malaysian experience

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This study focuses on developing a cooperative learning environment to promote active learning. Within this learning environment, multimedia technology and the use of Web 2.0 tools, namely, blogs were integrated to provide the students the opportunity to learn on their own as well as to document their process and experience within this cooperative learning environment. The purpose of the study is to determine its impact on student learning, their perceptions and learning experiences. Surveys were administrated to students to ascertain their reactions towards this learning environment. The results were encouraging as students managed to cooperate with each other to accomplish their common goal. The use of blogs served as a tool to enhance team cooperation and to foster a learning community within the class. This multimedia enhanced cooperative environment proved to be a viable alternative to the traditional classroom and was an effective strategy to enhance the students' learning process.

Local content game: The preferred choice for mobile learning space

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Two studies to find out Malaysian students' preferences towards learning using mobile space are conducted. This first study is a survey gathered from 591 secondary school students, age 13 to 17 years old. The main objective of the survey is to acquire relevant data to support a mobile game-based learning (mGBL) development. The outcome of this survey indicates that almost 60% of the students prefer mobile phone as the chosen platform for game-based learning rather than other devices. Further finding suggests that, in order to provide successful learning environment for students; both entertainment and education values should be embraced, suggesting mGBL as the possible solution. Also, 83% stated that they preferred local designed characters with local culture based contents. Next, the second study determines what types of game characters appeal to the students. From this, two points are concluded, which are (i) local, appealing and well-developed characters are important elements to motivate students and (ii) local uniqueness must always be incorporated to increase mGBL acceptance.

***E-valu8* – A tool to support proactive feedback: Motivating students to learn and complete their course**

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The *E-valu8* project at the University of Central Lancashire (UCLan), aimed to utilise technology to support students in effective methods of evaluating the quality of their learning experience, enabling open interaction, collaborative and personal action planning. The objectives explored ways of engaging and motivating students by providing timely feedback, through the development of an online evaluation tool. Initial investigation focused on the mechanism, value and worth of both the process and value of effective feedback. The emphasis within this paper is the consequential effect, if any, on the motivational effect of student feedback by closing the feedback loop and endeavouring to consider if such activity promotes student engagement within a course of study. Creating an environment in which feedback is acknowledged and acted upon and fed back to students has been shown to enhance learning outcomes in many different ways, including improvement in the quantity and quality of the learning experience (Grabinger et al, 1995). This could be defined as an environment which is both dynamic and responsive, with the students being encouraged and rewarded for participating within the feedback and assessment process. Our work illustrates that by embedding more intrinsic rewards via appropriate feedback mechanisms this allows students to feel involved in taking responsibility for their own learning, (Davies and Smith, 2006; Canaan, 2003). This promotes a deeper understanding of concepts and their application. The technology use needs to be constructively aligned with the curriculum objectives and learning outcomes so the students can become

actively engaged in their learning and the learning and teaching process, rather than passive recipients of knowledge and information. To conclude, this paper attempts to show how the effective use of an institutionally based feedback and evaluation tool can encourage and support student motivation to learn and engage within a course of study.

Our journey to new places using different spaces:
A teaching degree totally online

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The investment in technology to support delivery through Open University Australia (OUA) is a significant step in opening up the potential to increase efficiencies in service delivery to remote locations and indeed the world - as well as to develop new course offerings that do not add to the strain on 'physical' resources. Whilst Curtin University is currently the 'only player' in the Bachelor of Education Primary Education OUA arena it is wise to consolidate its leading position by understanding the distinct and real trends of student attraction and retention to enhance its status, position and ultimate economic viability in this sphere. This paper reports on a pilot study conducted to determine the student attrition rates in the very first offering of four OUA units in study period one. The results of the pilot study have informed the design of a much larger research project which aims to profile the students participating in the OUA Bachelor of Education Primary course in order to develop a greater understanding of those factors that impact on attrition rates thus informing future practice.

Building engaging physical and virtual learning spaces:
A case study of a collaborative approach

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Research is somewhat divided as to whether today's younger students speak natively the language of social networks, mobile phones, and the Internet. What seems incontrovertible, however, is that current learners (from several generations) have readily embraced technology which allows them to share their experiences and knowledge through online sites such as Facebook, Twitter and ePortfolios. Universities often struggle to keep pace with the engagement offered by these largely commercial social networking sites. Large and devolved universities face the added challenge of integrating support services to build university-wide systems that integrate with curriculum. While universities cannot force engagement, it seems likely that student engagement and achievement will be optimized if curricula and next generation learning spaces work in concert, and are supported by

collaborative partnerships. Curtin University has in recent years reevaluated its physical and virtual spaces based on research of its students' ownership and expectations. Recent initiatives reported in this paper demonstrate how central university support agencies have collaborated in an effort to design spaces and tools that optimise engagement incorporating Web 2.0 technologies and mobile platforms.

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ePortfolios and unfamiliar spaces: Exploring the unknown together

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When decisions are made to implement initiatives using e-portfolios, anxiety is sometimes expressed because of the challenge of exploring 'new spaces'. This can occur, for example, when academic practitioners are required to re-address learning, teaching and assessment practices, and upskill in ICT. This paper has three main aims. The first is to ground the subject in current literature. Reference will then be made to two research studies conducted at Dubai Men's College where the use of e-portfolios was proposed and in one case implemented. The barriers identified around e-portfolios are described, along with an overview of current attitudes expressed at Unitec NZ during small-scale trials. To date, a comparative research study has not been conducted, but the collation of findings offers a rich picture of potential challenges for academic practitioners around adopting e-portfolios. Finally, the paper draws the threads together to recommend ways of avoiding some of these possible pitfalls.

Online learning environments: Same place, different demographic space?

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This paper presents a large scale, quantitative investigation of the impact of demographic differences on the student experience of using an online learning environment (OLE). Female respondents generally gave higher ratings than males, and gave significantly higher ratings in both importance and satisfaction to a group of OLE elements related to online interaction and community. Postgraduate respondents generally gave lower satisfaction ratings than undergraduate students, though significant differences were few. Results on the basis of mode of enrolment were mixed. The discovery of significant differences between demographic groups highlights the importance of up-to-date and on-going research-based surveys of student perceptions of the OLE. The finding that elements of the institutional OLE are not universally perceived the same way by all students groups also challenges the value of standard, one-size-fits-all institutional policies and templates relating to the use of the OLE.

A proposal for an adaptable personal learning environment to support learners needs and preferences

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In recent years, Virtual Learning Environments (VLE) (also known as Learning Management Systems) have become pervasive in Higher Education. In addition, the explosion in social software and Web 2.0 technologies raises learners' expectations of flexibility and personalisation, and highlights the rigidity and limitations of the VLE. Recognition of these limitations has given rise to the evolution of such systems into the concept of a Personal Learning Environment (PLE). This paper examines the concept of personalisation in terms of adaptation of the learning environment according to the needs and preferences of disabled learners. We report on progress towards the development of a model for an Adaptable Personal Learning Environment (APLE) that responds to the challenge of providing truly learner-centred, accessible, personalised and flexible learning.

Building sustainable learning spaces with industry partners through reciprocal mentoring

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This research aims to address current problems regarding availability of pre-service teacher education internship opportunities through the development of an ongoing and sustainable relationship with local primary school teachers and students. The culmination of the research will ultimately result in a reciprocal-mentoring model being developed which will create a mutually beneficial partnership between an Australian University (teacher education students and academic staff) and local primary school teachers and students. A *Collective Community* learning platform has been built and implemented which has enabled all stakeholders to work together on ICT-rich learning activities. The research has involved four very distinct phases. However, this paper reports on *Phase 3: University Readiness* of the larger study. This phase involved primary school students working with teacher education students, teachers and academic staff on an ICT activity for the day. The findings reveal that reciprocal mentoring can be mutually beneficial to all involved.

Evaluating mobile learning artefacts

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The design of mLearning applications based on mobile data technologies and the development of mLearning services implementing them is driven both by mobile technology innovation, and by the trend towards more student-centered and personalized learning. mLearning activities are normally delivered through an mLearning service, which may use a specialized hardware/software mobile learning artefact. The study aims to develop a framework for the evaluation of innovative mLearning artefacts with respect to their potential to succeed as mLearning services. The perceptions of the mLearning users are investigated in order to identify the dimensions of the framework. The outcomes of the completed study may highlight the role of artefact design in the adoption of the mLearning service and provide directions to artefact designers.

The cachet of constraint: Learners, ownership and power

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The innovation explored in this paper reveals some of the complexities of power and ownership that practitioners need to negotiate if they are to create institutional spaces where learners can find their own voice. The paper sheds light on current debates about personal learning environments versus VLEs, and argues that an either/or approach is unnecessarily limiting. It proposes, instead, that practitioners will be able to operate more effectively if they recognize the diversity of actors and influences that shape the spaces in which learning takes place. The paper tests this proposition by examining the introduction of a synchronous online tool, highlighting the practitioner values that the project team revealed in its pedagogic choices.

Flexible role playing game engine for case studies in forensic accounting

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Louis Shun, Educational Development Centre
The Hong Kong Polytechnic University

This paper reports on the design, development and first implementation of a role playing game engine to improve students' learning for a university course in Forensic Accounting, a specialty that has been growing in popularity in recent years. A role playing game (RPG) engine has been developed to allow students to act in a virtual environment as forensic accountants responsible in investigating potential fraud cases. It was observed that students were more engaged and class interaction was greatly enhanced. The gaming nature of the tasks also helped create a friendly competitive atmosphere and encouraged independent learning. Unlike other game engines, the developed system was designed specifically to allow teachers to create new and maintenance existing cases on their

own with little need for technical assistance. The developed system is extremely reusable and is highly adoptable for other disciplines to be used in case studies activities.

Peer review of teaching practice and resources: Exploring new spaces to embrace cultural change

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The implementation of systematic peer review as a professional development activity, and as a support for educational design activities is under-utilised in many Australian higher education institutions. This case study reports on the first stages of planning and implementation of an institution-wide project to enhance teaching and learning quality at a remote and regional university, where one of the major strategies for improvement is peer review. Through a systematic process of staff engagement in peer review, within and from outside the organisation, a substantial change in flexible learning is envisaged. A mix of new and different learning spaces are to be used in the project, including blended learning spaces for academic development. This paper describes the research framework that will guide the peer review process and examines the early findings of the design-based research. Leadership, awareness raising and development of a supportive community of inquiry are seen as key components for successful implementation of peer review. In addition, unique contextual elements add to the complexity of designing for transformative change within such a relatively new organization.

Students' expectations of the Virtual Maternity Clinic

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The aim for the Virtual Maternity Clinic (VMC) is to engage students in learning about the role of the midwife and care of women during early pregnancy. The VMC, using Deakin Studies Online as a platform, includes LiveSim, videoed characters and Adobe Flash of four pregnant women with diverse issues. From an evaluation distributed to students prior to access of the VMC to identify their expectations, we found that undergraduate students wanted to learn how to interact with women during early pregnancy, whereas postgraduate students wanted strategies to learn about midwifery practice. Further development of the VMC is progressing to include a suite of programs incorporating the care of women during late pregnancy, labour and birth; and the time after birth.

eScience: Evaluating electronic laboratory notebooks in chemistry research

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The School of Chemistry at UNSW is undertaking a trial of an electronic laboratory notebook (ELN) with selected honours and postgraduate research students. This ELN was developed at the University of Southampton and has been designed to accommodate the diversity of research in science. The concept of an ELN is that all the data from instruments, the observations of a researcher, their notes, thoughts, etc, will be captured within the ELN. The UNSW/Southampton ELN is a blog of each researcher's experiments, which resides on a secure server and is accessed through the web. It is intended that data will be readily retrievable for creating presentations, writing papers and ultimately the student's thesis. The project has obtained a number of input devices (e.g. netbook, tablet and notebook PCs, PDA) and will trial their use with the web site. The central part of this trial is the perceptions of staff and students as to the merits of adopting an ELN and the usefulness of an ELN to access experimental data more efficiently and to enhance communication between students and their supervisor(s).

The TeCTra online groupwork tool: Scaffolding the learning of self and peer assessment

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A reliable assessment strategy for allocating different summative marks for individual contributions in groupwork is a perennial problem that using the TeCTra online tool can resolve. By collecting weekly quantitative and qualitative data to support the individualising of contributions and summative marks the tool supports and scaffolds the students' learning of self and peer assessment understandings, knowledge and skills. This paper discusses the changing design of peer assessment from 1998 to 2008 and the impact of the TeCTRa groupwork tool within a capstone undergraduate subject with large student numbers at UTS. The TeCTra strategy has delivered more diversity of individual summative marks than those reported in the literature and experienced by the authors in the period before the introduction of the tool in 2004. The system for calculating an individual contribution factor has released the academic from the enormous workload otherwise required to process any similar paper-based strategy.

Benchmarking across universities: A framework for LMS analysis

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Leigh Stevenson, Griffith University
Janne Malfroy, University of Western Sydney
Kevin Ashford-Rowe, Griffith University

Enterprise wide learning management systems are integral to university learning and teaching environments. Griffith University and the University of Western Sydney (UWS) are predominantly face-to-face, multi-campus teaching institutions with similar size student bodies and academic communities. Both Griffith and UWS utilise a single enterprise wide e-learning system, although the systems are different. This paper describes a benchmarking activity between the two universities to determine the level and quality of the uptake of the e-learning system. A framework was developed as a product of the partnership and applied to a representative sample of e-learning sites. The results of the benchmarking exercise showed that there are parallel trends between the two institutions in how the LMS is being used, however with distinct differences in specific areas.

Blended spaces, work based learning and constructive alignment: Impacts on student engagement

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Nona Muldoon, Curriculum Design and Development, CQ University
Cheryl Bookallil, Student Support Centre, CQ University

This study examined students' active engagement in the context of aligned curriculum and instruction. In conjunction with Biggs' (2003) notion of constructive alignment, the ten principles of engagement suggested by Krause (2005) informed the redesign of an undergraduate course, which was delivered fully online and had a work-based learning component. The results of the present study strongly suggest that the course redesign has lead to significantly increased student engagement and achievement of higher order outcomes. Statistical analyses using Student t-tests revealed highly significant increases ($p=0.002$) in student engagement as measured by the average total 'hits per student' on learning resources, and a highly significant increase ($p=0.001$) in student engagement within the Discussion Forum on the online learning environment. Findings in the study highlighted a number of implications for educational practice, one of which is the need for a University- or systemic-wide review of the constraints that inhibit responsive course redesign.

Developing surgical decision making skills through dynamic branching short cases and reflection

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Swee Kin Loke, Michael Winikoff, Peter Vlugter, Ayelet Cohen and Jenny McDonald, Higher Education Development Centre
Otago University

This paper describes the development of reflective branching short cases to facilitate medical student's acquisition of surgical decision-making skills. Decision-making skills are an important attribute of a competent surgeon. However, the acquisition of decision making skills is often not explicit in medical curricula and is developed by experience after graduation. Formative dynamic branching cases were developed for students to interact with, as part of a surgical decision-making eLearning site. The cases require students to make and reflect on decisions. Feedback is provided about the decision-making process, with links to eTutorials providing more information about decision making factors. Initial feedback from student testers indicates they welcome this learning strategy and feel that it encourages them to be more reflective about their decision-making skills. Interactive branching short cases with a focus on decision-making factors enable students to practice the three recognised modes of reflection; reflection in-action, on-action and for-action.

The blended discourse of SMS communication in a mobile student administration system

Joan Richardson and John Lenarcic
School of Business Information Technology
RMIT University

The pilot implementation of a Short Messaging Service (SMS) system for student-academic staff administrative information exchange in a higher education environment is described. Assessment results and related alerts were broadcast to students and access was provided to information relating to their subject schedules and assessment performance. Both qualitative and quantitative data were collected during the pilot study using an online student survey with a basis in Davis's (1989, 1993) Technology Acceptance Model (TAM). A preliminary analysis of the data from focus groups for staff and student participants is outlined here. The pilot and subsequent review enabled an evaluation of the benefits of SMS in relation to supporting student services, specifically scheduling information and assessment feedback. Some of the sociolinguistic issues related to the usage of the system are discussed, these being findings derived from the focus groups.

Mentoring through scholarship-based academic development projects

Diane Robbie and Debbi Weaver
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While there is definitely a place for centrally delivered Professional Development (PD), staff often don't transfer what they have learned in the PD sessions and return to their workspace usually continuing as before. This paper describes an evidence- and scholarship-based model of PD, where academic developers work closely with teaching staff on projects designed to address teaching needs specifically through the implementation of educational technologies. Each project involves engagement with the relevant scholarly literature, implementation of an appropriate teaching strategy or innovation, evaluation of the effectiveness of that implementation, and ultimately publication of the outcomes of the project. Fostering a one-to-one collaborative, mentoring relationship means the academic developer also benefits by extending their scholarly knowledge, and contributes to the discipline of academic development.

Teachers as active agents in recontextualising pedagogic spaces in vocational education and training

Ian Robertson
RMIT University

This paper shows that policy reforms in Vocational Education and Training in Australia since the late 1980s developed with the specific intention of reforming the official pedagogic discourse and associated pedagogic spaces that existed at that time. The discourses of flexible delivery, flexible learning, online learning, e-learning and blended learning established pedagogic spaces that are described in terms of the primary purposes, actors, rules and resources that have characterised each. Drawing on the idea of recontextualisation, an existing model is used as a basis to propose a representation of the dynamics that shape practice in the transition from one pedagogic space to another. This model portrays teachers as active agents in the recontextualisation of official policy discourse. A proposition that challenges the ideas of rational actor theory that underpins assumptions about the implementation of policy changes in VET.

What leading educators say about Web 2.0, PLEs and e-portfolios in the future

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Mark Brown, Director of Distance Education, Massey University

Over the last decade and a half concepts around portfolios have gone through many transformations influenced by the evolution towards an increasing digital world. More recently Web 2.0 technologies have

appeared. These have afforded shifts in our constructs of learning spaces: Blended-Space, Virtual-Space, Social-Space, and very recently the emergence of the PLE or personal learning environment. This paper presents results of a survey that is one element in a broad environmental scan of the e-portfolio field set against the blooming of Web 2.0. The survey probes the perceptions of New Zealand educators who lead; how they see e-portfolio trends, Web 2.0 integration, and their views of teacher education in a digital society in the context of e-portfolios. Critical perspectives around learner agency are explored. Questions are raised about the location of knowledge production and validation. Results indicate that Web 2.0 technologies are just coming to the attention of teacher-educator leaders, and are seen to offer potential to future e-portfolio practices. However the vision in respect to Web 2.0 and the PLE appears constrained in the main. A gap is identified around conceptualizing this as an integrative relationship. Further research into the alignment of e-portfolios within these emerging learning spaces is suggested.

Simulating clinical experience: Exploring *Second Life* as a learning tool for nurse education

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Healthcare professionals have established that experience gained through simulation is a fundamental learning activity in developing competent nurses. An emerging technology that has, up to now, had little consideration as a clinical simulation platform is three-dimensional multi-user virtual environments. The purpose of this study was to explore *Second Life* as a clinical simulation platform, based on the attitudes and experiences of a sample of undergraduate nursing students. Teams of self-selected students were placed in separate locations and participated in a clinical simulation developed in *Second Life*. The simulation involved a series of problem-based scenarios which incorporated concepts of technical skills, patient interaction, team work, and situational awareness. Results from a set of investigative interviews provided evidence to support *Second Life* as a learning format for simulating clinical experience.

An emancipating space: Reflective and collaborative blogging

Arianne Jennifer Rourke and Kathryn Coleman
College of Fine Arts, University of New South Wales

This paper discusses the philosophy behind utilizing blogs to engage Postgraduate learners at the College of Fine Arts (COFA) University of New South Wales (UNSW). Digital diaries (Gleaves, Walker & Grey, 2007) were established to enable a reflexive and collaborative space in which students could discuss and reflect on their personal experiences while completing a compulsory arts industry Internship. The virtual learning environment (VLE)

through *my eLearning* Vista allowed for a range of asynchronous communication initially in the discussion forum (DF) for these online learners to increase student engagement while completing their internship. The DF did allow students to collaborate and discuss their work practices in the arts industry it however, did not offer students the reflective learning space that a digital blog diary could provide. It will be argued that blogs are effective teaching and learning tool for engaging students proactively in a collaborative learning space in higher education.

Integrating e-portfolios: Putting the pedagogy in its place

Jennifer L. Rowley and Peter Dunbar-Hall
Sydney Conservatorium of Music, University of Sydney

E-portfolio's have been a feature in teacher education degree programs as a means to document professional accreditation (Gerbic & Maher, 2008). The development of a professional e-portfolio for pre-service music education students has challenged teacher educators in a NSW university music Faculty as it was essential to embed the *processes* of creating a student e-portfolio across the four-year music education degree program that allowed students high levels of independence and creativity in the presentation of themselves as both reflective learners and professional practitioners (musician and music teacher). This poster presents a work in progress describing the *processes* of introducing e-portfolios into a music education degree program and discusses the initial design issues of blended learning, the methodology used to embed e-portfolios into existing Units of Study, assessment, the pedagogical possibilities for engaging students in a technology rich learning environment and other conceptual issues that arose in the design process.

***Basic Science Alive*: Linking science knowledge to clinical practice**

Joy R Rudland, Judith Swan, Faculty of Medicine, University of Otago
Phil Blyth, Otago School of Medical Sciences, University of Otago
Michael Winikoff, Information Science, University of Otago
Jenny McDonald, Swee Kin Loke, Richard Zeng, Ayelet Cohen, Educational Media, Higher Education Dev, University of Otago

This paper describes an e-learning package, *Basic Science Alive* (BSA) that aims to facilitate undergraduate medical students'Äô integration of basic science to clinical scenarios. The educational emphasis is on students constructing their own links between theory and practice and the process of peer review. There are three main components of the package: the writing of a short structured essay (presentation) demonstrating the linkage of basic science to a specific clinical scenario; the opportunity to review and comment on colleagues'Äô presentations; and the value of receiving feedback through multiple choice questions (MCQs) and peer comments. This paper specifically focuses on the peer review element, including the

perceived learning of the reviewee through receiving the comments, and the learning of the reviewer through interaction with the presentation and formulating feedback to the reviewer.

Different spaces: Staff development for Web 2.0

Gayani Samarawickrema
Institute of Learning and Teaching, Deakin University
Robyn Benson and Charlotte Brack
Faculty of Medicine, Nursing and Health Sciences, Monash University

This paper reports on a collaborative staff development activity run across two Australian universities, for academic staff integrating Web 2.0 technologies into their teaching. It describes a three-week long virtual workshop, on teaching with wikis where participants in two groups developed a group project as students and then assessed the work as teachers. Participants were guided through a central *Wikis in Higher Education* wiki which provided the resources and communication supports. The experience suggested that teaching in a Web 2.0 space requires new thinking about pedagogy and that peer learning and the development of an online community are helpful for effective professional development. In closing, the paper reflects on the successes and limitations of this virtual workshop model.

A conceptual model for the educational deployment of QR codes

Sarah-Jane Saravani
Library, Waikato Institute of Technology
John Clayton
Emerging Technologies Centre, Waikato Institute of Technology

As mobile internet adoption increases, mobile engagement with information and access to services becomes increasingly routine. However, m-learning implementations are currently input dependent. The protracted methods of accessing stored information and services through phone-pad input functionalities is time-consuming, frustrating and serves to limit the uptake of m-initiatives. To increase the impact of m-deployments, to enhance flexibility of provision and also to advance the personalisation of learning, a number of institutions are using Quick Response (QR) Codes and Mobile Tags (MT) which allow users with embedded camera phones ready access to information and services. However, the increasing use of QR/MT creates challenges for the institution, for example, managing changes in approaches to learning, secondly, making informed investment decisions, and finally, evaluating impact. This paper describes a conceptual framework used by the Waikato Institute of Technology to integrate QR/MT within their current policies, procedures and institutional ICT infrastructure.

An online tool for managing student assignment selection

Mark A. Schier and David Shields
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Learning Management Systems allow the delivery of learning materials to students, facilitate collaboration, and submission of assessable material. One aspect missing in current Learning Management Systems is the ability to manage student assignment selection from a list of topics with multiple markers. This paper describes the pilot assignment allocation system we developed in-house to manage this process. The system was trialled with a third year subject, and functioned well, with positive feedback from users and practical suggestions for the next iteration.

Using e-resources and tools to update professional knowledge in the workplace

Madeleine Shanahan
School of Medical Sciences, RMIT University

Continued learning is vital for health practitioners to ensure they stay up-to-date with current developments in their field. This study examined a range of electronic information resources and tools that health practitioners use to update their professional knowledge and explored workplace access to these learning resources and tools. Survey method was used for data collection. A 4-page survey was sent to a random sample of 1067 Australian Medical Imaging Workers (MIWs) with 320 useable surveys returned. This study showed that ease of access to information resources is positively associated with increased frequency of use. This study also identified that there is widespread variation in access to electronic information resources and communication tools within the workplace. Issues reducing accessibility of electronic information resources and communication within workplaces must be addressed so that health practitioners can avail themselves of resources and tools that support them in updating their professional knowledge.

The evolution of an LMS: Cecil fifteen years on

Don Sheridan and David White
The University of Auckland

"Cecil, the First Web-Based LMS" (ASCILITE, 2002) described how The University of Auckland's home grown LMS originated. Now - fifteen years on we describe the challenge of maintaining such a system given of the evolution of computer hardware and software and the increasing sophistication of its users. Over time we have made the transition to the latest processors and database architectures and at present we are running a pilot to replace a significant a amount of our own code with Microsoft

Office SharePoint (TM) Services (MOSS)- while seeking to retain the original functions and features including a bodies of knowledge (taxonomy), gradebook, assessment engine and communications modules. One important outcome of the pilot is to relieve our team of developers, who have *'grown up'* with Cecil, from legacy code maintenance. The SharePoint pilot has proved that moving to a higher level of abstraction will position the University to deliver core functionality 'out of the box' freeing resources for integrating new computer supported learning features. Innovators in the teaching and learning 'space' may find the history of Cecil useful as they prepare for fearless change.

Comparison analysis of the online lecture formats of *PowerPoint* and Webpage for online students

Daniela Signor
Faculty of Higher Education, Swinburne University of Technology

While many studies have been conducted on students' experiences when comparing face-to-face teaching to online teaching, these have not focused solely on the delivery format. Many lectures have simply been placed online from the equivalent on-campus version and are in the PowerPoint format, and so do not use the online medium to its best advantage. This study will look at online students' opinion of a PowerPoint lecture, a Webpage lecture and their comparison. This paper reports on the outcomes from two surveys taken by online students, enrolled through Open Universities Australia, studying an introductory Swinburne University IT unit. This study will evaluate the delivery format of the online learning lectures with the aim of improving the online learning material. The findings indicate that online students prefer Webpage to PowerPoint for text-based online lectures.

Theory of planned behaviour: Higher education students' attitudes towards ICT-based learning interactions

Lou Siragusa and Kathryn C. Dixon
School of Education, Curtin University of Technology

Phase one of a pilot study (Siragusa & Dixon, 2008) collected data from a group of undergraduate students in a higher education setting to determine their attitudes towards their engagement with ICT interactions. Phase two of the pilot study was undertaken in 2009 with another group of students in a pre-service teaching course which employed a mixed method approach. The participants completed a quantitative questionnaire, worked though an ICT-based activity and then completed a qualitative questionnaire. The questionnaire items related to components of the Theory of Planned Behaviour to determine students' attitudes and planned use of ICT-based instruction. The quantitative data indicated that students believed engaging with ICT can potentially enhance learning and plan to engage with ICT during their teaching careers. The qualitative data showed that students felt

overwhelmed when commencing the activity, but felt more confident as the activity progressed. Some students suggested improvements to the learning environment.

Improving graduate attributes with online teaching resources: A case study in IT Management

Alan Sixsmith and Andrew Litchfield
Engineering and Information Tech, University of Technology Sydney

The paper backgrounds the *UTS Work-ready Project* which aims to improve graduate professional attributes and employability understandings and skills. The Project makes available online teaching and learning resources to support the integration of Work-Ready Learning Activities (WRLA) into the existing curriculum. The WRLA's are contextualised for each profession's workspace to maximise relevance for both students and academics. The paper presents a case-study of the integration and evaluation of contextualised WRLA's to improve teamwork processes into three subjects in the IT Management curriculum. Students were surveyed to obtain feedback on the usefulness of a team collaborative decision-making WRLA and whether it helped in their undertaking of a group assessment task. The survey results were positive when averaged across the three subjects and the five surveys conducted indicate 85% of students thought the activity was useful. However in relation to whether the WRLA helped in the group assessment task there were mixed results. Undergraduate students reported the WRLA made little difference, whereas post-graduates indicated the WRLA did help the team produce their group assignment. We also present reflections and lessons learnt from the perspective of a Subject Coordinator trying to improve graduate work-readiness within the existing curriculum.

Facilitating holistic growth in a blended program: Students reflect on what worked and why

Ruth Smith
Counselling and Family Studies, Bethlehem Tertiary Institute, Tauranga

The ability or otherwise of flexible learning environments to facilitate whole-person growth and transformation has been attracting increasing research interest. This article shares initial findings from an ongoing project that seeks to identify key factors from a faith-based, blended Diploma of Counselling programme which students identified as significant in their self-perceptions of holistic change. Two aspects – 'gristy' online discussions and the onsite intensives – are explored more fully. The article addresses a perceived gap in the literature by giving focus to participant responses as they share their perspectives, seeking to identify helpful practices as well as challenges in the facilitation of holistic growth and transformation among students in blended learning settings.

Exploring online spaces to support multi-ethnic Asian undergraduates' critical thinking

Helena S. Y. Song and Yuen May Chan
Faculty of Creative Multimedia, Multimedia University

Engaging students to think critically especially in a large tutorial group setting is problematic. Many literatures have cited the problem of Asian students being critical thinkers. Observation from several researchers noted that deeply rooted Asian cultural traditions such as maintaining social harmony, filial and obedience to people of authority, inability to voice ones opinion, undivided loyalty as well as avoiding conflicts in public were some of the obstacles that discourages critical thinking. This study seeks to investigate the use of online tutorial (online forum/discussion) in supporting critical thinking among Asian undergraduates. The methodology used for this study is a mixed-method case study approach, utilizing techniques such as interaction pattern mapping and content analysis. Data will be culled from students' postings and comments in the online forum at the end of study. Coding of data is reflected and based on the Newman, Webb and Cochrane's paired indicators of critical and uncritical thinking. Results show that there is strong evidence of critical thinking among the students participating in the online forum. Content analyses revealed general positive ratios of the critical thinking indicators with (O+- Bringing outside knowledge/experience to bear on problem) being the strongest.

What spaces? Designing authentic, sustainable online learning spaces for children with diabetes

Richard Sprod, Shirley Agostinho and Barry Harper
Faculty of Education, University of Wollongong

This paper presents a work-in-progress of how social networking, Web 2.0 and emerging communication technologies might be successfully used to support authentic self-management education for children aged 11-13 years who are living with Type 1 diabetes. The study employs a mixed-method approach that has been adopted within a Design Based Research framework. This paper explains the research problem, the theoretical framework that will underpin the study and the overall research design.

Creativity and constraint: Understanding teacher beliefs and the use of LMS technologies

Caroline Steel
Teaching and Education Dev Institute, The University of Queensland
Mike Levy
School of Languages and Linguistics, Griffith University

Most universities still offer Learning Management Systems (LMS) as the 'one size fits all' technology solution for all teachers across all disciplines. Using LMS across diverse campuses has resulted in efficiencies-of-scale for administrators, however LMS integration into teacher practices is minimal (e.g., Conole & Fill, 2005) and teachers' creative space can be limited for discipline-based innovation. Together, these realities indicate that there are significant barriers to the effective use of LMSs, especially for teaching and learning purposes. To overcome such barriers, the complex and less visible internal space of teacher beliefs must be understood in relation to teachers' pedagogical contexts and the affordances they can identify. This paper reports on the findings of six qualitative case studies of teachers at different stages of LMS integration and the extent to which teachers reconciled their beliefs. The results highlight the need for technology environments that better accommodate teacher diversity.

To spray or not to spray? A scenario-based exercise for tertiary-level horticultural students

Terry M. Stewart and Mark E. Brown
Centre for Academic Development and e-Learning, Massey University

A scenario-based exercise was developed to expose third-year degree-level horticultural students to the complexities of modern orchard pest and disease management. Using scenarios developed and presented with the e-learning tool SBL Interactive, students are required to analyze four successive scenarios set at different growth stages in the crop, and provide justified recommendations for all. The lesson combines formative and summative assessment and uses sound learning design principles. The exercise could be adapted to workplace training. This paper describes the lesson and discusses the rationale behind the lesson design.

A contextualised online writing support system: Creating the links between generic skills and the discipline

Pat Strauss, Auckland University of Technology
Robin Goodfellow and Marianne Puxley, Open University UK

This paper describes an ongoing research and development project aimed at providing contextualised, individualised online writing support for postgraduate students. It is the result of a collaboration between UK and NZ academics who share similar challenges and concerns. The massification of higher education globally means that many tertiary students drawn from non traditional or second language backgrounds struggle to master the academic literacy requirements of particular discipline areas. These writing difficulties can, and often do, impact negatively on their academic success. Universities attempt to address this problem by providing online generic resources for students. Unfortunately research indicates that students are not successful in transferring generic concepts to their own discipline. We

are attempting to devise an online programme where lecturers will be able to draw on these generic resources and, following models provided, construct a link between the specific and the generic in their own discipline area.

A dialogic approach to online facilitation

Jennie Swann
Educational & Professional Dev, Auckland University of Technology

Social construction of understanding has long been a significant underlying principle of learning and teaching and while there are many models for the design of online activities to promote this there are considerably fewer models for the facilitation of such dialogue. This paper examines some of these facilitation models from the point of view of a university lecturer seeking to encourage social construction of understanding through online dialogue and proposes an alternative which extends the principles of Community of Inquiry theory. It describes a design-based research project which focuses on the dialogue itself in a university learning environment, and on the development of facilitation techniques which will encourage it to flourish.

Moodle and the institutional repositioning of learning and teaching at CQUniversity

Kevin Tickle, Arts, Business, Informatics and Educ, CQ University
Nona Muldoon, Curriculum Design and Development, CQ University
Beth Tennent, Arts, Business, Informatics and Educ, CQ University

This paper provides insights into the unique operation of a multi-campus university and its pursuit to improve the quality of the student learning experience. The paper outlines the institutional repositioning of learning and teaching and discusses the beginning of this journey in terms of improving educational practice in the delivery of courses through the use of the newly adopted Learning Management System (LMS), Moodle. The limitations of past practices are reflected upon within which the new adoption strategies are discussed through the lens of the RIPPLES model, the elements of which include **R**esources, **I**nfrastructure, **P**eople, **P**olicies, **L**earning, **E**valuation and **S**upport (Surry, Ensminger & Haab 2005). The paper highlights the critical influence of these factors in the change management of the new LMS, and outlines an approach for sustaining the renewal of educational practice. The paper concludes with an action plan for continuing the renewal journey through action research.

New beginnings: A report on the ALTC Exchange version 2

Patricia Treagus
Australian Learning and Teaching Council

The ALTC Exchange is an online service that provides learning and teaching resources and facilities to support professional communication and collaboration across the Australian higher education sector. Released in May 2008, the Exchange is an integral part of the ALTC's strategy for disseminating good practice and aimed at fostering change and development in learning and teaching. Membership is open to academics, managers, and leaders of learning and teaching in Australian higher education and internationally. Considerable input into the design requirements and development of the Exchange has been made by practitioners, sector leaders, professional associations including ascilite members and other interested teaching and learning professionals. In August 2009 an extensive upgrade to the Exchange was released. This paper reports on the current status of the Exchange and outlines recent developments to improve usability and enhance functionality.

Networked learning: Implementing a fully flexible, multi-institution network of elearning provision

Keith Tyler-Smith
Tertiary Accord of New Zealand

The increasing power of networked computing and the next generation Internet, often described as Web 2.0, has enormous potential for institutional collaboration on the development, delivery and sharing of educational resources, courses, faculty and students. Building on a number of TEC funded eLearning developments over the past four years; the Tertiary Accord of New Zealand, (TANZ) took the step of piloting a proof of concept for networking the Moodle instances of the six TANZ member institutions. The pilot was designed to test the network's ability to enable the sharing of courses, resources, learners and tutors. Moodle is an open source online Learning Management System (LMS), that has had extensive development and wide adoption in New Zealand. This paper examines the experience of this initiative through the lens of a Participatory Action Research project that ran alongside the pilot, the themes that emerged from the research and the guiding principles for future networked provision of eLearning that the project generated.

A question of purpose: Community embedded ePortfolios

Christian Voigt
Learning and Teaching Unit, University of South Australia

Existing implementation guidelines for ePortfolios frequently assert that a thorough long-term strategy is needed. However, the implications of such a demand are not entirely clear. Research on ePortfolios is primarily focused on promoting learning, accreditation or career development of individuals. This paper makes a point for broadening the scope of analysis and design, considering the roles of potential audiences of ePortfolios early on. It is suggested that looking at ePortfolios as community-driven practices provides a fresh approach to student buy-in and motivation. The argument is conceptual in nature, linking the literature on ePortfolio uptake with research on communities. A set of recommendations and caveats about how to get community-embedded ePortfolios started stands as conclusion.

Developing a responsive system to enable students to develop realistic expectations of higher education

Lucy Warman and John O'Donoghue
School of Public Health and Clinical Sci, University of Central Lancashire

TAG – The Alternative Guide to UCLan aims to be a dynamic, interactive, web based platform of support, which enables potential students to develop realistic expectations of HE. The information provided by UK universities to potential students is designed to highlight the positive aspects of the university to entice students into applying. However, as the UK Government seeks to widen participation at universities (HEFCE 2009), the literature shows many students are coming from backgrounds where they have no peers or family members with experience of HE to draw on (Thomson and Quinn (2007)) and the students' expectations of university do not match the reality. Students who go to university with misguided expectations are likely to withdraw or struggle with the course. TAG aims to help potential students understand what to expect from HE and help them develop ownership of their own learning.

Mobile and Web 2.0 technologies in undergraduate science: Situating learning in everyday experience

Jenny Waycott and Gregor Kennedy
Medicine, Dentistry and Health Sciences, The University of Melbourne

Mobile and Web 2.0 technologies have the potential to support learning that is situated in "real-world" contexts, dissolving boundaries between formal learning and social spaces. We describe a case study in which first-year students in an undergraduate chemistry course used digital cameras or camera phones to capture images that illustrated chemical processes in everyday life. They then shared these images with other students on the *Flickr* website. We present qualitative findings from the case study evaluation, identifying students' perceptions of the activity and their reactions to using everyday technologies in this formal learning setting.

While the evaluation identified positive aspects of the photo sharing activity, it also revealed that many students did not see the relevance of the activity to their formal learning. The paper raises a number of issues about the challenges of incorporating everyday technologies, such as mobile and Web 2.0 tools, into higher education.

Innovation and entrepreneurship education: Embracing Web 2.0 across a postgraduate program

Ruth Weeks and Richard Seymour
The University of Sydney

In recent years there has been much discussion in the literature about the potential of Web 2.0 tools to enhance the learning process, in terms of their collaborative and connective nature and their potential for the transformation of pedagogy itself. Wikis in particular are recognised as a useful platform for collaboration and knowledge sharing within a tertiary context. This short paper describes the experiences of setting up a wiki for a large cohort of students with diverse learning needs in the Innovation & Entrepreneurship program at The University of Sydney. The purpose of the wiki was to act as not only a repository of collaborative knowledge but also an assessment tool, complementing the program learning outcomes – to "develop skills and perspectives relating to opportunity seeking, initiative taking and ownership, and curiosity." This paper will describe the process and its successes and shortcomings from the perspective of the educational designer, academics and tutors.

Moving between workplace and online learning spaces: An activity theory perspective

Nicola Westberry
School of Education, University of Waikato

In recent years, blended learning has experienced significant growth in higher education; however, there is a need to gain a deeper and richer understanding of the interplay between face-to-face and online learning spaces in order to inform the design of blended learning settings. The intent of this paper is to offer new perspectives on blended learning within vocationally-oriented programmes by drawing on the concepts of activity theory (Engeström, 2001) and epistemic frames (Shaffer, 2004). The paper reports on a doctoral study which explored how English as an Additional Language (EAL) learners experienced the interplay between face-to-face learning experiences in workplace contexts and an online discussion activity within an undergraduate nursing course. The findings suggest that enabling the appropriation of resources across the boundaries of face-to-face and virtual spaces should be a key issue in the design of learning activities in blended learning settings.

Different spaces but same places: Possibilities, pitfalls and persistent practices in *Second Life*

Julie Willems
Humanities, Communications and Social Sciences, Monash University

Second Life is one of the social sharing spaces of Web 2.0 that is being employed for educational purposes around the globe. Over the past few years many conference presentations on *Second Life* have highlighted the potentials of its use in the formal education of neomillennials. This paper takes a different perspective. It documents the possibilities and the pitfalls of *Second Life* as a formal educational space, including the persistence of traditional teaching practices in the environment. The paper concludes that it is the quality of the learning design, and the fundamental philosophical underpinnings behind that design, that will lead to deep learning, irrespective of the technological space or place that is utilised.

Experiential learning through 'real world' placements undertaken in 3D 'virtual world' spaces

Denise Wood
University of South Australia

Students who have grown up with digital technologies are said to respond best to multi-modal activities that involve multi-tasking in collaborative, networked environments. It is also argued that such students are interested in 'things that matter' (Oblinger, 2008) and have a desire for experiential learning that engages them in 'real world' issues. This paper describes the use of the 3D virtual world known as *Second Life* as a space for experiential learning for undergraduate students enrolled in a media arts program at the University of South Australia. Two first year students and seven final year students chose to undertake field placements in *Second Life* requiring them to collaborate with organisations and groups providing support services for people who identify as disabled in their actual lives. The issues identified from previous offerings of courses in *Second Life* (Wood and Hopkins, 2008) and the differences in student engagement in these subsequent courses are discussed. The comparisons between these different offerings of courses in *Second Life* provide the foundation for understanding the benefits and potential issues in conducting classes in 3D virtual worlds. It is argued that students will engage in activities within 3D virtual worlds providing they can see the connection between their virtual learning experiences and the impact that they can make on 'real world' lives. When students undertake 'real' placements in 'virtual' spaces the focus is on the interactions with their clients and the skills they can bring to improve the quality of services provided by their client groups. Such findings should come as no surprise if we accept the popular rhetoric that the technology is of secondary importance to our 'generation-y' students; the 'virtual' space is simply the medium that enables students to undertake experiential learning in ways not easily achieved in 'real' world places.

Expanding to fit the (blog)space: Enhancing Social Work education through online technologies

Susan Young
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Leitha Delves
Arts, Humsand Soc Sci Multimedia, The University of Western Australia

Social Work education has for some time laboured under the tag of being somewhat behind the times in relation to the use of elearning, and at the University of Western Australia (UWA) this idea rings true. One reason for this is that pedagogies within Social Work tend to hold true to the people-oriented nature of the discipline, and it has been difficult to see how technology can replicate this aspect of the field. Nevertheless, the problem exists that Social Work students are very often lacking in some of the digital literacies that are increasingly becoming important in the workplace, and as in other discipline areas, it is incumbent upon educators in this area to provide their students with opportunities to develop such competencies. The challenge, then, was two-fold: find a way to introduce technologies that are of relevance to the discipline, *and* overcome the resistence Social Work students show toward such technologies in general. Blogging was trialled in an upper level Social Work unit at UWA which focussed on the development of communities and community practice and, despite uniformly negative feedback from the students on the perceived "difficulty" of the technology, the blog entries and comments themselves showed clear evidence of the students having developed as a community of learners. This paper describes the degree to which the students used the blogspace as it was intended - as a common, owned space for expressing, reflecting, sharing, collaborating and supporting – and shows the depth to which an online communication tool can have relevance to Social Work education *beyond* the attainment of generic skills.

Where's my class? Using Web 2.0 for collaboration in a design environment

Lynette Zeeng, Faculty of Design, Swinburne University of Technology
Diane Robbie, Prof Learning, Swinburne University of Technology
Keith Markham Adams, Department of Art, Rowan University
Clive Hutchison, School of Creative Arts, James Cook University

This paper builds on the successful implementation of Web 2.0 technology in a first-year photography subject within a design education program. The success of the subject is now being expanded to create a dynamic, global classroom introducing students to international perspectives. This paper describes the setting up of a universal partnership and collaborative steps taken to design, develop and implement learning and assessment tasks. Logistical considerations of time zone, student numbers, year levels, existing curriculum and learning outcomes agreeable and paramount to all parties are explained. Setting the parameters to create a global classroom

has demanded strict guidelines and planning to create an effective partnership. To achieve this, extensive communication and consensus between the teachers was required to establish a pedagogically sound learning environment.

UniTube: Making media accessible for learning and teaching

Richard Zeng, Jenny McDonald, Ayelet Cohen, Swee Kin Loke, Peter Vlugter and Tiffany Cone, Educational Media, University of Otago
Michael Winikoff, Deptof Information Science, University of Otago

Sharing video and other media for teaching and learning in the University setting can be problematic. Negotiating the mix of in-house systems for hosting files, dealing with competing file formats, copyright and intellectual property rights, not to mention supporting the access and use of material by students can present significant challenges. This paper describes a new open source web application, called UniTube. UniTube is based on the YouTube concept, but is specifically tailored for use in a Higher Education setting. This short paper describes the rationale for developing UniTube, an overview of the system features, usage data to date, initial evaluation and plans for further development.

Interactive session

Podcasting in an enriched educational landscape: Bringing a peripheral technology into the teaching core

Theresa Anderson, Kathy Graham, Jenny Pizzica and Simon Housego
University of Technology, Sydney

In this session we model an approach for supporting the uptake of podcasting for uses that go beyond recording lectures. In the process podcasting can become a key aspect of a course's teaching and learning activities and not just a safety blanket for busy students who might skip lectures. Developing engaging learning activities in a digitally-infused education landscape is very challenging for teachers, even for those with prior experience with these technologies. Each of the team of presenters has been involved in supporting the incorporation of podcasting into teaching with uneven results. A pooling of our experiences led to the initiation of a university-wide community approach. Our learning community is exploring the use of podcasting to enrich students' learning activities by building on the experiences of its members. Judicious insertions of educational research findings, technical expertise and practical know how provide ideas for utilising this technology more effectively.

Symposium

Should there be life after SLENZ?: How best to provide for education in MUVEs for NZ learners

Clare Atkins, (Chair) NMIT, **Terry Neal,** BlendedSolutions, **John Waugh,** Journalist and Virtual Worlds blogger, **Michael Winter,** CORE-ED, **Justin Sampson** (tbc), **Ako Aotearoa and John Eales,** Telecom NZ

Enabled by NZ Government funding, the SLENZ project has brought together a group of NZ academics, educators, learning designers and technical specialists who collectively hold a significant percentage of the knowledge and expertise concerning education in multi-user virtual environments in New Zealand. As often happens, there is a real possibility that as the funding and the project comes to an end, the collaborative and supportive community established by the project will fragment and disperse. While knowledge sharing and dissemination has always been a major feature of the project, it is widely recognised that no one NZ institution currently has the knowledge or the resources to take full advantage of the potential benefits that MUVEs can offer tertiary education.

Aiming for the right place: eLearning strategy past, present and future

John Barnett, University of Western Ontario
Josephine Csete, The Hong Kong Polytechnic University
Cathy Gunn, University of Auckland

Is there an 'ideal' approach to strategic planning for a rapidly changing area such as technology in education? Are there principles or heuristics that define useful process and help to avoid pitfalls? Do lessons from the past inform actions in the future? Where does my institution aim to be with elearning five years from now, and is it making the right moves to get there? This symposium will review elearning goals and implementation strategies from different parts of the world. Panel members from Hong Kong, Australia, North America and New Zealand will present regional perspectives drawn from experience across different organizations. Participants will have the opportunity to share their own experience and opinions of elearning strategies through small group activity. Discussion will focus on how strategies are developed and implemented, what outcomes are expected or have been achieved, and what principles of good practice can be applied.

Invited interactive session
Online creative outreach: International online learning communities assisting global regions in need

Rick Bennett
Omnium Research Group, University of New South Wales
Nataly Martini
School of Pharmacy, University of Auckland

In 2005, Rick Bennett (UNSW) was awarded the *Ascilite President's Award*, for work in forming global online learning communities through his *Omnium* research project. This presentation will showcase more recent global online projects that he has progressed into areas of social outreach, by forming large cross-disciplinary learning communities to assist those in areas of great need, including: Kenya, East Timor, the Philippines and Uganda. This presentation will specifically focus on two recent projects that have involved online-learning collaboration between Rick Bennett and Dr Nataly Martini from the School of Pharmacy at the University of Auckland. By forming global communities of students, teachers and professionals from disciplines of Design and Health Sciences, the projects sought to address the production of public awareness campaigns to help prevent diseases such as malaria, tuberculosis, HIV and water-borne diseases in Kenya (2007) and Uganda (2009). The interactive session will initially give a full visual account of both projects before inviting audience participation to discuss a range of issues concerning forming online learning communities as well as working with overseas agencies to assist students and teachers in contributing their efforts to helping those in great need.

Symposium

Thinking about a new LMS: Comparing different institutional models and approaches

Mark Brown, Massey University
Alan Arnold, University of Canberra
Gregor Ronald, University of Canterbury
Derek White, University of Waikato

Selecting a new Learning Management System (LMS) is a strategic decision. The LMS is a key part of your institutional culture and shapes not only the student experience but also the future direction of your institution. This symposium describes the experience from the initial selection phase to early implementation of Moodle in four case studies: University of Waikato, University of Canberra, University of Canterbury and Massey University. The central question explored is: how do you successfully implement a new LMS within a large institution? In answering this question, the symposium compares and contrasts different models and approaches to successfully implementing such an important educational innovation and large-scale institutional change. The symposium shares lessons learnt from each university and offers participants an excellent opportunity to hear first hand about the benefits and challenges of adopting an open source LMS in the university sector.

Interactive session

New media to develop graduate attributes of science students

Lloyd Davis, University of Otago
Will Rifkin, University of New South Wales

We will draw on the expertise of session participants to assist our development of materials for teaching 'new media communication skills' to university science students. We are enabling students to become the source of multimedia content to teach them valuable professional skills through the 'authentic' learning task of catering to real online audiences.

Interactive session

Reviewing learning designs with HEART, a learning design support strategy

Claire Donald and Adam Blake
The University of Auckland

HEART (HEaring And Realising Teaching voice) is a learning design support strategy for teachers and learning designers involved in planning, developing or reviewing course (or learning) designs. The strategy helps users to elicit and visualise what we have called the teacher's voice; that is,

the confluence of teaching beliefs and educational practice, in the form of pedagogical dimensions. Participants are invited to bring any course materials to support an opportunity they will have to review their own course/learning designs during the session.

Symposium

Cascading change: The role of social software and social media in educational intervention and transformation

Sebastian Fiedler (Austria), **George Siemens** (Canada), **Rob Fitzgerald** (Australia), **Jan Philipp Schmidt** (South Africa), **Leigh Blackall** (New Zealand), **Barbara Kieslinger** (Austria), **Cyprien Lomas** (Australia), **Terje Väljataga** (Estonia), **Frederik G. Pferdt** (USA)

In recent years social media and social software tools and practices have been applied in numerous implementation and pilot studies in higher. Some have been driven by explicit educational goals, while others seem to have been inspired by the attractive, technical flexibility of an emerging decentralized landscape of loosely-coupled, networked tools and services and its alleged potential for changing the dominant patterns of institutional provision of ICT in education. This symposium brings together a diverse and international group of researchers to explore the problems and limitations of using social media as a leverage point for second-order change in higher education. It aims to engage contributors and the audience in theoretical and empirical reflection on possible directions for further conceptual and methodological development in that area.

Symposium

Blended learning: Is there evidence for its effectiveness?

Philippa Gerbic, Auckland University of Technology
Elizabeth Stacey, Deakin University

This symposium will focus on how academics are using blended learning practices in a range of contexts and discuss the process of becoming effective practitioners in this new field of ICT-facilitated education. The discussion will be based on the research of panel members which is now published in a new edited collection of international research, "Effective Blended Learning Practices: Evidence-Based Perspectives in ICT-Facilitated Education." A range of perspectives will be presented on effectiveness in pedagogical contexts and also new emergent settings such as communities and professional learning.

Symposium

Complex spaces for learning: Theory and practice in design, co-design and re-design

Peter Goodyear, University of Sydney (chair)
Yael Kali, Technion**,** Israel Institute of Technology
Vic Lally & Maddy Sclater, University of Glasgow
Sue Tickner, University of Auckland

Teaching and educational design involve imagining other people's learning. The shifting spaces of possibility, created by new technologies and new ways of working, make this imaginative act much more complex than it used to be. Combine this complexity with the need for students to take more control of their learning and one swiftly recognises the need for design to be a distributed, collaborative activity. At a minimum, design needs to leave room for students to reconfigure key parts of their learning environment. This symposium will focus on approaches to design that acknowledge the role of students and others as co-designers and/or re-designers. It will reflect on recent design experiences and some of the links between theory and practice in design.

Interactive session

Teaching in virtual space: An interactive session demonstrating *Second Life* simulation for haemorrhage management

Michelle Honey, School of Nursing, University of Auckland
Scott Diener, IT Services, University of Auckland
Kelley Connor, Boise State University, Idaho
Max Veltman, Boise State University, Idaho
David Bodily, Western Wyoming Community College, USA

Second Life is an example of a 3-D virtual reality environment that can be used to create simulated learning experiences. Users access this environment from the internet via an avatar that interacts with others and the environment. Simulating patient care scenarios in a realistic environment is an increasingly popular method to prepare health professionals to care for patients. While most simulation training occurs in a live simulation environment such as a laboratory, there has also been an increase in the use of virtual reality. This interactive session will demonstrate the use of the virtual world, Second Life for teaching. The demonstration will mirror the stages used for pilot use of Second Life for teaching postpartum haemorrhage that took place earlier this year with undergraduate nursing students and lecturers from New Zealand and the USA. The experiences and key lessons learnt from the evaluation of the pilot will be shared.

Interactive session

What makes blended learning effective? An interactive session of peer review

Jo McKenzie, University of Technology, Sydney
Lina Pelliccione, Curtin University of Technology
Nicola Parker, University of Technology, Sydney

This session will engage participants in a supported process of Peer Review (PR) in blended learning environments. An introduction to PR and short overview of a current PR project (McKenzie et al 2008) will contextualise the activities. Participants will form pairs and use a 'briefing template' to ask each other questions in relation to a subject/unit or staff activity run in blended learning mode. Each pair will to log on to their subject/unit/activity site to work through part of a peer review framework. A debrief and look at project resources and website will conclude the session. This session is intended for all academics who have been teaching, or running staff development workshops, in blended learning environments. Delegates who have recently taught a subject, unit or workshop should bring along their laptops to engage in this 'hands on' review of learning and teaching in blended learning environments.

Interactive session

Integrating Web 2.0 technologies into Moodle courses

Stuart Mealor
Human Resource Development International, stuart@learning.ac.nz

Delegates will be able to use WiFi enabled laptops and mobile devices such as cellphones to contribute to the construction of a Moodle course created using a variety of social-networking approaches. The underlying concept is the aim of creating a Moodle course space that is truly 'an interesting place to be' rather than a course as a 'resource to read'. An audience attending and outside of the session will collaborate to integrate Twitter, Flickr, YouTube, Yahoo, and other content into a course that will grow during the conference. The theme of the course is only revealed on the day. The course will be built during the 90 minutes, and continue during the Ascilite conference.

Symposium

The quality challenge: Quick fix solutions or enduring cultural changes?

Duncan O'Hara, Mark Brown, Ingrid Day, Mark Downey, Margaret Hill, Wanda Jackson, Andrew Jamieson, Jennie McKelvie, John Milne, Scott Symonds, Gordon Suddaby, Massey University

This symposium digs beneath the surface of quality and reveals the dangers of relatively impoverished models of institutional support. It demonstrates that quick fix solutions have their place but can support an additive model of blended learning, which may be counter-productive to quality pedagogical conversations. Through the lens of six case studies the symposium illustrates how different contexts influence decisions about learning design, definitions of quality and the potential for durable and transformative innovation. A number of tensions are identified and participants are invited to reflect on the relative strengths and weaknesses of different support models. The overall aim is to promote fertile discussion about what blended learning should look like and how to promote it in different institutional contexts.

Interactive session

A classroom trial of using blogs as a constructivist tool

Nuddy Pillay
Manukau Institute of Technology

This interactive session presents a background and overview of the classroom trial of using blogs as a constructivist learning tool. Participants are invited to work in pairs to discuss the contexts of their own teaching and learning and provide feedback to the group. Each individual can then create a blog with the aim to establish a community of practice among participants who are willing to continue discussion after the session and make available details of a wiki (collaborative workspace) for further engagement.

Interactive session

Classrooms of the mind: Using radio's 'explaining voice' to create a sense of shared place

Brett Van Heekeren & David Cameron
Charles Sturt University

The intended audience (educational designers and podcasters) should expect to be introduced to the basic skills and principles of radio broadcasting and identify the significance of the 'explained voice' in creating a 'sense of place' in an audience's mind. The interactive session will:

- Introduce the concept of the 'explaining voice' and its relevance to educational podcasting.
- Take participants through a sample of self-guided training designed for educational podcasters.
- Explore different types of podcast and their equivalent formats in radio..
- Conclude with an opportunity for participants to reflect on these learning materials.

Poster presentations: Monday 7 December

Authors will be available to discuss their posters at morning and afternoon tea times.

Aneesha Bakharia, Elizabeth Heathcote and Shane Dawson
Social networks adapting pedagogical practice: SNAPP

Madhumita Bhattacharya
Journey with the students towards exploring the potential of Tablet PCs in learning

Melanie Brown
Exploring the tension between return on investment and pedagogical design

Selena Chan
E-portfolios using mobile phones and social networking sites: Workplace skill acquisition and identity formation

Gill Clough, Graínne Conole and Eileen Scanlon
Behavioural finance and immersive games: A pan-European framework for design and evaluation

Nicki Dabner and Niki Davis
Developing best practices in online teaching and learning to impact students and their organisations

Mark Downey and Mark Brown
The challenge of equivalence: Meshing food technology with blended learning across campuses and modes

Laurel Dyson, Andrew Litchfield, Ryszard Raban and Jon Tyler
mInteract: Online tool for sustainable active experiential mobile learning

Richard Elliott and John Clayton
Critical success factors in e-learning for small and medium enterprises

Vimani Gamage, Alexei Tretiakov and Barbara Crump
Educators' perceptions about using MUVE for teaching

Eva Heinrich
Lightwork: Managing marking effectively

Kate Goodwin, Gregor Kennedy and Frank Vetere
Exploring co-location in physical, virtual and 'hybrid' spaces for the support of informal learning

Suraya Hamid, Shanton Chang and Sherah Kurnia
Identifying the use of online social networking in higher education

George Hatsidimitris, Joe Wolfe and John Smith
Physclips: Multi-level multimedia resources

Jacquie Kelly and Andrew Stewart
The role of collaborative online tools in business and community engagement with course design/delivery

Anja Kirberg
Blended learning class *Sociology of Education International*: Teach local, learn global

Giedre Kligyte
Threshold concept: A lens for examining networked learning

Muireann O'Keeffe, Catherine Bruen, Vincent Wade, Jen Harvey, Claire McAvinia, Terry Maguire, David Jennings, Morag Munro, Paul Gormley and Grace O'Leary
Opening digital doors through communities of practice

Jorge Reyna
Developing quality e-learning sites: A designer approach

Mark Schier
Computer based method for investigating divided attention and interference

Poster presentations: Tuesday 8 December

Authors will be available to discuss their posters at morning and afternoon tea times.

Kathryn Lewis
A design based research project: Buckingham's Digital Media Framework and a new media pedagogy

Jo Lockwood, Jo Lander, Katherine Conigrave and Kylie Lee
An online resource for Indigenous health professionals undertaking a graduate diploma

Richard Logan, Judi Baron and Christine Swann
Oral pathology in blended space: A pilot study

Ann McGrath and Donna Morrow
Did the impact of imposed course structure change lead to positive outcomes for lecturers and students?

Muireann O'Keeffe, Jen Harvey, Mary O'Rawe, Odette Gabaudan, and María-José González
Teaching fellowships: Using wikis, blogs and social networking tools to enhance collaboration and participation

James Oldfield and Andrew Slessor
Shades of grey: The business ethics game

Beverley Oliver, Peter Nikoletatos, Brian R. von Konsky, Heath Wilkinson, Joanne Ng, Robert Crowley, Robert Moore and Royce Townsend
Curtin's iPortfolio: An online space for creating, sharing and showcasing evidence of learning

Joanne Patterson
Using lecture capture technologies for distance learning: A case study using Panopto

Rosanne Quinnell, Murray Henwood, Rowan Brownlee and Su Hanfling
eBot: an image bank of Australian flora

Jorge Reyna and Carole Stanford
Use of slidecasts in higher education settings: A pilot project

Leeane Robinson, Leah Clapton, Beverley Oliver, Peter Nikoletatos, Travis Quirk, Dic Liew, Royce Townsend, Michelle Rogers, Constance Wiebrands, Jim Elliott, Connie Price
CurtinMobile: Help at students' fingertips

Samantha M. Samarasinghe and Alexei Tretiakov
A multi-dimensional measure of e-learning systems success

Peter Sampson
Supporting skill development through flexible task based design

Siti Mahfuzah Sarif and Norshuhada Shiratuddin
m^{d}-Matrix: An assistive learning tool in blended project based learning for mobile development course

Mark Schier and Jennifer Curtin
First year student engagement, discussion forums, and reflections on mentoring practice

Stephen Segrave, Jacob Cybulski, Dale Holt, Judy Munro, David O'Brien, Mike Keppell, Deborah Murdoch, Ben Bradley, Brian Corbitt, Ross Smith, Martin Dick, Hossein Zadeh, Ian Searle, Pradip Sarkar

eSimulations for blended learning in professional education: Capacity building, knowledge transfer and dissemination

Juliette Smeed, John Roder and Christopher Naughton

Student experience at New Zealand Tertiary College in changing from traditional to online distance learning

Patricia Treagus

New beginnings: A report on the ALTC Exchange version 2

Susan Tull and Barry Brooker

A 'learn'ing space for lecturers

Colin Warren

Professional development and Web 2.0, can the space make a difference?

Julie Willems

Friendship, high adventure, and a crown: A virtual journey of hope in Web 2.0