

ascilite 2010 **Speaker Abstracts**

Abstracts are in time order of the program. Those not published here will be available on the conference website.

Presenters are listed first. Full authors are recognised below the title.

Location Abstract

MONDAY 9:35 AM

Endeavour Room

Jan Herrington, Murdoch University

Authentic learning and emerging technologies

As a pedagogical model, authentic learning has prevailed for over two decades. Reflecting a constructivist philosophy, and strongly informed by situated cognition, it has served as a robust guide to the creation of authentic and innovative learning environments. But where does it stand now in an education environment moving rapidly towards the participatory culture of web-enabled communities, and the CElifestream¹ contexts of personalised dynamic content? This presentation will review authentic learning in relation to mobile technologies and a broad range of web affordances and tools, and illustrate how authentic tasks and contexts are more important than ever in a rapidly transforming educational landscape. There will also be discussion on the complex nature of authentic tasks, and how they can be designed to maximise learning opportunities. Finally, the presentation will conclude with discussion of the need for further research and how these environments can be effectively studied.

MONDAY 11:00 AM

Ben Carmichael & Chris Eske, Blackboard

Blackboard - the nexus of your enterprise virtual learning environment (VLE)

Through relationships at multiple levels within many Universities in Australia, New Zealand and around the globe, Blackboard is well positioned to observe the transition from the traditional concept of the Learning Management System (LMS) as the centre of the e-learning landscape within many higher education institutions to a more diverse Virtual Learning Environment, or VLE. This presentation will discuss the concepts of the VLE as opposed to the LMS, and how the Blackboard technology platform allows for an open and powerful enterprise approach to your VLE as it evolves and grows.

Blackboard (Nasdaq: BBBB) is a global leader in e-education and campus commerce software and solutions with a global client base of over 5,000 institutions in higher education, K-12, corporate, government, military and vocational education.

MONDAY 11:25 AM

Endeavour Room

Margot McNeill, Macquarie University

Technologies to transform assessment: a study of learning outcomes, assessment and technology use in an Australian university

Authors: Margot McNeill, Maree Gosper, John Hedberg

Emerging Web 2.0 technologies have frequently been touted as having the potential to transform learning and assessment, with their capacity to capture the processes and not just products of collaboration and creativity. While the literature is optimistic, questions emerge about the impact these tools have had on academic practice and the extent to which they have been able to rise to this challenge of changing assessment strategies and processes in universities.

This paper reports the findings from a survey of unit convenors in an Australian university, which explored how technologies were used to support assessment. The results suggest that while uptake of technologies for assessment may slowly be rising, the uses are frequently limited to assessing students' ability to understand or apply concepts or procedures. The potential of technologies to support assessment of the all-important higher order learning outcomes such as evaluation, creation and metacognition is still largely left untapped. For many of the technologies, the results suggest that rather than transformative tools, their uses are predominantly limited to perpetuating traditional practices.

La Perouse 1

Petrea Redmond, University of Southern Queensland

Transforming Pre-service Teacher Curriculum: Observation Through a TPACK Lens

Authors: Jennifer Lock, Petrea Redmond

This paper will discuss an international online collaborative learning experience through the lens of the Technological Pedagogical Content Knowledge (TPACK) framework. The teacher knowledge required to effectively provide transformative learning experiences for 21st century learners in a digital world is complex, situated and changing. The discussion looks beyond the opportunity for knowledge development of content, pedagogy and technology as components of TPACK towards the interaction between those three components. Implications for practice are also discussed. In today's technology infused classrooms it is within the realms of teacher educators, practising teaching and pre-service teachers to explore and address effective practices using technology to enhance learning.



MONDAY 11:25 AM

La Perouse 2

Khe Foon Hew, Nanyang Technological University**The relationship between group size and advanced level knowledge construction in asynchronous online discussion environments***Authors: Khe Foon Hew, Wing Sum Cheung*

This study is part of a funded research project that examines possible factors that may influence students' advanced level of knowledge construction. This study examines if group size of the online discussion is related to the frequency of advanced level of knowledge construction occurrences. Group size of an online discussion refers to the number of people who contributed in the discussion. Advanced levels of knowledge construction refer to levels II, III, IV, or V of Gunawardena, Lowe, and Anderson's (1997) interaction analysis model. Data was collected from 28 asynchronous online discussion forums. Results showed a significant positive correlation between group size and advanced level knowledge construction; suggesting that the larger the group size of the online discussion is, the more frequent the occurrences of advanced level knowledge construction would be. Further analysis between the more successful and less successful forums suggested that a certain critical mass, which appears to be a group size of about 10 participants may be required to direct the discussion to advanced levels of knowledge construction.

Sirius Room 1 & 2

Geoffrey Crisp, University of Adelaide, Helen Farley, University of Southern Queensland & Sue Gregory, University of New England**Teaching and Learning in Virtual Worlds: Is it worth the effort?***Authors: Helen Farley, Sue Gregory, Allan Ellis, Geoffrey Crisp, Jenny Grenfell, Angela Thomas, Matthew Campbell*

Educators have been quick to spot the enormous potential afforded by virtual worlds for situated and authentic learning, practising tasks with potentially serious consequences in the real world and for bringing geographically dispersed faculty and students together in the same space (Gee, 2007; Johnson and Levine, 2008). Though this potential has largely been realised, it generally isn't without cost in terms of lack of institutional buy-in, steep learning curves for all participants, and lack of a sound theoretical framework to support learning activities (Campbell, 2009; Cheal, 2007; Kluge & Riley, 2008). This symposium will explore the affordances and issues associated with teaching and learning in virtual worlds, all the time considering the question: is it worth the effort?

MONDAY 11:45 AM

La Perouse 1

Nicola Westberry, AUT University**Making sense of learning design: Co-teaching within a blended educational environment.**

Large classes seem to be a permanent fixture in tertiary education, often necessitating the use of multiple teachers to design and enact learning activities with many students. Within these multi-teacher learning environments, there is a need to gain a deeper understanding of the ways teachers make learning designs meaningful through their pedagogical beliefs. Employing the terms "design-for-use" and "design-in-use" (Folcher, 2003, p. 647) to draw a distinction between planned and enacted design, this paper reports on a qualitative study that followed the experiences of three teachers in a blended tertiary-level business writing course. The findings suggest that the teachers related to the same learning design in differing and conflicting ways, revealing the relative nature of "pedagogical sense-making" (Goodyear, Markauskaite, & Kali, 2010, p. 16), and paving the way for a more extensive discussion of co-teaching within ICT-supported learning environments.

La Perouse 2

Patricia Andrews, University of New England**Why the Student Voice? The Case for Investigating the Distance Learners' Experience of ICT in Distance Education***Authors: Trish Andrews, Belinda Tynan*

In recent years the student experience of higher education in general and distance education in particular has been strongly influenced by wide scale uptake of internet based learning approaches, internationalisation and an expanding distance education market, amongst many other trends. As competition within the sector increases because of access to the WWW and other in-country socio-political influences, the push to attract and retain students is becoming a key issue for institutions. Understanding the distance student's voice in relation to these trends and developing appropriate responses to ensure a satisfactory learning experience is becoming of critical importance. This paper reports on a work in progress. It discusses some of the trends influencing students' learning in our increasingly borderless world and outlines a rationale for investigating the student voice to meet the unique needs of the distance learner. It describes approaches that will be adopted by a consortium of Australian and New Zealand distance education providers to undertake this work.



MONDAY 11:55 AM

Endeavour Room

Christopher Naughton, New Zealand Tertiary College**The 'strategic learner' goes digital: Web 2.0 and the implications of assessment when transferring from distance education to online learning***Authors: Christopher Naughton, John Roder, Juliette Smeed*

With the rapid move by many Higher Education Institutions to an online mode of teaching, the changes in pedagogy sometimes result in new means of communication with students. Whereas previously in a classroom setting, or paper-based distance mode, students may have been encouraged to develop their thinking from a study guide, with the introduction of online learning new opportunities have arisen for students to engage in learning both with a text and in dialogue with other students. The chance to share knowledge, develop ideas and formulate new thinking has been a feature of many initiatives in online engagement. While some students may wholeheartedly engage in such interactive learning, others are less inclined and remain more detached in their learning. This group were identified in a study of a cohort of students undertaking an online learning course at a private tertiary college in New Zealand. This paper outlines the response of students who resisted the opportunity to engage in a more interactive approach to their online studies.

MONDAY 12:05 PM

La Perouse 1

Kathie Goldsworthy & Lynnae Rankine, University of Western Sydney**Learning design strategies for online collaboration: an LMS analysis***Authors: Kathie Goldsworthy, Lynnae Rankine*

Ask any student about their thoughts on group work and the response is likely to be negative. They experience issues around choosing suitable topics/projects/issues, finding a group, getting underway as a group, meeting deadlines, and being assessed for their individual participation. What learning design strategies can be applied to support online collaboration? This case study explores the online collaboration activities of a sampled selection of 72 sites in the learning management system to identify learning design strategies which promote effective collaboration. A framework was developed and applied to provide a consistent approach to the analysis of these sites. The results indicate unique and reusable learning designs that ranged from simple to complex in design.

La Perouse 2

Alistair Campbell & Julia Wren, Edith Cowan University**Improving marking of live performances involving multiple markers***Authors: Julia Wren, John Heyworth, Rachel Bartlett, Alistair Campbell*

Assessment in the arts can be challenging. The problems associated with assessing student performances are that judgements are complex and even more so when they involve multiple markers (Campbell, 2005). It can be difficult to ensure assessment is fair, valid and reliable and that students are provided with clear feedback that is meaningful to them. This paper describes the development and trialling of an innovative, technology supported tool, designed to improve the confidence, efficiency and effectiveness of student performance-based assessment in arts education.

This project is a work in progress and early trials of the Internet based digital computer technology tool suggest that it reduces tutor anxiety, increases markers' confidence, improves the management of assessment and record keeping, facilitates easy and quick moderation, and provides explicit feedback to students to enhance ongoing learning. The perception by stakeholders is that this assessment is far more accessible and easy to use than previous methods.

The project was implemented in a Bachelor of Education course, with 170 third year pre-service teacher students. The performances were an end of semester assessment where groups of students were simultaneously assessed on short creative performances by each of their three tutors. Initial assessment was conducted online during the live performances and also online for one week afterwards, where tutors were able to review video clips of each performance and discuss marks via a confidential online tutor 'chat box'. The marked electronics rubrics with the video clips and tutor comments were emailed as pdf documents to students. The student's responses have been overwhelmingly positive. They have a preference for electronic assessment as this enables them to review and engage with their assessment multiple times. They felt that having the video clip of their performance side by side with the assessment clearly demonstrated learning.

MONDAY 12:25 PM

Endeavour Room

Michael Sankey, University of Southern Queensland**Engaging students through multimodal learning environments: The journey continues***Authors: Michael Sankey, Dawn Birch, Michael Gardner*

The innovative use of educational technologies provides higher education institutions valuable opportunities for their staff to design media enhanced, interactive, more inclusive and engaging learning environments. The key motivation for incorporating educational technologies into the curricula is unquestionably the desire to improve the engagement and learning of students. To assist with this, the increasing use of multimedia in teaching has provided many opportunities to present multiple representations of content (text, video, audio, images, interactive elements) to cater more effectively to the different learning styles of an increasingly diverse student body. This paper presents the findings of an experiment to measure the impact of multiple representations of content on learning outcomes, including learning performance and engagement. While, in this study, multiple representations of content did not lead to discernable improvements in learning performance, students reported very favourably on multimodal learning elements and perceived that they had assisted their comprehension and retention of the learning material. The implication of this study for educators is to consider carefully the incorporation of selected multiple representations of key concepts, particularly those that use a combination of audio and visual content. The limitations of the experimental methodology and directions for future research are also presented for consideration.

MONDAY 12:25 PM

La Perouse 1

Ian Olney, University of Western Sydney**OT's Collaborating in IT: A Team approach to improving learning and teaching using a staged implementation of technology***Authors: Ian Olney, Rosalind Bye, Kristy Coxon, Rachelle Coe, Michelle Bissett*

Staff development is often conducted away from the workplace and in a hit and miss way where academic staff are given a 'dose of development' and then required to go back to their School or Faculty and be confident and comfortable in being able to enhance their learning and teaching activities with the new 'medicine'. Often these are 'one off' sessions and upon returning to the workplace the academic feels isolated and swamped by the pressures of day-to-day activities. This paper describes a team approach at a university between the occupational therapy (OT) academic staff and an e-learning educational specialist whose role it was to provide ongoing support to academic staff for the gradual implementation of an institution wide initiative to improve basic standards of online environments. This specialist worked one day per week in the School in which the occupational therapy program was taught. The process of working side-by-side over time sparked a willingness by the occupational therapy team to explore and trial other technological components that would engage their students. This paper highlights the collaborative process and staged implementation of this initiative, outlines key examples of e-learning initiatives trialled by the OT team, and presents the outcomes of the project as perceived by all parties.

La Perouse 2

Kelvin Jackson, University of Tasmania**What value assessment rubrics in shaping students' engagement in asynchronous online discussions?**

In recognition of the power of a rubric as an assessment tool, a range of rubrics for assessing asynchronous online discussions have emerged in the literature over recent years. The assessment criteria used may have as their basis an underlying conceptual model of online discourse, or they may have emerged more pragmatically. Irrespective, one intention of the rubrics is to make explicit and transparent the sorts of engagement expected of students in discussions, in the hope that students will take on board the advice and act accordingly. This paper explores the purported value of rubrics in the light of research into factors that influence students' engagement in online discussions, in particular students' conceptions of the place of discussions in their learning. Value would seem to be there, but that value is qualified by considerations of fundamental course design.

MONDAY 2:00 PM

Endeavour 1

Joan Richardson, RMIT University, Celia Thompson & Jenny Waycott, The University of Melbourne**Transforming assessment in higher education: a participatory approach to the development of a good practice framework for assessing student learning through social web technologies***Authors: Jenny Waycott, Kathleen Gray, Celia Thompson, Judith Sheard, Rosemary Clerehan, Joan Richardson, Margaret Hamilton*

Social web technologies, such as blogs, wikis, social networking and photo/video sharing sites, are increasingly being used in innovative learning activities in higher education. While there has been much discussion about the pedagogical rationale for using social web technologies in higher education, there has been little examination of the challenges involved in assessing the work students create or the activities they undertake using these tools. The transformation of academic authoring in a social web environment poses complex and urgent assessment-related challenges for policy-makers and educators alike. In this paper we describe the participatory approach we have taken in a project that aims to identify issues and support good assessment practices when students are asked to use social web technologies in medium to high-stakes assessment. In this paper, we outline the design rationale for the research, and describe the methods used in the three stages of this project: 1) documenting current practice through a nationwide survey and interviews; 2) initiating broad discussion across the sector about the issues raised; and 3) field-testing a draft good practice framework in 17 diverse teaching and learning settings. Our initial findings indicate that there are a range of complex student, teacher and institutional issues to consider. We conclude that bottom-up input from practitioners and students, combined with a policy-driven top-down approach is more likely to succeed in bringing about transformation and supporting good practice in the assessment of students' social web activities

Endeavour 2

Judith Enriquez, University of North Texas**Photo-imaging and Tagging the Act of Studying**

This paper aims to explore the study practices and places of learning as tagged and pictured in flickr.com. Digital imaging technologies and the Internet have recently expanded options for sharing text, photos, music and videos. Personal photography through the popular image-sharing site, flickr.com, allows this study to engage with the visible materials and visual orientation and representation of the act of studying. 'How is studying done' becomes the focus to visualize the socio-technical relations that order university settings and literacy practices with photos tagged as studying in Flickr. Photo-imaging and tagging come together in ways that reveal how individuals represent themselves in self-portraits captured or pictured in the act of studying – which includes reading, writing, sitting; and in particular study places or spaces – in bedrooms, libraries, cafes and outdoors. It is informed by photographs taken and uploaded in Flickr. Photos assigned with the tag 'studying' and 'self' were analysed. Only 94 of the total 181 resulting items were considered for this paper. Additional tags that were associated to photos tagged as studying were searched further. The paper concludes with a discussion on how study practices pictured through Flickr remains to be centered around reading textbooks, writing notes and highlighting text, and seated at desks or tables where things could be spread out and not necessarily with a computer or a laptop or any other portable device in the 'photo-framed' self-portrait of studying in Flickr



MONDAY 2:00 PM

Endeavour 3

Meg O'Reilly, 979**Media supported problem-based learning and role-play in clinical nurse education***Authors: Leeann Whitehair, Meg O'Reilly*

The introduction of a problem-based learning role-play into an undergraduate nursing degree has motivated and inspired students to take an active approach to learning. Practising the role of a registered nurse and working in a simulated patient environment were seen as valid preparation for future practice. Collaborating with peers and tutors provided students with confidence to solve authentic patient problems and motivated them to accept responsibility for preparation and active participation during lab sessions. Inclusion of digital recordings of expert demonstrations of clinical skills significantly enhanced students' skills development. Students' future colleagues working in health care, noted their preparedness, high level of confidence and ability to transfer theory and skills to the real world of nursing.

La Perouse 1

Wendy Fisher, The Open University & Birgit Loch, Swinburne University of Technology**Facilitating change - Tablet PC trials across two distance education focused universities***Authors: Birgit Loch, Wendy Fisher*

This paper reports on initial findings in comparing two distance universities' approaches to trialling tablet technology to enhance communication between instructors and students. There were different reasons for initiating the trials and different approaches to each of the trials, but there were also some striking similarities. For instance both trials were led from the bottom up, however they were each conducted with no knowledge of the other. Funding for each of these trials was resourced from a university learning and teaching grant/fellowship and both projects used an action research approach. The emphasis for both trials was on pedagogical and technological staff development facilitated and administered through each project leader. The paper gives an overview of how the trials were conducted, what did and did not succeed and what could be improved. Longer lasting outcomes that have been achieved through these projects are described. This comparison is meant to guide and inform change agents and identify good practice in the management of technology trials.

La Perouse 2

Mike Wierzbicki, The Learning Edge**Creating a content-rich and integrated eLearning environment with the Pearson suite of products***Authors: Mike Wierzbicki and Ryan O'Hare*

This session will provide an overview of how institutions can benefit from the end-to-end capabilities of the Pearson suite of products within an eLearning environment. Utilising the EQUILLA Digital Repository to store and manage all of their Pearson content, institutions can now rapidly deliver this powerful and engaging content to students via its seamless interoperability with LearningStudio.

Discovery Room

Chun Hu, University of Sydney**Impact of a New Curriculum on Pre-Service Teachers' Technical, Pedagogical and Content Knowledge (TPACK)***Authors: Chun Hu, Fyfe Vilma*

This paper reports some preliminary findings of a formative evaluation on the impact of a new curriculum on pre-service teachers' technical, pedagogical and content knowledge (TPACK). It discusses the design principles employed and its implementation process. A survey adapted from Schmidt et al. (2009) was administered at the beginning and completion of the course. The post-course survey showed an increase in pre-service teachers' self-reported ratings in technology, pedagogy and content knowledge. Implications are discussed.

Sirius Room 1 & 2

Yvette Blount, Faculty of Business and Economics**Using virtual worlds efficiently in a post-graduate business course: Designing an exploratory study***Authors: Elaine Huber, Yvette Blount*

There is much interesting work being done around virtual worlds in education (Bulmer, 2008; Dede, 2007; NMC, 2007; Schutt & Martino, 2008) particularly in areas that lend themselves to immersion and scenarios or role-plays, but how can the time and effort required to become familiar with a virtual world be minimised whilst at the same time creating an engaging task for students? This paper describes one such example using Second Life in a postgraduate business course. It outlines the first phase of a mixed methods research study (Cresswell & Plano Clarke, 2007), in which insights are sought from a lecturer and student perspective. An Exploratory Design: Instrument Development Model is used to inform research questions around the factors that influence the use of virtual worlds in learning and teaching. Preliminary findings show that initial support and orientation to virtual worlds contribute to the success of their use in learning and teaching, and that our 'net-gen' students are not as technology savvy as we imagine. The second phase of the study has brought to light a conceptualisation of virtual worlds as a gaming environment which may indicate one reason not yet highlighted in the literature, for low uptake of virtual worlds by both students and lecturers (McNeil & Diao, 2010). Continuing investigations will use a Triangulation Design: Convergence Model to collect qualitative and quantitative data, surveying students on their perceptions of virtual worlds in order to corroborate the findings in the literature.

MONDAY 2:20 PM

Discovery Room

Karen Scott, University of Sydney**A longitudinal study into the transformation of a university teacher's conceptions of, and approach to, elearning**

In seeking to meet the demands placed upon them, many universities are increasing their use of elearning. At the same time, a good deal of research is being undertaken into academic practice using elearning. The research reported in this paper is a longitudinal case study that examines one teacher at The University of Sydney, Australia, as he transformed in his conceptions of, and approach to, teaching using elearning over two years. This research forms part of a larger project with embedded case studies focusing on teachers from the Health Sciences and related disciplines. Data for this case study was collected between February 2007 and December 2008 through semi-structured interviews with the participant and observations of the participant's elearning resource. The findings demonstrate that as the participant worked with his elearning resource over two years, he transformed the resource to improve learning and teaching. Through the process, he transformed his conceptions of, and approaches to, elearning, as well as his lesson image. He also came to understand the learning needs and styles of his students and their approaches to elearning. The research provides insight into the role of reflection and support of university teachers in their use of elearning.

Sirius Room 1 & 2

Gail Wilson, Southern Cross University**Implementing and evaluating a "Next Generation Learning Space" – a pilot study***Authors: Gail Wilson, Marcus Randall*

A dramatic, pedagogical shift has occurred in recent years in educational environments in higher education, supported largely by the use of ubiquitous technologies. Increasingly, emphasis is being placed on the design of new learning spaces, often referred to as "Next Generation Learning Spaces" and their impact on pedagogy. The idea of "classroom" now incorporates the use of both physical and virtual space. This change has meant a greater focus on the design and use of flexible learning spaces, more use of blended learning approaches and more personalised, individualised learning opportunities for students. While many such classrooms have been built and utilised in universities globally, only a few formal studies have been reported on how these spaces are used by both teachers and students. This article focuses on a pilot study of the use by lecturers and students of a technology rich next generation learning space – the Pod Room – and makes recommendations for further research into the effectiveness of new learning spaces in universities.

MONDAY 2:30 PM

Endeavour 1

Tania Broadley, Curtin University**R U there yet? - Using virtual classrooms to transform teaching practice.***Authors: Lina Pelliccione, Tania Broadley*

Access to quality higher education is challenging for many Western Australians that live outside the metropolitan area. In 2010, the School of Education moved to flexible delivery of a fully online Bachelor of Education degree for their non-metropolitan students. The new model of delivery allows access for students from any location provided they have a computer and an internet connection.

A number of academic staff had previously used an asynchronous environment to deliver learning modules housed within a learning management system (LMS) but had not used synchronous software with their students. To enhance the learning environment and to provide high quality learning experiences to students learning at a distance, the adoption of synchronous software (Elluminate Live) was introduced. This software is a real-time virtual classroom environment that allows for communication through Voice over Internet Protocol (VoIP) and videoconferencing, along with a large number of collaboration tools to engage learners.

This research paper reports on the integration of a live e-learning solution into the current LMS environment. Qualitative data was collected from academic staff through informal interviews and participant observation. The findings discuss (i) perceived level of support; (ii) identification of strategies used to create an effective online teacher presence; (iii) the perceived impact on the students' learning outcomes; and (iv) guidelines for professional development to enhance pedagogy within the live e-learning environment

Endeavour 2

Tom Kerr & Lee Mowbray, Macquarie University**Minimising the distance, maximising the learning: Successful selection and implementation of an online virtual whiteboard for tutorial sessions***Authors: Lee Mowbray, Thomas Kerr, Jenny Donald*

Emerging online technologies are increasingly being evaluated to meet the needs of the expanding group of students who wish to balance education with their career and family commitments. This paper describes the collaboration between Educational Developers at Macquarie University Learning and Teaching Centre and the Department of Biological Sciences, to research effective new technologies to facilitate an improved learning environment for Distance Ed students. We detail the process, from the needs analysis and extensive research of possible solutions, to the ensuing procedure of trialling, demonstration, implementation, training and support. The criteria and steps in testing and trialling the nine possible solutions are described, in addition to the subsequent implementation process of the final solution, Scribblar, a free Web 2.0 online interactive whiteboard.



MONDAY 2:30 PM

Endeavour 3

Martin Andrew, Swinburne University of Technology**Strategically Maintaining E-Community in a Postgraduate Writing Program**

Building and maintaining online learning communities (OLCs) among learners of postgraduate writing is crucial to these students' investments in creating effective texts for assessment and possible publication. Well-facilitated OLCs become sites of identity negotiation and construction for postgraduate writers, as they create authentic texts and apply industry-focused, text preparation skills for the 'unknown future' Barnett (2004) characterises as a key feature of early 21st century Higher Education. This study uses social constructivist, situated pedagogical theories of building and maintaining e-communities to situate a discussion of strategies experienced tutors use to develop and maintain effective e-communities for writers. The context of the study is a core first-year unit 'Critical friends' in an online Master of Arts (Writing) taught from Melbourne, Australia. This unit aims to socialise groups of distance learners into quasi-communities of practice (CoPs) by exploiting the possibilities for primarily asynchronous discussion within the Asynchronous Learning Network (ALN) of the Learning Management System (LMS) Blackboard. The strategies offer support between facilitators and the OLC and among participant members. Establishment and maintenance of OLCs can help to break down feelings of marginalisation, offer insider support, harness common goals, encourage shared discourse and promote 'belongingness'. This involves facilitating participants' individual and collective learning and providing contexts where it might continue temporally and spatially in real and imagined communities beyond the group.

La Perouse 1

Thom Cochrane, Unitec NZ**Twitter Tales: Facilitating international collaboration with mobile web 2.0***Authors: Thomas Cochrane*

Web 2.0 tools provide a wide variety of collaboration and communication tools that can be appropriated within education to facilitate student-generated learning contexts and sharing student-generated content as key elements of social constructivist learning environments. This paper illustrates this by describing and evaluating an international design collaboration project between two courses on either side of the world. A key communication tool used by the project participants included Twitter. The paper reflects upon the impact of one of the student participant's (LisaTickledPink) serendipitous rise to Internet fame as a result of using Twitter for the project and gaining over 30000 followers within a month. The project is evaluated within a framework of longitudinal research investigating the impact of mobile web 2.0 on higher education.

MONDAY 2:40 PM

Sirius Room 1 & 2

Glenda Cox, University of Cape Town**Sustaining innovations in educational technology: Views of innovators at the University of Cape Town**

Educational technology is increasingly being used to enhance teaching and learning activities in higher education. One of the persistent challenges has been how to encourage, support and sustain these innovative practices which rest largely on the individual lecturer. At the University of Cape Town, the Centre for Educational Technology (CET) has endeavoured to encourage and support pedagogic innovation through various mechanisms including the allocation of teaching with technology innovation grants. Findings of a recent survey of these grant recipients reveal how lecturers are sustaining these innovations over time. Using Archer's (2003) social realist approach this study is showing that lecturers' ultimate concerns, expressed in their reasons for changing the way they teach, have resulted in "projects" that have been successful and which have led to established practices. These projects have been sustained because they were created as a result of a specific pedagogical need and have been embedded in the courses for which they were created. Lecturers' practices have been supported by working in teams, sharing their teaching practice with others and receiving both financial and technical support from CET. This suggests that the key to maintaining innovative use of educational technology for teaching and learning in higher education should be centred on the notion of pedagogical sustainability.

MONDAY 3:30 PM

Endeavour 1

Seong Chong Toh, Universiti Sains Malaysia**Redundancy Effect in Multimedia Learning: a closer look***Authors: Seong Chong Toh, Ahmed Saleh Munassar, Wan Ahmad Jaafar Wan Yahaya*

The generally accepted assumption by most multimedia researchers is that learning is inhibited when on-screen text and narration containing the same information is presented simultaneously rather than on-screen text or narration alone. This is known as the verbal redundancy effect. Are there situations where the reverse is true? This research was designed to investigate whether the reverse redundancy effect for non-native English speakers learning English reading comprehension, where two instructional modes were used - the redundant mode and the modality mode. In the redundant mode, static pictures and audio narration were presented with synchronized redundant on-screen text. In the modality mode, only static pictures and audio were presented. In both modes, learners were allowed to control the pacing of the lessons. Participants were 209 Yemeni learners in their first year of tertiary education. Examination of text comprehension scores indicated that those learners who were exposed to the redundancy mode performed significantly better than learners in the modality mode. They were also significantly more motivated than their counterparts in the modality mode. This finding has added an important modification to the redundancy effect. That is the reverse redundancy effect is true for multimedia learning of English as a foreign language for students where textual information was foreign to them. In such situations, the redundant synchronized on-screen text did not impede learning; rather it reduced the cognitive load and thereby enhanced learning.

MONDAY 3:30 PM

Endeavour 3

Robyn Nash, Queensland University of Technology**Development of a resource to promote resilience in international students undertaking health courses***Authors: Sandra Sacre, Robyn Nash, Jennifer Lock*

The Resilience in International Student Education (RISE) project was funded by the Australian Learning and Teaching Council (ALTC) and aims to develop and build supportive strategies for international students in the nursing, public health, and nutrition and dietetics disciplines. The project is led by the Faculty of Health at the Queensland University of Technology (QUT), working in partnership with the University of South Australia (UniSA), as well as clinical partners, to develop, implement and systematically embed a supportive model for promoting resilience and effective workplace functioning in international students. In addition to providing direct student support, this model will enhance the mechanisms by which international students are mentored and supervised when on practicum placement in clinical settings. The model and accompanying resources developed through the educational partnership will be informed by critical iterative feedback from a network of tertiary health education experts, specialists in the area of language and learning support, and other key stakeholders to ensure that project outcomes have the potential for mainstreaming across both the health education and health service sectors. The RISE project embeds a sustainable model for tertiary institutions and healthcare services to support international students in health courses that will result in more resilient, confident and job-ready international graduates. It will also contribute to safer and more culturally responsive healthcare in Australian hospitals and health services generally. The project has developed a range of innovative online resources to assist international students, and those supporting them, to negotiate common situations more successfully and access appropriate resources and networks.

La Perouse 1

Deirdre Wilmott, Deakin University**Tinkerers, learning organisations and sustainable innovation**

The contribution of the lone ranger educator who tinkers with applications, testing, discarding and working haphazardly around systems, should be seriously considered. Whilst learning organisations want to be perceived as dynamic structures that recognise and support innovation in curriculum and teaching practice they cannot responsibly incorporate every technical change, new invention or application, and idea into their curriculum. Collaborative teams concerned with responsible sustainability, should not be subjecting their ideas to natural selection. Before ideas can be disseminated through collective teams, there needs to be a diffusion of originality, innovation and thought between members of teams, and this frequently stems from the very tinkerers whose willingness to take risks and fail with new technologies is often regarded as inefficient and contradictory to organisational development.

As learning organisations embed open source and community developed software they are finding themselves enmeshed with systems that are never complete and always being changed as the Internet magnifies the opportunities for tinkerers to adapt applications. When learning organisations embrace the open source option instead of using proprietary licences, they too have an obligation to support and participate in the development. This development is often done within a community that exists without concerns for sustainability and responsibility but uses an adaptive process of natural selection. An important way in which they can respond to this obligation is to provide an environment where lone rangers tinkering in the developmental role of resources can function.

La Perouse 2

Shannon Kennedy-Clark, Centre for Computer Supported learning and Cognition**Pre-service Teachers' Perspectives on using Scenario-Based MUVs in Science Education**

This paper presents the findings of a study on the understanding and attitudes of pre-service teachers in the use of scenario-based multi-user virtual environments in science education. The participants in the study used Virtual Singapore, a virtual world, and completed an open-ended questionnaire. Data from the questionnaire indicated that gender and current computer game use were likely to affect the perceived benefits of using virtual worlds in a classroom setting. Behavior management was seen as being a constraining factor on a pre-service teacher's willingness to use a virtual world in the future. Overall, the results of the study indicate that teachers are both aware of virtual worlds and have an understanding of both their potential advantages and disadvantages within a classroom setting.



MONDAY 3:30 PM

Sirius Room 1 & 2

Leanne Cameron, Macquarie University, James Dalziel, LAMS International, Peter Goodyear & Lina Markauskaite, University of Sydney & Lori Lockyer, University of Wollongong

Teachers, technology and design

Authors: Peter Goodyear, Lina Markauskaite, Shirley Agostinho, Lori Lockyer, James Dalziel, Leanne Cameron

Deciding how best to combine good learning tasks and appropriately supportive technology is becoming increasingly complicated. Teachers in higher education are struggling with rising expectations about graduate capabilities, a diversifying intake, increasing pressure on time and a dizzying proliferation of technology options. One response we are seeing is a strengthening interest in taking a more design-based approach to tackling what many would see as 'wicked problems' (Luckin, 2010; Hoadley, 2010; Goodyear & Retalis, 2010). This symposium provides an opportunity to discuss some of the latest insights from research on teachers' experiences with the tools and methods of educational design (aka 'design for learning').

The symposium will start by drawing on the team's recent research and development work, to share insights into some important aspects of teachers' engagement with design. It will merge ideas from research on two ARC projects with some practical experience of design implementation using LAMS. Among other things, it will consider how university teachers engage in design, and what kinds of knowledge and communication are involved in the work of successful design teams.

The symposium follows on from a similar very successful event (on the design of complex learning spaces) run at ascilite 2009, which attracted over 60 delegates.

MONDAY 3:50 PM

Endeavour 3

Eunice Sari, Edith Cowan University

Professional Knowledge Building in Online Learning Community (OLC): Embracing the Unknown Future

Authors: Eunice Sari, Cher Ping Lim, Jeremy Pagram

The paper discusses a number of elements of the knowledge building process that were evident amongst educators in Indonesia. These educators took part in the discussion board of an online learning community, called OLC4TPD (Online Learning Community for Teacher Professional Development). OLC4TPD is an OLC-based professional learning case study developed at Edith Cowan University to investigate the feasibility of an OLC-based model to support ongoing professional training of educators in Indonesia. Starting by examining the current professional challenges faced by the teachers in their professional work, the paper talks about the potential of the OLC-based model to provide ongoing support for teachers. It examines in detail one particular aspect of the learning interactions amongst the main stakeholders of the project that is that between teachers and teacher educators. Inspired by Scardamalia's Twelve Socio-Cognitive Determinants of Knowledge, the authors examined the discourses generated on the Discussion board during the period of 2009 – 2010 using qualitative and quantitative analysis. The paper reports the preliminary findings of the study, including the challenges and future works to be done at this project.

La Perouse 1

Joan Richardson, RMIT University

The emergence of social networking through the communal annotations of an e-book system

Authors: Joan Richardson, Ross Smith, John Lenarcic, Rod McCrohan, Ryan O'Hare

Work-in-progress is reported, taking a case study approach to investigate the delivery of an e-book which is constructed based upon the customisation of an existing Pearson Education text. Of particular interest is that the customisation will include a capability for dynamic highlighting and annotating of the e-book text to reflect activities stipulated in the course guide, and to facilitate interchange between students and the lecturer and between students and their student colleagues - a form of social networking. The data collection and evaluation of the impact of the e-book will provide insights into a number of aspects including: learning resource uptake; effectiveness of the resource suite components; and the means of staff instruction to students as facilitated using e-book resources.

MONDAY 4:00 PM

Endeavour 1

Annika Wiklund-Engblom, Åbo Akademi University

Exploring Conative Constructs and Self-Regulation of E-Learners: A Mixed Methods Approach

This study explores end-users' e-learning experiences from several perspectives in order to learn about the how and why of their e-learning process with particular focus on their cognitive constructs and self-regulation. Research questions are targeting how novice e-learners manage their learning in a computer-based learning space.

The study was conducted at a media laboratory for content testing. Mixed methods were used to collect data and triangulated in the analyses. Methods used were questionnaires, eye tracking, screen recordings, observation, and a stimulated instant re-call (SIR) interview. The SIR-interview ties the methods together by targeting in-depth qualities of users' subjective experiences.

Different phases of analysis are described in the paper emphasizing how methods can be triangulated in order to create an authentic picture of e-learning experiences. The study is still work in progress intending to explore how theories of motivation and self-regulation are applicable to e-learning contexts, and how this can be used in further studies on how to evaluate e-learning environments.



MONDAY 4:00 PM

Endeavour 2

Lorraine Fleckhammer & Lisa Wise, Swinburne University of Technology**Providing timely and constructive feedback to large online student cohorts***Authors: Lorraine Fleckhammer, Lisa Wise*

The strong market demand for psychology to be taught online has seen a rapid growth in enrolments in psychology units delivered by Open Universities Australia. Students studying in the online environment have expectations of a fast turnaround of their assignments along with an individual critique of their work. Such expectations can prove difficult to fulfil and the challenge will only be exacerbated as student numbers increase. This paper outlines four different models of assignment marking, adopted in an online Introductory Psychology unit with a high student enrolment and a correspondingly large teaching team. The first model of assignment marking focused on transitioning experienced on-campus teaching staff to the online environment. Subsequent models aimed to reduce inefficiencies in the assignment marking process, without a reduction in pedagogical effectiveness. The current model (Model 4) no longer includes the time-consuming process of annotating student's assignments with embedded comments. This change, while originally motivated purely by efficiency and budgetary constraints, has proved to be pedagogically effective. The faster return of grades accompanied by a brief individual comment on the overall quality of the work (rather than more extensive comments embedded as annotations within the assignment document) meets student expectations with respect to feedback, and when used in conjunction with more focused "feedforward" through use of tutor teams and stronger tutor-student relationships, appears to provide a more effective teaching and learning outcome.

La Perouse 2

Matt Bower, Andrew Cram & Dean Groom, Macquarie University**Blended Reality – Issues and Potentials in Combining Virtual Worlds and Face-To-Face Classes***Authors: Matt Bower, Andrew Cram, Dean Groom*

This paper describes issues and potentials related to blending virtual worlds and face-to-face environments for the purposes of learning and teaching. By streaming a live video feed of a face-to-face classroom into a virtual world space at the same time as projecting the virtual world space onto a screen in the face-to-face classroom it is possible to merge participation in the two environments. In this way students in remote locations can be offered improved access to and involvement in face-to-face classes, and face-to-face students can capitalise upon the affordances of the virtual world to extend the range of possible learning experiences. A pilot of this technique revealed several potentials for learning and teaching were evident including enhanced remote access to face-to-face classes, increased possibilities for online interaction, and the capacity to leverage the affordances of both worlds within the one learning environment depending on needs. However there were several implementation issues including latency and resolution of the video-stream into the virtual world, the quality of the audio feed, and distorted orientation between face-to-face and virtual world participants. A framework for evaluation is proposed based on an Activity Theory perspective. An invitation for participation in an Australian Learning and Teaching Council grant application is also extended

MONDAY 4:10 PM

Endeavour 3

Amanda Davies & John Nixon, Charles Sturt University**Making it real - from the street to the online classroom in police education: what is the impact on student learning?***Authors: Amanda Davies, John Nixon*

The design and delivery of effective learning experiences in foundational police practice studies for distance education students is complex and challenging. The many and varied capabilities of computer technologies, in particular the online environment is providing a conduit to connect distance education students with authentic, situated learning experiences and providing a nexus between face to face and distance education police subject delivery. This paper describes the design and implementation of an online module in police investigation studies by Charles Sturt University School of Policing for NSW Police recruit students and the student evaluation of the learning experience. Key findings from the evaluation suggests that online learning delivery which utilises real-time policing scenarios connected the student to the reality of their chosen profession and was preferable to traditional print based curriculum delivery. Further findings from the evaluation informs on future design considerations and the connection between learning opportunities and technologies, a focus of ASCILITE 2010. Importantly, students also suggested that the interactive design of the online modules was compelling, engaging, provided for diverse learning styles whilst allowing for individual rate of progress without fear or favour.

La Perouse 1

Linda Corrin, University of Wollongong**Capturing clinical experiences: Supporting medical education through the implementation of an online Clinical Log***Authors: Linda Corrin, Martin Olmos*

The capturing of data regarding medical students' clinical experiences contributes constructively to the delivery and enhancement of the curriculum. In order to facilitate the capture of this data the University of Wollongong's Graduate School of Medicine has implemented an online Clinical Log system using an iterative software development process to continually develop and refine the system to provide the most effective tool possible for students and staff. This paper reports on the progress of this project to date and outlines areas of future development and innovation.



MONDAY 4:30 PM

Endeavour 1

Helen Drury, University of Sydney**Transforming the teaching of report writing in science and engineering through an integrated online learning environment, WRiSE (Write reports in Science and Engineering)***Authors: Helen Drury, Janet Jones*

This paper describes an ALTC (Australian Learning and Teaching Council) funded project, which addresses the development of students' report writing skills in science and engineering across the undergraduate years. The WRiSE project grew out of concerns about student performance in written assessments, as well as the need to improve graduate writing emphasised by employers and government. The project approach involved a collaborative team across two institutions. The team comprised language and learning specialists and discipline staff who developed learning materials and technical and eLearning specialists who converted these into online materials. Development followed a feedback spiral, which also involved student users. WRiSE is an integrated, freely available, student centred, online learning environment for report writing in nine discipline areas within science and engineering. In each discipline area, interactive learning materials have been developed to address both the product and process of report writing, as well as the concepts and content behind the reports students have to write. WRiSE is designed to meet the needs of students from diverse backgrounds who have had varying writing experiences as it can be accessed according to student needs. Evaluation of WRiSE has been positive in the areas of user friendliness and improved understanding and confidence in report writing. Those students who used WRiSE have attained significantly higher grades in their reports than students who did not use WRiSE.

Endeavour 2

Chris Campbell, The University of Notre Dame Australia**Developing teachers' understanding of molecular biology: Building a foundation for students***Authors: Rachel Boulay, Alex Parisky, Chris Campbell*

Molecular biology often uses participation in active research laboratories as a form of educational training. However, this approach to learning severely restricts access. As a way of 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 further explores the process of material development and assessment plans. A pilot case study of a group of advanced biology teachers who embark 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. Teachers were positive in reporting about the many areas they gained instruction in although some feedback suggested that the initial online materials over-emphasised abstract concepts and laboratory techniques and did not adequately connect to the active research problems or local context of most interest to teachers and students. The experiences of the teachers are shared in an effort to gain insight on how teachers perceive their participation in the study.

Endeavour 3

Anthony Herrington, Curtin University**A scholarship program for academic staff to develop exemplary online learning tasks***Authors: Anthony Herrington, Judy Schrape, Kim Flintoff, Tama Leaver, , Matthew Molineux, Sheena O'Hare*

There is a strong impetus for blended learning approaches to be more widely adopted in higher education but finding an effective model for professional development of teaching staff can be problematic. In 2009, Curtin University developed an eTeaching and Learning Scholarship program for academic staff to develop exemplary online learning tasks that could be shared with the university community and inform future online teaching within their disciplines. This paper describes the design of the professional learning program together with early encouraging results that indicate both the willingness of the eScholars to incorporate additional learning technologies to extend the affordances of the university provisioned systems and to embrace authentic learner-centred tasks.

Endeavour 3

Sheena O'Hare & Judy Schrape, Curtin University**A scholarship program for academic staff to develop exemplary online learning tasks***Authors: Anthony Herrington, Judy Schrape, Kim Flintoff, Tama Leaver, Matthew Molineux, Sheena O'Hare*

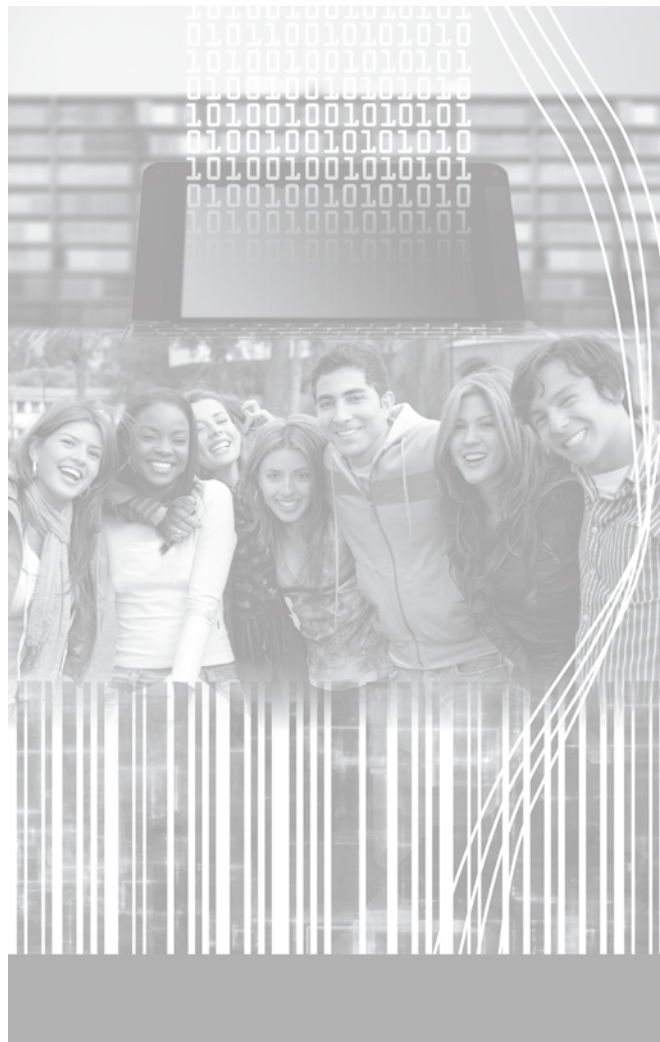
La Perouse 1

Wai Yat Wong, University of Sydney**Teaching developmental psychology using an interactive online video platform***Authors: Wai Yat Wong, Pauline Howie*

This paper examines the use of an interactive online Educational Video platform with collaborative temporal Annotation (EVA), with the aim to develop undergraduate psychology students' competence in assessing and understanding cognitive development. Two videos were developed, showing children being assessed on cognitive tests. One video was shown in a tutorial and actively guided by a teacher. The other was available online via the EVA platform with peer feedback as a voluntary supplement to the tutorial; the aim is to facilitate collaborative peer supported learning, scaffolded by pre-set prompts from teachers. Low level online users were compared with active users. Overall, students gave positive evaluations of the peer supported online learning especially among the active users. However, students in general preferred the classroom tutorial experience largely because of the presence of active teacher guidance and facilitation. Given that the online learning activities were voluntary and delivered in a competitive learning environment with minimal guidance, we believe that collaborative peer supported online learning has demonstrated educational potential in a range of contexts. We discuss factors that may facilitate greater student participation, elicit better learning outcomes, and promote learning satisfaction in an online peer learning environment.

Arafah Karimi, Multimedia University**Children Engagement and Enjoyment in Digital Narrative***Authors: Arafah Karimi, Yan Peng Lim*

There have been many experiments being carried out in recent years by educators and designers in the digital narrative areas which engaged children progressively in the story environment in order to ensure that the experience is fun and enjoyable while maintaining the educational values (Robertson & Good, 2005). However, with the research and experiments in place, the demand is more focused on more engagement and enjoyment in children learning and digital playing environment. The intention of this study is to look into children's engagement and enjoyment in a 3D digital narrative environment and to find out their likes and dislikes based on their experience. This study focuses specifically on how children interact with the Quest Atlantis and seeks to identify participants' enjoyment level by applying the combination of Intrinsic Motivation Inventory (IMI) instrument (Ryan, 2006) and smileyometer (Read, MacFarlane, & Casey, 2002). Engagement was measured by time related factors as well as observation of each participant's facial expression. Data sources used in this study include questionnaire, interview content, observational notes, and time records while a mixed method of qualitative and quantitative approaches was employed for analyzing the data. Findings of this study showed that in general, there was a high level of enjoyment which demonstrates a fun environment in terms of interest, enjoyment, perceived competency and perceived choice. Perceived choice was reported positive with low degree of pressure and tension. The related time duration data also showed that there was a high-level of engagement among the participants of this study. Facial expression observed from the children supported the results from the time related analysis while interview responses provided some interesting points about their enjoyment features. In this paper, the implication for digital narrative design, engagement features, and IMI scale findings will be discussed.



TUESDAY 8:50 AM

Endeavour Room

Lev Gonick, Case Western Reserve University**Building the Smart Connected City: A Platform Vision for the Future of Global Research Challenges, Academics, and Student Engagement**

Keynoter Lev Gonick is the CIO Case Western Reserve University and the technology visionary behind a landmark project that will bring fiber connections to five underserved and impoverished Cleveland neighborhoods. Researchers, academics and students at Case Western Reserve University believe broadband, along with training, computers and other broadband-enabled devices, may be a critical factor in improving these residents' lives. Simultaneously, the communities of interest working with Gonick believe they are setting out a course to architect the future and the pursuit of relevance for 21st century global research, academics and student engagement

TUESDAY 9:50 AM

Endeavour Room

Thomas Reeves, University of Georgia**Open Learning Requires Open Minds: The Challenges of Online and Blended Learning Environments for 'Generation Me' Students and their Instructors**

Immersive Games, Virtual Reality Simulations, Social Networking, 3D Worlds, Twitter, Vodcasts.....these and other technologies are predicted to have enormous potential to enhance teaching and learning for the 21st Century learners in Australia and the rest of the developed world known variously as the Millennials, the NetGen, Generation Y, the Digital Generation, or perhaps most accurately "Generation Me." The session will address questions such as: "How are GenMe learners different from and similar to previous generations of students entering higher education?" "What blends of pedagogical strategies and technological affordances are most effective for these learners?" "How can authentic tasks and enhanced assessment strategies be used to address a comprehensive range of learning outcomes in online and blended learning environments?" "How can instructors more effectively integrate their teaching and research agendas to engage GenMe learners?" Although definitive answers cannot be provided for all these questions, feasible and researchable solutions to meeting the challenges of the Millennials will be proposed.

TUESDAY 11:00 AM

Endeavour 1

Aik Ling Tan, National Institute of Education & Seng-Chee Tan, Nanyang Technological University**Reflection of teaching: A glimpse through the eyes of pre-service science teachers**

Authors: Aik-Ling Tan, Marissa Wettasinghe, Seng-Chee Tan, Mazlan Hassan

This paper examines pre-service teachers' reflection on teaching after participating in an online course using teaching videos of micro-skills coupled with self-reflection and group blogs. A total of 137 online entries were collected from 26 participants. Larrivee's (2008) four levels of reflection (pre, surface, pedagogical and critical) were used to code the reflection by the participants. The findings showed that 67% of the reflection by pre-service teachers' falls in the pedagogical category and 2% in the critical category. These findings show that pre-service teachers are capable of engaging in reflection beyond a surface level even with limited actual classroom experience and micro-skills teaching videos coupled with self-reflection and online blogs can serve as stimulus for reflection about actual teaching practices. The resources that the pre-service teachers used to make sense of teaching are (1) their knowledge of learning theories; (2) their ideas of teachers' roles and responsibilities; and (3) existing ideas of what makes good teaching. The pre-service teachers reflected upon their learning showed evidence of willingness to incorporate the learnt ideas of good teaching in their future classrooms teaching. The use of videos and reflection allowed them to restructure their teaching knowledge through identification, comparison, modification and synthesising.

Endeavour 2

Barney Dalgarno, Charles Sturt University**How does pre-service teacher preparedness to use ICTs for learning and teaching develop during the first two years of teacher training?**

Authors: Lincoln Gill, Barney Dalgarno

Pre-service teacher development in the use of ICT's in the classroom was one of three aspects investigated over a period of two years in a qualitative study. Data collection was performed using three semi-structured interviews (3 phases), this was analysed and the developmental positioning of the pre-service teachers determined using a model developed by Taylor (2004). The results illustrate the diversity in students' initial capabilities, and indicate that the students' development over time was impacted in the main by attitudes and beliefs formed in class and on teaching placements, hands-on experience, and modelling of ICT use. Due to the acknowledged need for graduate teachers to effectively integrate technology into their teaching, the results are likely to be of interest to teacher educators involved in early childhood, primary and secondary pre-service teacher education courses. The paper is also likely to be of interest to higher educators in other professional disciplines, particularly those in which changes to course structures and content have been proposed on the basis of assumptions about the capabilities of 'Digital Native' students.

TUESDAY 11:00 AM

Endeavour 3

Khe Foon Hew, Nanyang Technological University**Asynchronous Online Discussion: Instructor Facilitation vs. Peer Facilitation***Authors: Wing Sum Cheung, Khe Foon Hew*

Asynchronous online discussion forums have been widely used in schools and universities. It forms an integral part of e-learning and blended learning. Many researchers and educators use asynchronous online discussion activity to develop student thinking skills, problem solving skills, and others. There are many factors that may affect student participation in asynchronous online discussion forums such as discussion topics, group size, ground rules of the discussion forums, facilitation skills, and others. We believe that facilitators play an important role for the success of asynchronous online discussion. Usually instructors or students serve as facilitators for online discussion activities. In this study, we explore participants' preference in terms of facilitator (instructor facilitator vs peer facilitator). In addition, we also found out the reasons for their preference.

La Perouse 1

Geraldine Lefoe, University of Wollongong**Strategic leadership capacity development for ICT: Moving beyond learning on the job***Authors: Geraldine Lefoe, Dominique Parrish*

Leadership for change is a key component for universities striving to find new ways to meet the needs of their future students. This paper discusses an innovative framework for leadership capacity development which has been implemented in a number of Australian universities. The framework, underpinned by a distributive approach to leadership, prepares a new generation of leaders for formal positions of leadership in all aspects of teaching and learning. Through the Faculty Scholars Program a number of teaching and learning innovations were implemented, including a number using innovative technologies, to establish strategic change within their faculties. The Scholars shared their outcomes annually through national forums focussed on improving assessment practice.

The paper provides a brief overview of the program, the methodology used and the Leadership Capacity Development Framework which was developed. Critical factors for success are identified including the implementation of strategic faculty-based projects; formal leadership training and activities; reflective practice; opportunities for dialogue about leadership practice and experiences; and activities that expanded current professional networks. The model can be adapted to have a specific focus on leadership for elearning.

La Perouse 2

Peter Albion, University Southern Queensland & Birgit Loch, Swinburne University of Technology**Preparedness for flexible access to learning materials: How ready are university students and staff?***Authors: Peter Albion, Birgit Loch, Joseph Mula, Jerry Maroulis*

Information and communication technologies (ICTs) provide new opportunities for learning and teaching. However, for students to benefit from these opportunities, they must have ready access to ICT and positive attitudes toward its usefulness for learning. This paper reports results from an analysis of data collected from students and staff at an Australian regional university with on campus and distance student cohorts in late 2009. The surveys were conducted as part of a larger project to identify ICT likely to be available and of most benefit for student learning, and to gain an understanding of lecturers' attitudes toward ICT use for teaching in relation to the perceived benefits to students. The survey data is being used to inform decisions about adoption of new digital technologies for learning and teaching and the provision of professional development to teaching staff. This paper focuses on the preparedness of students to access study aids such as lecture recordings via traditional and mobile devices. Outcomes of the study are important to inform responses to proposals to make recordings of all classes available online through establishing what types of content are most likely to be accessed by students and identifying priorities for professional development of teaching staff.

Sirius Room 1 & 2

Geoffrey Crisp, University of Adelaide, Kristine Elliott, The University of Melbourne & Garry Hoban, University of Wollongong**Do online activities inspire students in the science disciplines? Engaging students in learning science with online activities: Affordances and limitations***Authors: Geoffrey Crisp, Kristine Elliott, Garry Hoban, Michael Nott, Will Rifkin*

This symposium will draw together the work of several authors and practitioners who have investigated various approaches to engaging students in the sciences with online learning activities and e-assessment tasks. Participants will engage in debate and discussion on the affordances of the online environment, the nature of science education and what evidence we have that the online environment is appropriate and effective in engaging all students in learning in the sciences.



TUESDAY 11:20 AM

Endeavour 3

Mitchell Parkes, School of Education**Virtual tutor support using SMARTHINKING: Preliminary findings***Authors: Jennifer McDonell, Mitch Parkes, Belinda Tynan*

The University of New England (UNE) has been using a virtual tutoring service called SMARTHINKING since 2007. UNE explored the use of a 'virtual tutor service' to support distance education students in their academic development; to reduce attrition; and to provide academic support 24 hours a day, 7 days a week to all students with access to a computer irrespective of geographical location. A cascading selection of units across different disciplinary areas and cohorts of students were targeted for the virtual tutorial support service over 6 semesters to provide rich data. A survey consisting of 20 questions was developed and implemented at the end of each teaching period. Preliminary analysis of data indicates that SMARTHINKING appears to be making a difference to student learning outcomes. However, while uptake tends to be low in all cohorts but where students select to use the service they are positive about its effects.

La Perouse 1

Iain Doherty, University of Auckland**Aiming for systemic change through an embedded continuing professional development initiative**

We will show how we have tried to drive systemic change in the teaching culture of a Faculty through the provision of online continuing professional development resources firmly embedded in the University's reward and recognition processes. Technology will be presented as an enabler in the context of a transformation strategy that engaged academic staff, academic managers and members of the Staffing Committee in the change process. We will detail the launch plan for this initiative and present data on visits to the online continuing professional development modules since the launch. Finally, measurements for the success of this project will be discussed.

TUESDAY 11:30 AM

Endeavour 1

Chien-Ching Lee, Nanyang Technological University & Seng-Chee Tan, Nanyang Technological University**Graphical representations and transfer of ideas between multi-draft pre-writing stages***Authors: Chien-Ching Lee, Seng-Chee Tan*

In this study, 36 engineering students who were taking a course on effective communication used graphic organizers to prepare their draft for a writing task. This was followed with a review by peers and the teacher. As students often have difficulties constructing knowledge across representations, this study aims to uncover the factors that influence students' cognitive decision-making when transferring information between pre-writing stages. The findings show that the factors were: the level of elaboration of the main ideas, the link between the writing goal of each pre-writing stage, and the level of importance of the main ideas. Furthermore, the redundant information in the pre-writing stages helped rather than hindered them from transferring ideas between the pre-writing stages. In addition, the students were more ready to accept feedback from the teacher than their peers. These findings highlight the importance of factoring in the function of the information in the representations in instructional design using multiple representations.

Endeavour 2

Denise Wood, University of South Australia**Preparing students and communities for an unknown future with the support of Web 2.0 and CMS technologies***Authors: Denise Wood, Alice Dodd*

While "net generation students" are said to respond best to the use of information and communication technologies (ICTs) that foster participation through collaborative and networked environments, the same cannot be said of the majority of community sector organisations. There is a growing body of evidence (Barraket, 2005; Department of Communications Information Technology and the Arts, 2005; Knox, 2005; Stillman et al, 2010; Yerbury, 2007) suggesting that the community sector is not yet harnessing the full potential of ICTs and that they could be using these technologies much more effectively (Barraket, 2005; Productivity Commission, 2010; Stillman et al, 2010; Yerbury, 2007). This paper describes a case study of service learning involving a cross-sector partnership between the public sector, university and community organisations aimed at developing student skills in web design through service learning, while also empowering community sector organisations to make more effective use of ICTs. The case study reported is based on a program which is a joint initiative of the State Government of South Australia, Office for Volunteers, and the School of Communication, International Studies and Languages at the University of South Australia. The case study describes key issues associated with developing and delivering a service learning model in partnership with government and in collaboration with community sector organisations that harnesses the power of Web 2.0 and CMS technologies to engage learners and community sector organisations through service learning. The findings from evaluations of student and community stakeholder satisfaction are reported and suggestions for addressing identified challenges are proposed.

TUESDAY 11:30 AM

La Perouse 2

Paul Gruba, University of Melbourne**The use of social networking sites for foreign language learning: An autoethnographic study of Livemocha***Authors: Cameron Clark, Paul Gruba*

Despite their spectacular growth in both daily life and mainstream education, little research to date has been conducted concerning the use of social networking sites in foreign language learning. The aim of this study, therefore, is to examine the use of such sites to learn a foreign language. Using an auto-ethnographic approach that included self-aware participation, learner diaries and peer debriefing, we investigated the social networking site Livemocha to study Korean from our perspectives as native speakers and experienced teachers of English. Specifically, we focused our questions on aspects of socio-collaborative principles and practice. Results of a grounded, thematic analysis indicate that the site had number of counter-productive pedagogical impediments to language learning that included, for example, flaws in site design. We conclude our paper with suggestions for improved foreign language learning through social networking sites.

TUESDAY 11:40 AM

Endeavour 3

Charlotte Brack, Monash University**The wiki factor: scaffolding online learning in groups***Authors: Charlotte Brack, Marie-Paule Van Damme*

We have used Web 2.0 technology to transform undergraduate group work, in higher education, preparing students for ways in which people will work together in future. This was implemented within Leapfrog Biology, an intensive four week online program developed for students who have not completed year 12 biology and who are entering first year medical studies. We used wikis to facilitate both the process and the product of online collaboration. This paper presents the evolution of the educational design of the online environment and the underlying pedagogy with a focus on online group work and the scaffolding of collaborative learning. Student activity in group wikis, assessed from edit trails and discussion posts, was analysed quantitatively in terms of participation and qualitatively in terms of the nature of student contributions. Scaffolding of learning in groups and ways groups were selected are described and related to student activity.

TUESDAY 11:40 AM

La Perouse 1

Julie Willems, University of New England**Understanding the multidimensional nature of student disadvantage to better inform the provision of 'glocal' learning**

There are growing calls to make equity a focus of research concern in Australian higher education. In turn such research will, it is anticipated, inform the planning, delivery and implementation of education in an era of rapid global and technological change. Yet to undertake such research requires generating a greater understanding of the complex and multidimensional nature of educational disadvantage for the purposes of equity. This paper explores the Equity Raw-Score Matrix as a means of capturing economic, geographic and social disadvantage.

TUESDAY 12:00 PM

Endeavour 1

Shane Dawson, University of British Columbia & Lori Lockyer, University of Wollongong**From neural to social: Medical student admissions criteria and engagement in a social learning environment***Authors: Shane Dawson, Leah Macfadyen, Lori Lockyer, David Mazzochi-Jones*

Notions of what it is to be knowledgeable and skilled in one's profession have evolved in recent decades. For instance, medical practitioners are expected to think critically and creatively, communicate effectively, and to be a professional and community leader. While these attributes have always been well regarded, it is only relatively recently that higher education institutions are actively incorporating these skills and attributes into student admissions criteria. In parallel, methods of instruction and course delivery have also changed over time with respect to these driving social paradigms. Today's medical schools are expected to both select and develop students in terms of these qualities through socially based pedagogical practices. This paper investigates the admissions criteria that best predict student engagement in a social learning environment and thus the related attributes such as communication, creativity, and leadership. The paper frames this investigation in the scholarship related to 21st century skills and achievement orientations.



TUESDAY 12:00 PM

Endeavour 2

Seng-Chee Tan, Nanyang Technological University**Nurturing preservice teachers to develop a better understanding of technology-enhanced pedagogy through reflection***Authors: Ping Gao, Seng Chee Tan, Angela Wong, Doris Choy, Longlong Wang*

This paper reports the preliminary qualitative findings of the first-year phase from a two-year study, in which we aimed to investigate: 1) the preservice teachers' knowledge, attitudes and use of Information Technology (ICT) for classroom teaching and learning, and 2) their learning from reflection upon their use of ICT throughout their two-year initial preparation program. The major first-year findings showed that all the 14 participants demonstrated a gain in ICT knowledge and skills and register positive changes in their beliefs in and attitudes toward using ICT for classroom teaching and learning. Their use of ICT, however, varied greatly from using ICT as a presentation tool to support their instruction to engaging their students in using ICT to work on the authentic tasks. The participants' reflection reinforced their perceptions of using ICT for classroom teaching and learning. The recommendations for engaging preservice teachers in reflection are discussed.

La Perouse 2

Sandra Barker & Sheila Scutter, University of South Australia**Conceptualising social networking capabilities: connections, objects, power and affect***Authors: Christian Voigt, Sandra Barker, Sharron King, Kit Macfarlane, Tim Sawyer, Sheila Scutter*

The following paper discusses the implications of introducing social networking into a university teaching environment and suggests that further understanding and investigation into the role technology plays in such an environment is needed. In examining in-class technologies such as Clickers, online teaching tools such as Centra and Moodle and social networking sites such as Facebook, the paper considers the benefits for teachers and students, as well as examining the drawbacks that may need to be addressed for successful implementation in relation to learning outcomes. After discussing the growth of networking in an educational setting, the paper presents four major aspects that describe the working of networks, and then applies this discussion to specific examples of Facebook and Clickers. While the move towards technological implementation is supported, it is emphasised here that it cannot be done without in-depth examination of the position of both teachers and students in relation to technological innovation in the classroom.

TUESDAY 1:30 PM

Endeavour 1

Colin Beer & Kenneth Clark, CQUniversity**Indicators of Engagement***Authors: Colin Beer, Ken Clark*

Student engagement has become synonymous with the measurement of teaching and learning quality at universities. The almost global adoption of learning management systems as a technical solution to e-learning within universities and their ability to record and track user behaviour provides the academy with an unprecedented opportunity to harness captured data relating to student engagement. This is an exploratory study that aims to show how data from learning management systems can be used as an indicator of student engagement and how patterns in the data have changed with CQ University's recent adoption of Moodle as its single learning management system.

Endeavour 2

Shannon Johnston, University of Western Australia**Teacher transformation with eLearning experiences: a case for addressing Personal Practical Theories in academic development**

Academic development of staff capacity for the use of technology in their practice may be transformative towards new pedagogies if their training extends beyond skill and capacity with specific technologies to address underlying beliefs of learning and teaching with technology. This paper proposes that focussing on teacher personal practical theories may be a way to enable transformation in teacher practice for realising the potential of quality integration of technologies in teaching and learning. The principle will be explored in an upcoming research study of moments in teacher experience in a flexible learning initiative which created change to their personal practical theories. In this paper, the principle is discussed briefly and the impetus for the study illustrated with samples from two experiences in attempting to integrate teaching with technology.

Endeavour 3

James Dalziel, LAMS International & Bronwen Dalziel, University of Western Sydney**Using a Learning Design "embed" Function to Disseminate Medical Education Learning Designs***Authors: James Dalziel, Bronwen Dalziel*

Learning Design seeks to share effective methods for online teaching, such as templates which can be automatically run by Learning Design systems. To overcome barriers to widespread adoption, a new "embed" function has been developed to allow teachers to view and trial a design from any public webpage – for example, a design can be embedded in a blog post. This new approach has been applied to sharing of designs developed in an ALTC project on medical student training in the scientific basis of medicine during clinical rotations in hospitals. Advantages of the new approach to sharing of medical education designs are discussed, including the ease of sharing designs among those unfamiliar with online Learning Design communities.

TUESDAY 1:30 PM

La Perouse 1

Ardis Cheng & Gregor Kennedy, University of Melbourne**Using students' visual representations as a window to designing learning tools***Authors: Ardis Cheng, Gregor Kennedy, Edmund Kazmierczak*

We report the preliminary findings of a study that considered how undergraduate students visually represent dynamic processes of a biological complex system. Initial results indicate that students created structure-focused visuals and relied on visual representations they had previously encountered in their studies. We suggest that the results of this paper can inform how computer-based learning tools could be designed to prompt students to think about the relationships between structure, behaviour, and function, thereby aiding their understanding of how biological complex systems work.

La Perouse 2

Garry Hoban, University of Wollongong**Articulating Constructionism: Learning Science through Designing and Making "Slowmations" (Student-generated Animations)***Authors: Garry Hoban, Wendy Nielsen, Charles Carceller*

This conceptual paper analyses several theoretical frameworks for "learning through making" using technology. First, the theoretical framework of Constructionism, which was proposed by Seymour Papert (1987), is discussed which is based on an integration of constructivist views of learning and social views of learning. Second, several instructional design frameworks are analysed and finally a theoretical framework based on Peirce's (1931) Semiotic Triad is explained. An example of learning through making is provided in the form of a "Slowmation" (abbreviated from "Slow Animation"), which is a new way for preservice teachers to learn science by making a narrated animation. It is a simplified form of stop-motion animation that integrates features of clay animation, object animation and digital storytelling. A theoretical framework then evolves that guides students in learning by creating a sequence of five multimodal representations (the 5 Rs): Representation 1 — research being written notes from summarising a topic; Representation 2 — a storyboard to plan the design of the animation; Representation 3 — making 2D or 3D models; Representation 4 — taking digital still photographs of the models as they are moved manually; and Representation 5 — creating the animation which can include text and a narration. Each of the theoretical frameworks help to explain the learning involved when students design and make an artifact using technology but the most relevant one is Peirce's (1931) Semiotic Triad. Theoretical frameworks help to explain student learning that occurs through "designing and making" but some have limitations and their use depends on the purpose and context.

Sirius Room 1 & 2

Swee-Kin Loke & Jenny McDonald, University of Otago**Lessons in designing sustainable mobile learning environments***Authors: Swee-Kin Loke, Mark Lokman, Michael Winikoff, Jenny McDonald, Rob Wass, Maryam Purvis, Richard Zeng, Christoph Matthaei, Peter Vlugter*

There has been an increase in mobile learning projects reported in scholarly conferences and publications. Our project consists of investigating the integration of mobile learning into an undergraduate Zoology module in which students undertook research projects in groups. In this paper, we report on students' adoption rate of the mobile learning option and their perceptions of its utility, with the aim of informing the design of sustainable mobile learning environments. Few students made use of the mobile learning infrastructure because existing means were preferred and mobile learning was perceived to be irrelevant for the learning task.

TUESDAY 1:50 PM

Endeavour 2

Bonnie Cord, Swinburne University of Technology**Managing the transition from the classroom to the workplace: Beyond the duty of care***Authors: Bonnie Cord, Mike Clements*

Industry is increasingly demanding graduates that are work ready. Preparing students that are not only technically competent but that also display the necessary soft skills for industry, presents a challenge for higher education. Experiential learning programs can offer students the opportunity to develop these skills and practice discipline knowledge, however for program sustainability higher education must meet the needs of its key stakeholders. This paper presents an intensive internship program that aims to supportively transition students into industry, while focusing on key stakeholder engagement. A beyond duty of care approach is presented through the design, structure and application of the program with emphasis on the student and industry partner.

TUESDAY 1:50 PM

Endeavour 3

Tabitha Roder, Unitec NZ**olpc - messages for a community approach in education***Authors: Tabitha Roder, John Roder*

Within the theme of "Curriculum, technology and transformation for an unknown future" it seems appropriate to present an image of seeing and doing things differently that comes from outside of formal education. The context for this story comes from working as part of the NGO one laptop per child (olpc) community in New Zealand. The impact of the global olpc movement has been widely accepted as transformative in its mission to enable children's agency in learning and participation in knowledge building communities. It is a vision that frames future learning within highly fluid and unstable spaces. In this paper the focus will be on a local community network that supports this project. Members of the NZ olpc volunteer community largely learn through informal means. Their learning spaces are both physical and virtual. They are spread across New Zealand and are connected to diverse global networks, where they can access "mentors" and co-learners using Web 2.0 internet based technologies.

Using narrative inquiry (Clandinin and Connelly, 2000) we invite readers to draw parallels between the community of practice described, with its rich experiential and informal learning features, to pedagogical possibilities for formal tertiary settings. Roles for teachers and learners are examined with particular emphasis paid to the learner as maker and designer in both the lived physical reality and in the constructivist sense of meaning-making. This raises questions about the nature of knowledge and its relationship to pedagogy. In addition the recount draws attention to sociocultural and co-constructed dimensions, where learning is distributed across the community and knowledge is seen as stretched across the activities and members of the community (Scardemalia, 2004).

La Perouse 1

Stephane Bouchoucha & Helen Wozniak, Charles Darwin Univeristy**Is peer assessment of asynchronous group discussions fostering skills relevant to our future graduates?***Authors: Stephane Bouchoucha, Helen Wozniak*

The increasing use of peer assessment in higher education institutions, as well as its benefits in term of students' learning is well documented. Distance education can be fraught with challenges, but creating a community of practice has been proven to increase student engagement and learning. This paper reports on the implementation of peer assessment of online asynchronous group discussions to foster a community of practice and equip future graduates with lifelong skills relevant to their chosen professional path. Through a careful preparation of students, the implementation of the peer assessment process proved beneficial. This paper describes the analysis performed to establish the validity and reliability of the peer assessment process in the context of a 3rd year unit of study of the bachelor of nursing at Charles Darwin University.

Sirius Room 1 & 2

James Oldfield, Unitec NZ**Shades of Grey: Playing games in the classroom to enhance student learning***Authors: James Oldfield, Andrew Slessor*

Although the use of games in education is not new, the recent enhancements to game functionality through technology advancements have led to opportunities for significant changes to teaching and learning delivery methods and approaches.

Shades of Grey is a technology-driven educational game designed to make learning fun whilst also encouraging collaboration between students and interaction with the instructor. The game makes use of web and mobile technologies to test student comprehension of ethical concepts in a team environment.

This paper reports on a research project that interrogated the effectiveness and impact of the Shades of Grey game on a group of students in an Advanced Management Accounting course. The project tested the students' understanding of core course concepts before playing the game, and again afterwards. Students' perceptions of the game were also tested in order to find out whether or not they felt it encouraged them to learn and added benefit to the course.

The Shades of Grey game received very positive feedback from students who enjoyed the experience, felt they learned from it, and wanted to see games used more frequently in their courses. This project's findings have confirmed that further investment in the game's development will be highly worthwhile; importantly, the game can be repurposed to work in many different courses in different environments and discipline areas, making it a valuable and highly flexible teaching resource.

TUESDAY 2:00 PM

Endeavour 1

Rebecca Vivian, University of South Australia**Social networking: from living technology to learning technology?***Authors: Rebecca Vivian, Alan Barnes*

The future that popular social network technologies have in academia is the focus of this paper. The paper presents the results of a survey of some 812 university students at the University of South Australia. The survey focuses on student's current uses, social network preferences, student preferences, student learning styles in order to determine if these living technologies can be used as learning technologies. Of particular interest are student tendencies for using such social networking for academic purposes. The study attempts to categorise the vast array of contemporary technologies and student preferences into a smaller number of factors that bring some clarity to an understanding of the relevance of these technologies to learning. As such it provides a basis to future studies in this area. There is evidence in the paper to suggest that social network technologies are being used for informal learning practices and that the technology affordances are being used by students with a collaborative learning preference.

La Perouse 2

Meg Colasante, RMIT University**Future-focused learning via online anchored discussion, connecting learners with digital artefacts, other learners, and teachers***Authors: Meg Colasante*

This paper discusses a learning issue of diverging online communications when more convergent, targeted, artefact-specific discussions are required. It contributes to whether anchoring annotations to specific components of digital artefacts helps build conversations useful to learning. While aligning interaction to artefact has been previously noted for its benefits, here it presents in the context of a tool to help achieve this – a new media annotation tool, 'MAT'. Learner analysis, peer discussion and teacher feedback are promoted within this tool, together anchored to an artefact of learning focus in carefully designed cycles of learning. The paper discusses various educational design features of MAT that enable learning by online artefact-centred discussion, including learner use of these features. It draws from a recent case study on video annotation for critical reflection and evaluation of physical education teaching practice. MAT has been evaluated in this context, but requires wider integration and evaluation to determine usefulness for promotion in a range of other academic practices.

TUESDAY 2:10 PM

Endeavour 2

Deborah Veness, Australian National University**"As simple as possible": the Bones of Curriculum Design***Authors: Deborah Veness*

Einstein is reported to have said, "Everything should be made as simple as possible, but not simpler". Educational designers working with university teachers bring to their work models and theories from a range of disciplines, many of which are unfamiliar to or discounted by their discipline-based colleagues. This paper outlines a simple yet flexible approach to discussions of curriculum design which highlights key aspects - intended learning outcomes at program and course level, content (declarative knowledge), teaching and learning activities and assessment (functioning knowledge), and graduate attributes, qualities and capabilities. The Bones Model provides a framework to assist discipline-based teaching academics to describe more clearly their curriculum and the standards to which they hold their students. It demonstrates the links between program-level intended learning outcomes, statements of graduate attributes, and course-level intended learning outcomes. It highlights the most obviously pedagogically relevant purpose for assessment strategies: to collect evidence of how well students have achieved intended learning outcomes. It provides for discussions about the link between declarative knowledge and functioning knowledge. Moreover, it provides a mechanism to assist the institution to collect some of the evidence necessary to demonstrate quality to external reviewers and auditors. The Bones Model guides discipline-based academics through the essential aspects of the curriculum design process quickly, without requiring of them a deep knowledge of the theories and research underpinning the practice of educational designers and developers.

Endeavour 3

Swee Kit (Alan) Soong, National University of Singapore & Seng-Chee Tan, Nanyang Technological University**Integrating technology into lessons using a TPACK-based design guide***Authors: Alan Soong Swee Kit, Seng Chee Tan*

The Technological Pedagogical Content Knowledge (TPACK) framework, first discovered by Mishra and Koehler in 2006, has gained much interest among teacher educators as it recognises that pedagogical uses of technology are greatly influenced by the content domains in which they are situated in. Recent studies on the TPACK framework have been focused mainly on analysing the TPACK constructs and measuring as well as assessing TPACK of teachers. However, how TPACK can be utilized by teachers to guide them to integrate technology into their teaching has yet been well developed. This paper describes a proposed TPACK-based design guide for teachers to use when they consider integrating technology into their lessons. A case vignette that further articulates the design guide is included.



TUESDAY 2:10 PM

La Perouse 1

Lyndon Walker, Unitec NZ**Quantifying the benefits of narrated screen capture videos***Authors: Lyndon Walker*

This article provides a quantitative analysis of student results for an Excel-based statistics assignment in a first year statistics course before and after the implementation of narrated screen capture teaching videos as the primary method of teaching the statistical functions of Excel in the course. It describes the production of the videos and then examines how student performance changed after their implementation. A two-sample t-test found a significant difference between the mean assignment mark before and after the implementation of the videos. This was followed up with a multiple regression model which controlled for other factors that may have influenced the assignment marks. Once these factors were controlled for, the implementation of the videos still showed a positive effect on the assignment marks of the students.

Sirius Room 1 & 2

Kathy Lynch, University of the Sunshine Coast**Learning in the first-person: an initial investigation***Authors: Kathy Lynch*

In Australia, as in most other developed countries, the days of the didactic teaching practices of yesteryear are disappearing, being replaced by immersive and engaging pedagogies. Underpinning these pedagogies is a shift towards the acceptance that learning in an authentic manner results in a positive learning experience resulting in deeper learning. Together with the ever-changing digital technologies is the interplay they have with pedagogy.

This paper reports on a work-in-progress study investigating the hypothesis that learning in the first-person in an experiential learning context results in deep learning. The first stage of the study investigates the development of learning content presented in a first-person view on mobile phone. Nurse educators participated in the development of a prototype learning object of an intricate task that is best learnt if the learner sees what the nurse sees, and is available when they need it. Preliminary findings show that content choice, situation and environment for the creation of the task are critical to the using a first-person view in the development of content to be viewed in the first-person.

TUESDAY 2:30 PM

Endeavour 1

Jan Herrington, Rob Phillips & Pauline Roberts, Murdoch University**Using academic analytic tools to investigate studying behaviours in technology-supported learning environments***Authors: Rob Phillips, Greg Preston, Pauline Roberts, Wendy Cumming-Potvin, Jan Herrington, Dorit Maor, Maree Gosper*

Increasing flexibility in higher education is being provided to meet the needs of a diverse student body. Technologies such as lecture-capture systems have been employed by many universities to provide on-demand access to recorded lectures. This paper describes research into how students engage with lecture-capture technologies such as Lectopia as they study in blended learning environments. It reports on the development of an academic analytic tool to examine Lectopia usage logs to identify usage patterns among students in three units across two universities. A theoretical model of usage patterns has been developed to tentatively explain studying behaviour. Preliminary results suggest that patterns of use of Lectopia varied greatly across the student cohorts studied.

Endeavour 3

Gwendoline Choon Lang Quek, Nanyang Technological University**Supporting Teachers' Case-based Learning in Technology-mediated Learning Environment***Authors: Choon Lang Gwendoline Quek, Qiyun Wang*

The current challenge faced by most beginning teachers was the disparity between the theories of classroom management exposed to in pre-service and the practices in the complex and ill-structured classroom situations. Such theory-practice gap has led to the need to re-examine the existing instructional approach used in teacher learning and helping them develop deep understanding and meaningful learning for teachers. This proposed study explores case-based learning and related areas, beginning teachers' case-based learning for self-analysis, discussion and reflection. It also explores how technology can be used to support teachers' case-based learning. The affordances of technology and design of technology-mediated learning environment will also be presented.

La Perouse 2

John Paul Posada, University of New South Wales**Fast and feral: diversity, duplication and evolution in a university LMS***Authors: Carol Russell, John Paul Posada*

Fast and feral: diversity, duplication and evolution in a university LMS In 2010, UNIVERSITY OF NEW SOUTH WALES's Faculty of Engineering ran its own version of Moodle in parallel with institutional learning management systems. This looks like an inefficient local duplication of central services. But reflecting on the reasons why this happened, and on the outcomes so far, we realised that so-called 'feral' quick-fix software solutions can contribute a lot to the development of mainstream educational technology in universities. Specifically, they counteract some of the inevitable inertia, or more accurately homeostasis, in university systems with centrally managed online learning management. This case study illustrates the value of allowing for some local diversity and redundancy in a university's educational technology.

TUESDAY 2:30 PM

Sirius Room 1 & 2

Shelley Kinash, Bond University**Pad-agogy: A quasi-experimental and ethnographic pilot test of the iPad in a blended mobile learning environment.***Authors: Jeffrey Brand, Shelley Kinash*

Does student use of mobile technologies make a difference to their learning? Many educators make this claim. This research will test and report the learning outcomes, technology orientations, attitudes, times on task & exposure frequencies with iPad tablet computers and make comparisons of these groups using other mobile devices and groups not using mobile devices. Methods include a quasi-experiment and design-based research (DBR) and ethnography. Participants will be 150 students over 2 semesters randomly assigned to rotating a comparison group using a traditional bound textbook and regular access to a Blackboard subject site, another comparison group using their existing mobile devices and an experimental group using iPads to access equivalent content through enhanced Blackboard content and an enriched e-text prepared for this research by Oxford University Press. Surveys, observations, discussions and curricular assessment are conducted weekly as part of the class. Quantitative analysis will be through SPSS and qualitative through NVIVO. The distinctive contribution of this research is the addition of empirical data to this research domain. Early results will be presented at the conference.

TUESDAY 2:50 PM

Endeavour 2

Maria Northcote, Avondale College**Lighting up and transforming online courses: Letting the teacher's personality shine**

Affective aspects of learning have been shown to influence cognitive aspects of learning (Russo & Benson, 2005; Salmon, 2004) and online educators are increasingly aware of the role played by emotions in online learning. To encourage a well-rounded online learning experience for students, online course designers have long been encouraged to provide students with opportunities to express their own personality and identity (Palloff & Pratt, 1999). Such design features have been linked with improved learning outcomes and decreased attrition rates (McInerney & Roberts, 2004). However, a comparable discussion about the value of teacher personality in online courses has yet to be comprehensively considered beyond definitions and discussions of teacher presence. Although the development of teacher presence in online learning contexts can contribute in some way to the development of an online atmosphere where the teacher's role extends beyond the cognitive coach or resource provider, the role of teacher personality is yet to be fully acknowledged as an aspect of the virtual classroom that could further enhance and transform students' learning experiences. Rather than suggesting which offline personality type would best suit an online teaching role, this paper suggests that teachers should have the opportunity to express their personality in online learning contexts. By acknowledging this nexus between online and offline identities, the paper provides the grounding from which to frame and launch future investigations into how diverse teacher personalities can be allowed to shine in the online environment and, consequently, transform and enhance online experiences for future students and online teachers.

TUESDAY 3:30 PM

Endeavour 1

Amanda Parker, Macquarie University**Designing, adapting and integrating e-portfolio technology as an assessment tool into the curriculum of an internship program**

This paper presents a critically reflective evaluation of the pilot implementation of the Mahara e-portfolio system into the curriculum of an Internship Program at a Macquarie University in Sydney. Currently, at the half-way point of the pilot, the e-portfolio pilot project team is presented with the opportunity to evaluate their progress and make improvements in response to issues that have been identified for the following semester. Feedback was gathered from each of Brookfield's four lenses using tools including a reflective journal, online student feedback survey, consultation with colleagues and a review of the literature to provide a comprehensive evaluation of the Mahara e-portfolio in semester one, 2010. This investigation will form the first cycle of an action research process, where results from critical reflections in semester one will inform the next action research cycle to be undertaken during semester two, 2010. Implications for the Mahara e-portfolio trial in semester two include improvements to student feedback methods and usability, increased level of training and support and an enhanced blog and forum. These results suggest that in evaluating the effectiveness of the e-portfolio, as with any new curriculum innovation, it is important to focus on how the tool can support and enhance learning.



TUESDAY 3:30 PM

Endeavour 2

Sultana Lubna Alam, University of Canberra & Catherine McLoughlin, Australian Catholic University

Using digital tools to connect learners: present and future scenarios for citizenship 2.0

Authors: Sultana Lubna Alam, Catherine McLoughlin

With the adoption and integration of mobile and digital tools of the web 2.0 era, along with the scope and uptake of diverse and expanding social media, the higher sector education landscape is transforming itself. This is manifested in moves towards a participatory, interactive learning paradigm where students learn through social networks and by participation, collaboration and immersion in digital spaces to seek, share and create knowledge for self-realisation. Students now expect to assume greater control by becoming co-creators of content and by producing rather than being mere consumers of predetermined resources. Worldwide, higher education providers are now seeking to provide learners with a more customized, personalised learning experience. Students also need to become "citizens 2.0", with the capacity to participate fully in the social and political activities of their communities. In this work-in-progress paper we portray scenarios for learning using a range of digital tools to engage learners and develop critical digital literacy skills. These scenarios are situated in a tertiary level unit called "social informatics" which investigates areas such as e-government, e-learning and e-law and deals with the social, cultural, philosophical, ethical, legal, public policy and economic issues relating to information and communications technologies. The design of the learning environment incorporates multiple participatory digital social tools where students can share ideas and co-create content to enable them to engage fully in the knowledge society. Recommendations for design of future spaces for development of digital citizenship skills are presented.

Endeavour 3

Chris Kilham, University of Canberra

Positive Partnerships website: Addressing disability and educational disadvantage in rural Australia

This paper addresses the question: How can we create better access to quality educational practices for those who live and work with students with disabilities and who are also disadvantaged geographically? To explore the notion of multiple disadvantages, a study was conducted to examine the experience of participants who were exposed to an Australian online learning package that has been developed to assist those living and working with students with autism. The government-funded package, called Positive Partnerships, is available nationwide, and includes interactive multi-media learning modules, information, links, discussions and feedback options. In view of the finding that rural and remote education was less available, less accessible, and less affordable than that provided to urban dwellers (Human Rights and Equal Opportunity Commission, 2000), this study examined feedback from an online survey, with particular attention to comments made by those with disabilities and /or living in isolated areas. Feedback about the site was extremely positive. Participants valued the features that embodied universal design and maximised time efficiencies and convenience. To exploit the benefits of this form of online learning, four challenges were identified: promotion of the site; balancing multimedia against computer capacity; addressing local issues through a national site; and maintaining the site beyond the funding period. The study concludes that improving access to education by augmenting face-to-face training with online learning for those in isolated areas will not eliminate their hidden disability costs, but it will go some way to meeting their educational needs in a more equitable way.

La Perouse 1

Gregor Kennedy, University of Melbourne

Getting together out-of-class: Using technologies for informal interaction and learning

Authors: Kate Goodwin, Gregor Kennedy, Frank Vetere

This paper presents the results of a study of the way in which university students use technologies for out-of-class interactions. The study investigated the usefulness and usage frequency of technologies such as mobile phones, social networking and email for informal interaction, compared to face-to-face interactions occurring in physical settings. The results seem to confirm that while informal, spontaneous interactions between students were most common face-to-face, some technologies performed a critical supportive role for 'just-in-time' information sharing and coordinating face-to-face meetings. However, technology usage was limited due to social barriers that were sometimes exacerbated in technological settings. Building on these results, the study also considered the specific use of technologies for informal learning. Working on the basis that informal interactions are foundational to socially based informal learning, the study explored opportunities for technology use outside of the classroom, for collaborative and educational benefit.

TUESDAY 3:30 PM

La Perouse 2

Andrew Cram, Macquarie University, Helen Farley, University of Southern Queensland, Sue Gregory, The University of New England, Lyn Hay & Mark J.W. Lee, Charles Sturt University, Shannon Kennedy-Clark, Centre for Computer Supported learning and Cognition & Denise Wood, University of South Australia

Australian higher education institutions transforming the future of teaching and learning through virtual worlds

Authors: Sue Gregory, Mark Lee, Allan Ellis, Brent Gregory, Denise Wood, Mathew Hillier, Matthew Campbell, Jenny Grenfell, Steven Pace, Helen Farley, Angela Thomas, Andrew Cram, Suku Sinnappan, Kerrie Smith, Lyn Hay, Shannon Kennedy-Clark, Ian Warren, Scott Grant, David Crave, Heinz Dreher, Lindy McKeown

What are educators' motivations for using virtual worlds with their students? Are they using them to support the teaching of professions and if this is the case, do they introduce virtual worlds into the curriculum to develop and/or expand students' professional learning networks? Are they using virtual worlds to transform their teaching and learning? In recognition of the exciting opportunities that virtual worlds present for higher education, the DEHub Virtual Worlds Working Group was formed. It is made up of Australian university academics who are investigating the role that virtual worlds will play in the future of education and actively implementing the technology within their own teaching practice and curricula. This paper presents a typology for teaching and learning in 3D virtual worlds and applies the typology to a series of case studies based on the ways in which academics and their institutions are exploiting the power of virtual worlds for diverse purposes ranging from business scenarios and virtual excursions to role-play, experimentation and language development. The case studies offer insight into the ways in which institutions are transforming their teaching for an unknown future through innovative teaching and learning in virtual worlds. The paper demonstrates how virtual worlds enable low cost alternatives to existing pedagogies as well as creating opportunities for rich, immersive and authentic activities that would otherwise not be feasible or maybe not even be possible. Through the use of virtual worlds, teaching and learning can be transformed to cater for an unknown future.

Sirius Room 1 & 2

Robyn Nash, Qld University of Technology

Enhancing student learning in the workplace through developing the leadership capabilities of clinical supervisors in the nursing discipline

Authors: Robyn Nash, Sandra Sacre, Pauline Calleja, Jennifer Lock

Clinical experience is a core element of undergraduate nursing education and students consistently report that clinical placement plays a large part in their decisions to pursue careers in nursing beyond graduation (Shih & Chuang, 2008). Despite this, real-world experiences do not automatically translate to positive learning experiences, or to the development of well-rounded neophyte professionals. This paper describes the planning, implementation and evaluation of an Australian Learning and Teaching Council funded project that was designed to strengthen the leadership capacity of staff involved in the clinical supervision of undergraduate nursing students in the workplace. The university worked in partnership with three major metropolitan hospitals in Queensland to develop a framework and professional development program incorporating leadership and clinical supervision. The program consists of two structured workshops complemented by individual personal development projects undertaken by participants. Participants are supported in these activities with a purpose-built website that provides access to a wide variety of information and other learning resources. Initial evaluations indicate that the approach is highly valued by participants, promotes useful peer dialogue and sharing of experiences and personal development in relation to assisting student learning in the workplace.

TUESDAY 3:50 PM

Endeavour 3

Ayelet Cohen & Jenny McDonald, University of Otago

From paste-up to power-up: supporting students to design a research poster

Authors: Ayelet Cohen, Jenny McDonald

This paper describes the evaluation of a single teaching intervention, a poster design seminar, facilitated by a professional designer, for a 2nd year undergraduate ecology class. We provide some evidence that the intervention enhances students' understanding and practice of visualisation skills. We also recommend the use of readily available and accessible tools (such as PowerPoint) to reduce the amount of time needed for technical support. Our experience leads us to suggest that including the teaching of visualisation skills in the undergraduate science curriculum may be a simple strategy to help future scientists to become more effective and independent visual communicators.



TUESDAY 3:50 PM

La Perouse 1

Kathryn Coleman & Arianne Rourke, University of New South Wales**Knowledge building in 21st Century: learners, learning and educational practice.***Authors: Arianne Rourke, Kathryn Coleman*

The integration of the Internet and mobile learning devices in blended and face-to-face (f2f) teaching and learning is not a 21st century invention. For many decades teachers and instructors have sought the best technologies for their students in order to offer enriched learning pedagogies with the most recent forms of technology. Recent literature on the so-called millennials purports that Generation Y prefers mobile learning and VLE to f2f learning and teaching methods because they have grown up learning and living with them (Oblinger & Oblinger, 2005; Howe & Strauss 2003; Lancaster & Stillman 2002). It has also been noted in the research about the 'new' higher education student that they seek to learn anywhere, any time to fit learning into their schedules (McLoughlin & Lee, 2009). This led to discourse into the digital divide and Prensky's (2001) reference to the 'digital native'. This current generation of undergraduates in the western capitalist world has grown up with the Internet, digital technologies and second and third generation mobile phones. Many have however, only been introduced to this technology as a learning device when they entered university, only in the last few years have they experienced Learning Management Systems (LMS) in schools. This paper will argue however that despite the increase of technology into the daily lives of Generation Y, many students in higher education may not be as widely supportive of the idea of integrating this technology including their social networking systems into the f2f classroom as has been recently presumed.

Sirius Room 1 & 2

Shirley Reushle, University of Southern Queensland**Preparing for the future: Meeting the needs of tertiary education through the edgeless university**

The university is becoming defined by its function – provider and facilitator of learning and research – not its form. The function the university performs is no longer contained within the campus, or within the physically defined space of a particular institution, nor, sometimes, even in higher education institutions at all. The term "edgeless" has been used to describe this phenomenon. Rapid changes in the nature of the workplace, work, the structure of organisations, and the pervasive presence of networked technologies are requiring a shift in focus in the world of education and training. The internet, social networks, and collaborative online tools allow people to work together more easily and the provision of open access to content can be both the cause of change for universities, and a tool with which they can respond. The key to organisational change and sustainability is to embrace these "disruptions", exploit the energies created, accepting that this may require significant change in the cultural orientation and behaviour of stakeholders. This paper promotes a need for shared vision and an institution-wide response, consultation and collaboration, a commitment to a "futures" perspective, a culture of "openness" and a willingness to embrace elements of risk as being significant to an institution in shaping its future direction. As an example, the paper refers to the establishment of a Digital Futures Institute at an Australian regional university.

TUESDAY 4:00 PM

Endeavour 1

Santhakumari Thanasingam, Nanyang Technological University**A Case Study on Redesigning a Mechanical Engineering Curriculum to Promote Self-Directed Learning***Authors: Santhakumari Thanasingam, Sathyan Subbiah*

This study investigates how the infusion of a self-directed learning approach impacts learning, teaching and curriculum content. Segments of a traditional mechanical engineering module, Net Shape Engineering was redesigned to promote self-directed learning. Instructional strategies were selected to promote SDL processes such as self-management, self-monitoring and self-modification. Two of 3 lessons reported here were restructured using structured problem solving and compared with the traditional approach. Data was collected using SDLRS, questionnaires and MCQ scores. It was found that the instructional strategy promoted self-management, self-monitoring and self-modification. In addition, the approach promoted active learning through greater engagement and interaction. There was however a difference in student preferences for the two approaches. The Low SDLRS scorers liked the approach because they could be more involved in the learning and they felt it improved their understanding. On the other hand, Average SDLRS scorers preferred the traditional method because it saved time, was more structured, provided them with hardcopy notes and opportunities for copying notes. They also felt they did not have to go through the time consuming process of discovering answers for themselves or bring laptops to class

TUESDAY 4:00 PM

Endeavour 2

Vickel Narayan, Unitec NZ**New Beginnings: Facilitating effective learning through the use of Web 2.0 tools***Authors: Vickel Narayan, Lee Baglow*

Web 2.0 is driving change both in the mainstream society and education. Web 2.0 enhances the experience by allowing users not to only download pre-packaged content but by empowering them to become active contributors and publishers. Web 2.0 affordances such as the ability to network, communicate, collaborate, co-create and aggregate knowledge offer considerable opportunities for learning and teaching. The growth of Web 2.0 technology and rising easiness to collaborate, communicate and co-create provides an opportunity to move away from a transmission method of teaching to one that empowers learners to learn collaboratively through interaction with peers.

Trade education is perceived by many as "learning the skills". In this era of fast changing technology, learning the skills is not enough. The need to continually up-skill and the ability to learn on your own is fast becoming a necessity to deliver expected outcomes. The Certificate in Mechanical Automotive Engineering (CAME) is a foundation level mechanical course that in the past was mainly geared towards 'teaching the skills' and also suffered from poor student retention and success rate. This paper explores an example of how Web 2.0 tools were implemented in the curriculum to address these problems: student retention and success and gearing students towards becoming independent learners.

Phase 1 of the proposed 3-phase scaffolded student-centred learning model is implemented in the course. The design and use of chosen Web 2.0 tools for use in the course is described. An overview of the outcome from semester 1 of 2-semester research is discussed. Data for the research was collected using various methods: the administration of post semester survey (student), student and staff blog, data gathered from discussions and reflections in the community of practice that was established with students and staff and an evaluation of student results at the end of the first semester

La Perouse 2

Barney Dalgarno & Mark J.W. Lee, Charles Sturt University & Sue Gregory, The University of New England**3D immersive virtual worlds in higher education: An Australian and New Zealand scoping study***Authors: Barney Dalgarno, Mark J.W. Lee, Lauren Carlson, Sue Gregory, Belinda Tynan*

This paper reports initial findings of a major scoping study that is being undertaken to examine current and planned applications of 3D immersive virtual worlds at higher education institutions across Australia and New Zealand. This scoping study is the first of its kind in the region. It is parallel and complementary to several studies conducted in other countries, and results obtained thus far appear consistent with international trends. The overall research design of the scoping study is discussed, along with preliminary results from the Australian/New Zealand sector-wide questionnaire. There seem to be preferred platforms being used in the Australian and New Zealand context, and usage has increased dramatically in recent years. Academics are using 3D immersive virtual worlds with their students in a variety of ways, for both assessable and non-assessable tasks. The project is supported by the Distance Education Hub research consortium, with team members from Charles Sturt University and the University of New England.

TUESDAY 4:10 PM

Endeavour 3

Brian Landrigan, Teaching and Learning Centre**Using online scenario-based learning modules to assist NESB students studying Corporations Law**

The focus of this paper is to highlight one aspect of a larger project seeking to identify and address the difficulties international students are experiencing in a core unit of the Bachelor of Commerce (Accounting) at the University of New England. Academic developers at the Teaching and Learning Centre, in consultation with the unit coordinator, decided to incorporate into the unit a set of online scenario-based learning modules to assist students with the IRAC (Issues, Rule, Application and Conclusion) law methodology. The modules presented a workplace scenario that emphasised finding, understanding and using information. They were designed to help students acquire the skills that underpin success in the assessment tasks and develop strategies to deal with the subject-specific discourse. The first module was made available online and two compulsory workshops were given to familiarise the students with the content. The students were then able to revisit the online module in their own time. This module was designed to assist the students in identifying the issues that are relevant to a particular client of a local law firm. The second module continued the workplace scenario and supported students in developing their skills of identifying the rule, applying their findings and preparing a conclusion based on the evidence. Both these modules form part of a larger, ongoing project that has included focus group sessions and online surveys to determine what difficulties international students face in the unit and how support should be provided.

Sirius Room 1 & 2

Seng-Chee Tan, Nanyang Technological University**School technology leadership – Lessons from empirical research**

This paper uses grounded theory approach to derive key findings from 12 empirical studies on technology leadership. Roles of technology leaders were identified and categorized into four main areas of change: infrastructural, organizational structure and policy, pedagogical, and cultural change. Relationships between technology leadership and other factors were reported: School technology leadership is a strong predictor on the level of technology use in schools; the cultural and structural characteristics of schools could affect the level of computer use in classrooms; and transformational leadership is correlated with principal's ICT competencies. Issues related to technology leadership and recommendations for future research were discussed.



TUESDAY 4:30 PM

Endeavour 2

Nathaniel Ostashewski, Athabasca University**Constructionist Principles in Online Teacher Professional Development: Robotics and hands-on activities in the Classroom.***Authors: Nathaniel Ostashewski, Susan Moisey, Doug Reid*

This report explores the first iteration of a teacher professional development Courselet grounded in constructionist theory and activities. A design-based research approach guided this continuing examination of online teacher professional development (oTPD) activities within an educator social networking site. The topic of the oTPD was "Robotics and Hands-on Learning in the Classroom" for teachers interested in integrating constructionist LEGO robotics-based pedagogies. The Courselet engaged teachers in just-in-time, ongoing TPD utilizing Web 2.0 tools. Key findings of the first delivery of the oTPD Courselet point to flexible access, sharing of resources, teacher discussions, and support for constructionist pedagogical activities as the PD value for participants. Findings support the potential for an ongoing online community of practice around classroom robotics. The approach taken in this oTPD Courselet continues to inform a model of oTPD delivery within a social networking enabled environment. Further research is needed to determine the transfer of oTPD to classroom practice

Endeavour 3

Mark Schier, Swinburne University of Technology**Use of student audio recordings to develop communication skills in a first year physiology unit***Authors: Mark Schier, Julie Mulvany, Jillian Shaw*

Several academic reports have emphasised the importance of communication skills development within science programs. Despite employer concerns, there is little research in the academic science literature regarding how generic skills, including communication skills, can be embedded into the curriculum of science programs. Although there are instances in which dedicated communication skills units are offered, the practice of explicitly embedding these skills in disciplinary science units is rare. While science students typically receive practice in writing reports and essays, less emphasis has been placed on oral or spoken communication. We conducted a study where students made a two-minute audio recording on a topic in first-year physiology. The exercise has generally worked well (with some minor technology issues), and informal student feedback has been positive, particularly students' appreciation of not having to do their presentation in front of other students. More student feedback will be sought via an online survey. In the future, additional ways of embedding the assessment of oral communication skills in units offered in each year of the science program could be investigated.

La Perouse 2

Andrew Cram, Macquarie University**Using virtual worlds to elicit differentiated responses to ethical dilemmas***Authors: Andrew Cram, Maree Gosper, Geoff Dick, John Hedberg*

Two significant drivers of change within the contemporary educational landscape are the increasing emphasis for learners to gain effective problem solving skills and the ongoing transformation of student interactions through advances in information and communication technologies. One emerging technology, virtual worlds, offers a range of opportunities for the design of activities that involve problem solving. This paper reports the results of a study intended to identify opportunities and limitations of virtual worlds to support activities that involve one type of ill-structured problem, an ethical dilemma. A scenario was designed to utilise the characteristics of the virtual world technology to engage research participants within an ethically toned situation, while facilitating individualised responses to the situation from each participant. The success of the scenario was evaluated according to the extent that differentiated perceptions and responses were elicited from participants. Analysis of three contrasting cases indicates that the scenario did elicit differentiated responses based on the differences in participants' ethical sensitivity and solution paths, although there were some confounding effects from variation in the performance of actors involved in the scenario. The conclusion is that virtual world scenarios can be used to elicit differentiated problem solving responses from participants, thus exhibiting potential to play a significant role in the development of learners' problem solving skills.

Sirius Room 1 & 2

Wenchao He, University of Sydney**Enterprise Architecture Roadmap for the Development of Distance Online Learning Programs in Tertiary Education***Authors: Richard Wenchao He*

When universities are trying to convert their existing face-to-face courses to distance online learning programs at a project level, faculty members usually have to commit extra time other than their normal teaching and preparation hours to prepare the e-learning course content because their original face-to-face course materials are not fully compatible with the online learning settings. If universities are going to convert their face-to-face courses in a large scale on an ongoing basis, there is a clear need for us to re-design the enterprise architecture to lower the cost of the e-learning development and make the process more efficient. This paper will use two case studies to highlight the issues that the faculty members have been experiencing when they participate in the e-learning development, and to point out the good practices. Then based on the Zachman Framework, a "To-Be" Enterprise Architecture is proposed, which enables academic staff to start contributing to the e-learning development at an early stage such as at the time when they are preparing for the face-to-face courses.

WEDNESDAY 9:20 AM

Endeavour Room

Ron Oliver, Edith Cowan University**Designing for learning in higher education**

Few teachers in higher education have experience or skills in designing for learning. Teaching in higher education often lacks consideration of how learners learn and is often based on supporting knowledge acquisition and theory building more than conceptual change. This presentation will explore the concept of learning design as a critical element of university teaching. It will explore the role of ICT in designing for learning and the research practices that can inform this area of endeavour.

WEDNESDAY 9:50 AM

Endeavour Room

Jan Herrington, Murdoch University & Thomas Reeves, University of Georgia**Publishing and Perishing: The Critical Importance of Educational Design Research**

Authors: Thomas Reeves, Susan McKenney, Jan Herrington

The outcomes of educational systems continue to lag far behind expectations at all levels, primary, secondary, and tertiary. Meanwhile, the sheer amount of educational research published in refereed journals has expanded enormously. There is an obvious disconnection between the educational research papers published in professional journals or presented at academic conferences and any form of beneficial impact on the students, teachers, and other stakeholders in educational systems. This problem can be traced back to those professors and research supervisors engaged in the preparation of educational researchers who fail to convey to novice researchers important distinctions between the goals and methods of educational research. Educational design research provides a possibly viable alternative to educational research as it is commonly conducted in the field of educational technology. Educational design research has the twin objectives of developing creative approaches to solving human teaching, learning, and performance problems while at the same time constructing a body of design principles that can guide future development efforts. The time for greater uptake of educational design research is now.

Endeavour 3

James Dalziel, LAMS International**What's new in LAMS**

This presentation will provide an overview and live demonstrations of recent developments for LAMS and related systems:

LAMS: Branching, Student-selected groups/activities/sequences, Non-linear sequence options (eg, support activities), New activity tools such as Video Recording and Wikis.

Activity Planner: Advice for staff selecting (and adapting) effective teaching templates, How to create/edit your own templates/advice

LessonLAMS: New approach to home page and editing, Access to Activity Planner, Free hosting of LAMS for one class for up to 30 students

LAMS Community & "Embed" feature: Sharing sequences through the LAMS Community, "Embed" feature for sharing through any webpage

La Perouse 1

Naomi Augar, Victoria University**Suburb as Site: Virtual collaborative learning for undergraduate photography**

Authors: Naomi Augar, Daniel Armstrong, Albert Goodman

This paper describes a learning and teaching approach implemented in an undergraduate photography unit that is designed around a virtual collaborative experience. The approach was adopted several years ago and the process of continually refining the approach to enhance the student experience is outlined as are the benefits and challenges that have been encountered to date. The primary aim of the learning and teaching approach is to allow students to develop graduate attributes and technical skills that will prepare them to work in a contemporary media context – working in the virtual so as to understand approaches to developing and presenting work in the modern photography workplace. The approach also aims to engage and support students in a self reflective process where they examine the self and others focusing on aspects of contemporary culture and lifestyle, architecture and concepts of the home. Central to the approach is a virtual collaborative project where students are matched with partners to develop and present a cohesive virtual photography portfolio that contrasts their local environment: Suburb as Site. Finally, the paper describes the research project that is underway to enhance the collaboration matching process and evaluate the student experience. The research aims to contribute to improved staff understanding of the student experience with a view to further enhancing the learning and teaching approach.

WEDNESDAY 9:50 AM

La Perouse 2

Shannon Kennedy-Clark, Centre for Computer Supported learning and Cognition & Denise Wood, University of South Australia

Scenario-Based Multi-user Virtual Environments (MUVES) in Education

Authors: Denise Wood, Deborah Richards, Michael Jacobson, Shannon Kennedy-Clark

The rapid growth in the use of virtual worlds in educational contexts has raised many questions about the pedagogical benefits of these technologies for teaching and learning. This symposium will focus on the use of scenario-based multi-user virtual environments (MUVES) in education and will specifically focus on: 1) the role of virtual worlds in education; 2) the value of scenario-based MUVES in inquiry learning; 3) the role of 'collaboration' in a multi-user environment; 4) the design issues; and 5) the challenges that need to be addressed to ensure that students can benefit from the virtual experience.

The topic will be of interest to the ASCILITE community as virtual worlds have been the subject of much discussion in higher education. The Australia –New Zealand Horizon Report (2009) states that virtual and alternate realities are one of the technologies to watch over the next five years as they are proving to be an effective means of attracting and gaining students' attention and interest. Worlds such as Second Life have seen a growth in popularity as a vehicle for enabling communication between students, their lecturers and their peers in a virtual space. While virtual worlds such as Second Life can be used to support scenario-based learning, there are also several scenario-based MUVES such as Quest Atlantis, Urban Science, River City, and Virtual Singapura that are underpinned by a scenario and are more akin to a role-playing game than a virtual lecture or meeting room. This symposium will explore the benefits and challenges in using scenario-based MUVES in a variety of contexts. The topic will be of interest to the ASCILITE community who are interested in exploring the potential learning affordances that scenario-based MUVES offer in providing inherently motivating and engaging learning experiences through the use of such emerging technologies.

Discovery Room

Yvette Blount & Margot McNeill, Macquarie University

Using and Evaluating Publisher-Supplied Software: A Case Study of an Undergraduate Unit

Authors: Yvette Blount, Margot McNeill

The availability of publisher supplied software products is becoming more common, yet there is little evidence in the literature about how these technologies can be utilised in specific contexts to develop a deeper level of engagement for students. This research project evaluated a publisher supplied software product, WileyPLUS to discover whether it was a tool that could encourage a deeper level of engagement from students and therefore a better learning environment. We also evaluated the resources and the experience of using the tools from the lecturer's perspective. An evaluation checklist was developed that can be adapted to guide academic staff when selecting publisher supplied software tools in other contexts.

Sirius Room 1 & 2

Barney Dalgarno & Mark J.W. Lee, Charles Sturt University & Gregor Kennedy, University of Melbourne

Critiquing constructivist theory:

(Mis)aligned (mis)application of constructivism in online learning environments

Authors: Barney Dalgarno, Gregor Kennedy, Mark J.W. Lee

The focus of the symposium will be a critical exploration and examination of the nature of constructivist theories of learning and their consequences for the design of online learning resources and environments. Further details about the theoretical frameworks and research studies that will be covered in this symposium are outlined below.



WEDNESDAY 10:10 AM

La Perouse 1

Diana Jonas-Dwyer, University of Western Australia**The development of an open web based resource for answering clinical questions: catering to geographically dispersed learners, teachers and clinicians***Authors: Diana Jonas-Dwyer, Anna Nowak, Belinda Shilkin, Fiona Leece*

Some of the problems facing medical students, teachers and medical practitioners today are increasing medical knowledge and publications, rising patient expectations, information management and patients' internet access. Key skills such as efficient identification and appraisal of quality evidence are essential for medical practitioners. In an academic environment where clinical teachers and students are geographically dispersed in regional and urban centres it is a challenge to provide resources to teaching staff to support a consistent approach to teaching evidence based practice. Here we describe the development of an open web based resource to assist staff to progressively develop medical students' key skills in answering clinical questions.

WEDNESDAY 10:20 AM

Endeavour Room

Garry Hoban, University of Wollongong**Animated Storytelling about "My Special Place" to Represent Non-Aboriginal Preservice Teachers' Awareness of "Relatedness to Country"***Authors: Anthony McKnight, Gary Hoban, Wendy Nielsen*

In this study, a group (N=15) of final year non-Aboriginal preservice teachers participated in an elective subject that aimed to raise their awareness about Aboriginal ways of knowing. A vital aspect of the course was developing the preservice teachers' awareness of "relatedness to country" which is a key belief for Aboriginal people. The non-Aboriginal preservice teachers selected their own special place and then experienced Aboriginal ways of knowing throughout the course and visited local Aboriginal sites to hear and listen to stories shared by an Aboriginal Elder. At the end of the subject, the preservice teachers created their own animated story about their special place. The animation approach used is called "Slowmation" (abbreviated from "Slow Animation") which is a narrated stop-motion animation that is played slowly at 2 photos/second to tell a story. It is a simplified way for preservice teachers to make animations that integrate aspects of claymation, digital storytelling and object animation. To research this approach the preservice teachers were interviewed at the beginning and end of the course as well as submitting their animation for assessment. Data collected revealed that all the preservice teachers were able to make an animated story explaining their relationship to their "special place" and most developed a deeper understanding of what a relational approach to country means. Getting the preservice teachers to make animated stories helped them to reflect upon their special place and was a creative way to develop their awareness of cultural diversity especially about Aboriginal ways of knowing.

Discovery Room

Mee Wah Eugenia Ng, Hong Kong Institute of Education**Using an educational game to learn - are there any gender differences between pre-service teachers?***Authors: Eugenia Ng*

This article discusses an exploratory study that aimed to examine the gender differences between female and male student teachers who played an educational game to learn programming concepts. In this study, we adopted a self-made educational game called "Simulator". Eighteen females and fifteen males have finished playing a level of the Simulator. Female participants spent more time in the Simulator but their scores were lower. The findings call for larger and longer research studies and perhaps a re-design of the Simulator to make it more appealing to females when using an educational game to learn programming.

WEDNESDAY 10:30 AM

La Perouse 1

Tina Bavaro, Australian Catholic University**Technological innovation in action: Transforming the learning landscape for multi-locations through networked interactive whiteboards.**

This paper commences to unpack the possibilities for the question: how can technologies transform the learning for our future regional teachers? Videoconference and interactive whiteboards are not new. Yet, the innovation of these technologies has resulted in a new way of thinking to enhance the learning experiences for regional students who often feel disconnected when studying from a distance (Moore, 1997; Knipe & Lee, 2002; Saw et al., 2008; Worthy, Arul & Brickell, 2008). The advancement arises when a shared digital canvas is created using networked interactive whiteboards in conjunction with the videoconference for video and audio communication to provide two-way distance learning.

The Networked Solutions Project is an exemplar of such technologies being developed to improve the learning landscape for regional pre-service teachers at the University of Wollongong (UOW). The new infrastructure, technologies and evidence-based research of multi-location delivery attempts to address issues of: fragmentation; duplication; inconsistency and inequity as identified by Winchester & Sterk (2006) in their Australian Universities Quality Agency (AUQA) audit for regional universities.

This paper is a work in progress, it explores multi-location delivery of the Graduate Diploma of Education (GDE), the pilot program for the project. Data collection will occur throughout the year, concluding in December, 2010. Arising from the completion of this research in 2011 will be the strengths, challenges and affordances of multi-location delivery. Initial findings have commenced to establish a picture of participant perceptions and experiences. Further to this, more research is necessary to better understand the effectiveness of the networked interactive whiteboards (NIWB) technologies in tertiary institutions (Dawson, 2010).



WEDNESDAY 11:15 AM

Endeavour 1

Sheila Scutter, Frederick Stokes-Thompson, Rebecca Vivian & Denise Wood, University of South Australia**The future may have arrived, but engagement with ICTs is not equal among our diverse “net gen” learners***Authors: Denise Wood, Alan Barnes, Rebecca Vivian, Sheila Scutter, Frederick Stokes-Thompson*

While “net generation students” are said to respond best to the use of information and communication technologies (ICTs) that foster participation through collaborative and networked environments, the same cannot be said of the majority of community sector organisations. There is a growing body of evidence (Barraket, 2005; Department of Communications Information Technology and the Arts, 2005; Knox, 2005; Stillman et al, 2010; Yerbury, 2007) suggesting that the community sector is not yet harnessing the full potential of ICTs and that they could be using these technologies much more effectively (Barraket, 2005; Productivity Commission, 2010; Stillman et al, 2010; Yerbury, 2007). This paper describes a case study of service learning involving a cross-sector partnership between the public sector, university and community organisations aimed at developing student skills in web design through service learning, while also empowering community sector organisations to make more effective use of ICTs. The case study reported is based on a program which is a joint initiative of the State Government of South Australia, Office for Volunteers, and the School of Communication, International Studies and Languages at the University of South Australia. The case study describes key issues associated with developing and delivering a service learning model in partnership with government and in collaboration with community sector organisations that harnesses the power of Web 2.0 and CMS technologies to engage learners and community sector organisations through service learning. The findings from evaluations of student and community stakeholder satisfaction are reported and suggestions for addressing identified challenges are proposed.

Endeavour 2

Hyo-Jeong So, Nanyang Technological University**New Generation of Student Teachers “Are They Really Different?”: A Study on Korean and Singapore Samples***Authors: Hyo-Jeong So, Hyungshin Choi, Weiyong Lim, Xiong Yao*

During the past decade, both Korean and Singaporean governments have implemented several ICT policies in schools, and the ecology of classrooms was constantly changing with such policy impetus. Therefore, it is possible that the new generation of student teachers, who are the recipients of such policy initiatives, possess personal beliefs and knowledge about teaching and learning with technology, shaped and learned from their extended period of new experiences and observations as school students. However, we question are they really different in terms of their attitude and perspective about teaching and learning with technology? Hence, the purpose of this research is to examine the profile of the first-year student teachers in terms of past experiences, beliefs and attitude. Specifically, we examined the relationships of the following six variables: (1) past ICT experiences, (2) personal computer use, (3) constructivist belief, (4) computer efficacy, (5) attitude toward computers in education, and (6) prospective computer use. Participants include student teachers in the first year of teacher education programs in Korea (N=163) and Singapore (N=55). Survey findings indicate that participants in both countries had fairly negative or neutral ICT experiences in primary schools, while their experiences were better in secondary and post-secondary schools. In Korean data, past ICT experiences were significantly related to computer efficacy, attitude toward computers in education, and prospective use of computers while no significant relationships were found between past ICT experiences and other variables in the Singaporean data. Singaporean student teachers scored higher in all compared variables than Korean student teachers, and significant differences were found in two variables: past experience and attitude toward computers in education. We discuss implications of our findings and directions for future studies.

Endeavour 3

Natasha Giardina, Queensland University of Technology**Designing for successful diffusion: A faculty-based approach to enhancing staff use of technologies for effective teaching and learning.**

The use of learning management systems and other technologies to support teaching and learning in higher education contexts is becoming ever more important, especially as universities move towards increasing offerings to students over the internet. However, as many researchers have found, academic staff engagement with educational technologies has been relatively marginal, with innovations not always diffusing to the majority. In any faculty, staff are likely to have a varying range of technological and techno-pedagogical competencies and differing motivations for using educational technologies and e-learning principles. This paper reviews contemporary research on technology adoption in higher education contexts which has informed the design of a current faculty-based project to address the emerging demands of the twenty-first century higher education landscape by enhancing staff use of technologies for effective teaching and learning.

La Perouse 1

Geoffrey Crisp, University of Adelaide**Assessing students in Second Life – some options***Authors: Geoffrey Crisp, Mathew Hillier, Shamim Joarder*

This paper examines various options for assessing students within a virtual world such as Second Life. Although many learning activities are being set for students in virtual worlds and considerable effort is being made to construct elaborate 3D worlds for students to explore, less effort has been expended in developing tools that can assist in the assessment of student learning within the 3D environment. Examples of assessment tasks set using the Sloodle Set, QuizHUD and scripted prims (3D objects) will be discussed.



WEDNESDAY 11:15 AM

La Perouse 2

Mark Drechsler, NetSpot**Moving Forward with Moodle**

An increasing number of Australian Universities are choosing to move to Moodle in order to take advantages of its many benefits, but at the same time the majority of online courses run within university Moodle sites still only use a fraction of the potential tools available, and often reflect little more than a place to store PDF documents and collect assignment submissions. But how can universities effect transformational shifts of teaching practices using Moodle as the enabler? In this presentation you will hear about the challenges and achievements of several Australian universities who have adopted Moodle and used it as a vehicle for change for teaching staff.

Sirius Room 1 & 2

Colin Beer & Kenneth Clark, CQUniversity**Academic Involvement with the LMS: an exploratory study***Authors: Ken Clark, Colin Beer, David Jones*

There is growing interest in the use of academic analytics however most of the reported work is being done at the level of institutions, and groupings of courses within those institutions. This study is an exploratory case study aimed at analyzing an academics' involvement with the Learning Management System, the student's involvement with the LMS, and the links between the LMS, the academic, and the students.

WEDNESDAY 11:35 AM

Endeavour 3

Martin Parisio, Macquarie University**University teachers' conceptions of learning through online discussion: Preliminary findings**

This paper reports work-in-progress phenomenographic research investigating university teachers' conceptions of learning through online discussion. The study is being carried out at a large research-intensive University in Australia with fifteen teachers. Semi-structured interviews are complete and several transcripts have been analysed to reveal emerging categories of conception. Preliminary findings suggest that teachers consider learning through online discussion in four qualitatively different ways: (A) Learning through online discussion as a way to provide think-time; (B) Learning through online discussion as a way to enable accessibility; (C) Learning through online discussion as a way to foster a learning community; and (D) Learning through online discussion as a way to foster collaborative knowledge building. The outcomes of this study may have implications for university teachers, educational designers, academic developers and all those involved with the enhancement of student engagement, learning experiences and outcomes.

La Perouse 1

Swee-Kin Loke, University of Otago**Otago Virtual Hospital: medical students learning to notice clinically salient features***Authors: Phil Blyth, Swee-Kin Loke, Judith Swan*

Part of learning to become a doctor involves learning to read or notice the world as a medical professional. Such identity formation can take place by participating in social practices within virtual worlds. In this paper, we report early findings from a case study of seven medical students performing the role of junior doctors in the Otago Virtual Hospital (OVH), focussing on the degree to which they noticed and recorded the salient features in a clinical case. Using video recordings of in-world activity, submitted patient notes, and audio recordings of pre- and post-interviews, we provide early evidence that solving an open-ended case in OVH has the potential to require students to notice, record, and integrate significant elements of the case by themselves. One of the aims of our descriptive study is to isolate variables that can eventually be used to study the nature of learning in virtual worlds with greater precision.

WEDNESDAY 11:45 AM

Endeavour 1

Mark McMahon, Edith Cowan University**Ponderers, Sloggers, Slackers and More: Understanding the profiles of student bloggers to help promote academic self-regulation**

Self-regulated learning is the fusion of skill and will. Students who can regulate their learning show a high level of self-awareness, are motivated and are able to adapt their approaches to the task at hand. Blogging may be seen as one approach to enhancing self-regulation but for that to take place, an understanding of how self-regulation is manifested in blogs must be developed. This paper identifies a range of blogger 'profiles' and offers suggestions as to how the processes in self-regulation can be developed through blogging as a learning activity.



WEDNESDAY 11:45 AM

Endeavour 2

Heidi Tan Yeen-Ju, Multimedia University**Enhancing Student Learning Using Multimedia and Web Technologies: An Authentic Learning Experience in a Malaysian Classroom***Authors: Heidi Tan, Joyce Kwok, Neo Mai, Neo Tse-Kian*

There is still a lack of confidence in the effectiveness of online education as education materials are being developed without proper consideration as to their design and content representation (Chung, 2008). Adding to that, we are now in a world where the ability to identify and solve real-world complex problems has become a career transcending skill (Levy & Murnane, 2005) hence creating the need for incorporating authentic learning principles into learning content as it creates an environment that allows students to gain crucial real-world skills (Lombardi, 2007). Therefore this paper reports a study conducted to assess the impact of incorporating authentic learning principles (Herrington & Kervin, 2007) into a web-based multimedia learning module, and embedding it within a student-centred learning environment, on the student learning process. Students were presented with a multimedia-mediated web-based learning module, developed within the curriculum of the class, and their feedback was solicited. Results showed that students were very positive towards the incorporation of interactive authentic activities and found the authentic learning environment to be very relevant to their learning and became more engaged and actively involved in their learning process. These results show strong and encouraging support for the development of multimedia web-based modules that are grounded in authentic learning and sound design principles, and an innovative teaching and learning strategy in a technology-backed class.

Sirius Room 1 & 2

Belinda Allen & Alan Crosky, University of New South Wales**A model for transformation – a transdisciplinary approach to disseminating good practice in blended learning in a science faculty***Authors: Belinda Allen, Alan Crosky, Emma Yench, Louise Lutze-Mann, Peter Blennerhassett, Rebecca Lebard, Pall Thordarson, Krystyna Wilk*

A project for the dissemination of blended learning design in the faculty of Science used a successful foundational course in materials engineering, where online and face-to-face components were fully integrated, as an exemplar for similar developments in other science disciplines. The team-based process promoted academic development of online learning expertise, and the redeveloped courses now provide a model for blended learning in their respective disciplines, while the focus on benefit to student learning has resulted in significant improvements in student outcomes and experience in all the courses involved. This paper describes the transdisciplinary, collaborative, exemplar-based model used in the development process, investigates the impact on students and teachers of the course developments, and evaluates the effectiveness of the approach as a model for curriculum development and for academic development.

WEDNESDAY 11:55 AM

Endeavour 3

Kim Blackmore & Lauren Kane, Australian National University & Diana Quinn, University of South Australia**The Engineering Hubs and Spokes Project – Institutional Cooperation in Educational Design and Delivery***Authors: Kim Blackmore, Paul Compston, Lauren Kane, Diana Quinn, David Cropley*

The emergence of blended course techniques that embrace a combination of face-to-face and online learning environments offers a raft of opportunity for flexibility in education. While much writing has focused on the opportunities for flexibility for the students and teachers, this paper focuses on the opportunities for effective sharing of expertise and effort between institutions.

The Engineering 'Hubs and Spokes' project is a collaboration between The Australian National University and the University of South Australia. It draws on the strengths of each to improve the range and quality of educational opportunities for students. Two components of the project are underpinned by blended courses: sharing of courses at the advanced undergraduate level; and development of an integrated graduate development program.

We describe choices made, benefits identified, and the challenges encountered in the early stages of the project. We discuss recommendations for the future of cooperation in educational design and delivery, and comment on the opportunities that arise for structural reform of the higher education sector.

La Perouse 1

Shannon Kennedy-Clark, Centre for Computer Supported Learning and Cognition**MUVEing Slowly: Applying slow pedagogy to a scenario-based virtual environment***Authors: Miriam Tanti, Shannon Kennedy-Clark*

This paper presents the research theory and design of a work in progress that investigates how the application of slow pedagogy can be applied to an ICT rich educative environment. More specifically, the research will focus on an inquiry learning strategy within a scenario-based multi-user virtual environment and will evaluate the impact of such a strategy in terms of student interaction and engagement with a complex inquiry problem. The research proposes that by applying the philosophies of slow pedagogy to the learning experience and permitting students to explore a problem space, without the rigid structure normally encountered in inquiry learning, that students will not only be more motivated and engaged, but the result will be the acquisition of a greater depth of knowledge and the procurement of transferable inquiry skills.

WEDNESDAY 12:15 PM

Endeavour 1

Marion Sturges, University of Western Sydney**Use of Vimeo Online Video Sharing Service as a Reflective Tool in Higher Educational Settings.***Authors: Marion Sturges, Jorge Reyna*

Most students attending the School of Education, University of Western Sydney (UWS) have competing schedules due to the combination of work, family and study commitments which makes effective collaboration difficult. Dispersal within the Greater Western Sydney area further encumbers collaboration and has a negative effect on group assignments. This makes students interactions a difficult and demanding task. This is reflected in on-line scenarios, academics at UWS note that many students do not contribute to on-line work (blogs, wikis and discussion forums). This could be attributed to the lack of provision of on-line learning objects such digital videos that triggers students learning and exploration. In this regard, we identified the potential of using online digital videos embedded in blogs within our e-learning system (Blackboard). Preliminary research was conducted using digital video embedded in blogs and measuring student's participation. Quantitative and qualitative methods were used and students were asked to respond to on-line discussions and on-line survey related to the video topic. The concept was to allow the students the opportunity to reflect on the videos, learning in a visually appealing and therefore constructive manner. Preliminary data shows the potential of these videos to increase students participation and promote reflective learning and on-line collaboration. We identified the need to conduct rigorous research, taking into account content analysis of the discussions, before drawing a conclusion. We believe that this strategy has the potential to become a powerful teaching and learning tool that will engage students in the use of e-learning resources at our School.

Endeavour 2

Philip Paasuke, Open Universities Australia**Key elements of the tutorial support management model***Authors: Grace Lynch, Philip Paasuke*

In response to an exponential growth in enrolments the Tutorial Support Management (TSM) model has been adopted by Open Universities Australia (OUA) after a two-year project on the provision of online tutor support in first year online undergraduate units. The essential focus of the TSM model was the development of a systemic approach to the provision of online tutorial support for high enrolment units. Findings from this project indicate that the TSM model has provided benefits in terms of improved student retention, performance, and satisfaction in addition to increased return and reenrolment rates. This paper outlines the key elements of the TSM model and offers comments on various issues that need to be taken into account in adopting this model.

La Perouse 1

Helen Farley, University of Southern Queensland**Teaching first-year studies in religion students in Second Life: UQ Religion Bazaar**

The UQ Religion Bazaar project was originally conceived in 2007 and developed through 2008. It consists of a Second Life island situated in the New Media Consortium educational precinct and boasts a number of religious builds including a church, a mosque, a synagogue, an ancient Greek temple, a Freemasonic lodge, a Zen Buddhist temple and a Hindu temple to Ganesha. The island was used in two large first year classes and for supervising distance postgraduate students.

After a brief introduction to the discipline of Studies in Religion at the University of Queensland, this paper will assess the suitability of using Second Life as an environment for learning based on constructivist methodologies. Further, it will explore the original conception and development of the UQ Religion Bazaar project within Second Life, and outline the preliminary findings of the project.

WEDNESDAY 1:30 PM

Endeavour Room

Martin Oliver, Institute of Education, University of London**"Everything I need to know I learnt from World of Warcraft": why we might need to start asking better questions about games, simulations and virtual worlds**

Like many areas of educational technology research, a lot of the work that focuses on games, simulations and virtual worlds consists of case studies that demonstrate proof of concept, enthusiastic position pieces or success stories. All of this is important: we need to know what sort of things we can use these technologies to do, so as to build a broader repertoire of teaching practices. However, this kind of focus neglects a range of other questions and issues that may prove more important in the longer term.

For example, educational research about games typically emphasises the way that playing motivates players; it ignores how successful games (such as massively multiplayer online games) often feel like work, and it also glosses over the way that bringing a game inside the curriculum changes the way that 'players' relate to it. There are also inconsistencies in the way games are thought about: the idea that they cause violence is often criticised as over-simplistic, yet the idea that they cause learning isn't. In virtual worlds, opportunities to create new identities is widespread, but questions about how this relates to our embodied relationships are rarely asked. In simulations, 'realism' is celebrated - but this means that simulations will always be second best to actual experiences, and it ignores how groups can disagree about whether something is realistic or not. Across this work, the complexity of learning and teaching seems hidden by the desire to promote the value of these technologies.

This talk will offer some examples of work that, in small ways, try to engage with these kinds of issue. Different priorities will be suggested, which invite a new kind of engagement with research and practice in this area.

