

Traps with apps

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Graduates of the grammarless whole language approach, Bethany Andersson and Ann Beveridge developed a late love of grammar, and now teach a number of different grammar courses to both native English speakers and ESL students, from first year to final year of PhD. They also embed such courses in journalism, WAAPA classical voice, and other courses of study. This presentation details the difficulties and delights of developing a grammar app for native English speakers in an academic context. Spurred on by many native English speakers' desire for basic explanations of English grammar meta-language and for practice exercises (to say nothing of TEQSA's requirements), we decided to write a grammar app – perhaps a strange decision for two self-confessed Luddites. With an underlying ethos that virtue (and hard work) is its own reward, the resulting app may be more suitable for up-skilling staff than students, but the presenters invite you to learn from their mistakes, try out the app, and discuss your ELP/grammar needs. The app covers explanations and practice for grammar terminology, recognition of parts of speech, academic vocabulary and corrections of common student errors.

A quest to motivate: The impact of engaging pharmacy students in a clinical research project

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Community pharmacist practitioners show a reluctance to engage in research activities and this has been identified as hampering expansion and further evolution of professional services. Higher education institutions have been identified as being instrumental to cultural change within professions. With this in mind, final year pharmacy students undertaking a six week community pharmacy placement were engaged in patient assessment and data collection for a large scale study looking at the prevalence of uncontrolled hypertension in the community. The aim of the activity was to provide students with a collaborative experience in research, and to improve student confidence and perceptions of the value of research. Students attended two preparatory workshops prior to the placement. Upon completion of the placement students were informed of the clinical findings of the study and participated in group discussion and reflection sessions. An adapted version of the *Valuing of Education* survey was used in a pre-test, post-test capacity, before and after placement, to investigate the impact the activity had on student motivational beliefs towards research. Analysis of survey data revealed no significant impact on student motivational beliefs towards research. While thematic analysis of reflections identified a number of barriers such as lack of confidence in approaching patients and a lack of time during placements, many positive aspects were revealed including a perceived benefit to pharmacist-patient relationships, associating themselves as active members of an allied health care team, and a sense of performing beneficial care when at risk patients were identified and referred to their general practitioner.

Transforming pedagogy from passive to active in science and engineering

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In an increasingly competitive global market, universities are competing for student enrolments in an environment where time-poor students are expecting technology to both reduce their contact hours and enhance their learning experience. To cater for students' expectations, nine academics in Curtin University's Faculty of Science and Engineering participated in a research study to determine the effect of reduced didactic, face-to-face lecture time and increased use of interactive technology and active learning in a unit of their choice. The units were diverse in terms of their discipline, enrolment size, year group and

mode of delivery (e.g. offshore). During semester 1, 2013, academics participated in pre- and post-unit semi-structured interviews as they trialled different pedagogical approaches. The purpose of the interviews was to determine the types of pedagogical changes, problems encountered and to encourage reflection amongst the participants. Using a multiple case study method with cross-case comparison, the interview transcripts and students comments were analysed. The findings suggest that while the rationale for change varied, the changed pedagogical approaches led to an improvement in student engagement, increased student responsibility and increased attendance. Most academics, however, experienced difficulties with workload (increased) and difficulties with technology. The implications of these findings for other academics and disciplines will be presented.

Failure is not an option: The academic journey of an aspiring chartered accountant

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This article explores the experiences of a black male student born in South Africa to parents from a central African country as he undertakes the academic journey from primary school through to the completion of a Bachelor of Accounting Science degree. Data was collected by means of two in-depth semi-structured interviews which were then analysed to identify the key themes that shaped his academic journey. Two distinct cycles of 'failure' followed by 'success' emerged from the analysis of both his high school and university experiences. In both learning spaces he was able to draw on external and internal resources to finally achieve his goals. The authors identify some of the challenges faced by students from previously disadvantaged backgrounds within the present day South African educational context, and suggest possible interventions through the adoption of strategies emanating from social cognitive learning theory.

Innovation in a time of training: Future proofing through placements

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This presentation unashamedly borrows the cadence of the novel title *Love in the time of cholera* to emphasise that it is often in the most challenging of contexts that transformative pedagogy can emerge. One of the major challenges facing educators, particularly those who are tasked with educating professionals, is the conflation between education and training. This can, in part, be attributed to the privileging of economic discourses and associated processes in both universities and organisations. There is an expectation from both students and employers that they be work-ready and 'skilled up' so they can hit the ground running when they begin work. This limits students' experiences and belies the complexities they are likely to face as the impacts of climate change, population growth, and other unknowns increasingly mark our world. In this presentation we share our reflections on what it was like to be involved in an innovative social work placement at the *Future Farm 2050*. This was a placement informed by principles of sustainability and social justice and very relevant to social work practice. However, there was resistance with educators, social workers, and students flagging it as not 'real' social work. In sharing these experiences we aim to join in a re-thinking and re-visioning of placement opportunities for all students in the endeavour to develop leaders who are able to respond to and manage uncertainty and difference. This is, we argue, vitally important if we are to develop leaders who are ready for contextual uncertainties and thus 'future proof'.

Specialised or generic? Formative feedback for a practical-based unit

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Formative resources are plentiful on the Internet but these may not be useful for those units that aim to develop students' knowledge in specialised, practical skills. Histopathology is one of these units. A compulsory second year unit in the only AIMS-accredited program in

laboratory medicine in WA, Histopathology provides future professional medical scientists with a practically-based skill set. The unit assesses these skills and tissue identification in a climate of reduced assessments and a need for formative feedback. Resources such as already available test banks and Internet resources are not specific enough for such a unit. Consequently, a unit-specific set of *Blackboard*-based formative assessment was developed, based on the practical concepts that the students undertook on a weekly basis in their laboratories. The development, student use and feedback will be discussed.

Indigenous cultural awareness through critical service learning: Stories and learnings from a national project

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Policies related to the inclusion of First Peoples' knowledges and content are common across Australian higher education; however, within many disciplines the incorporation of these perspectives is minimal. In many cases the inclusion of First Peoples' curricular content is presented in a tokenistic manner, removed from the lived experience of Aboriginal and Torres Strait Islander culture. This paper will present the final results from a national project that sought to enhance Indigenous content through service learning with Indigenous communities. The project brought together university students and Aboriginal communities in collaborative learning partnerships. Over the past five years, the project has taken students from three different universities to Aboriginal communities in the Northern Territory and Western Australia to work on service learning projects. These projects have involved a range of creative activities such as recording and writing music; creating documentaries and journalistic reports; documenting cultural activities; managing community festivals; building community arts infrastructure; and running school arts programs. In this presentation we will outline the project's framework and key findings, highlighting the experiences of the students, lecturers and community members involved in the project. In so doing we aim to highlight the transformative nature of these learning experiences. In particular, we will focus on how the project has developed intercultural understanding, deepened participants' appreciation of Aboriginal culture, and supported Aboriginal communities through arts activities that have direct benefit to them.

Creating 'professional writers' through the use of e-portfolios

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This presentation will outline the findings of our research into how an e-portfolio can assist students majoring in Professional Writing and Publishing (PWP) to develop and reflect upon their career identity in their final year of study. The PWP major at Curtin University develops a new generation of professional communicators. The program integrates creative practice and academic inquiry with training and experience in real-world professional skills and competencies. Students have the opportunity to take a Professional Placement capstone unit in their final year, in which they undertake an internship or work placement with an employer to gain practical workplace experience. In 2013, we integrated the development of an e-portfolio into the assessment tasks associated with this Professional Placement unit, providing students with workshops on career and e-portfolio development alongside their placement. Students completed a survey about career identity and provided feedback on the process of developing an e-portfolio and its affect upon their sense of themselves as 'professional writers' in training. This presentation will convey key findings from the project, including the complexities of developing a career identity in the creative arts, the extent to which learning and assessment tasks can contribute to this identity, and the facilitative role of teaching staff. The presentation will also showcase a number of e-portfolios and examine how the students constructed an identity story about themselves as writers and editors.

Who am I and what evidence do I have? E-portfolios in music and writing as a means to develop learning and self-efficacy

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Drawing on case studies of e-portfolio use at four Australian universities, this presentation reports on work undertaken to introduce and evaluate e-portfolios for their benefits to the learning and teaching of undergraduate music and writing. Our project covers students in four institutions (Curtin University; Queensland Conservatorium of Music, Griffith University; Sydney Conservatorium of Music, University of Sydney; University of Western Sydney), and includes a range of types, formats, uses and expectations of e-portfolios. Although these differences can be marked, our underlying position is that through interactions with e-portfolios and the processes of designing, constructing and critiquing them, students engage with their own learning in new ways, thus increase the personalisation of their learning. Through this we see our work in bringing e-portfolios into national tertiary music and creative arts education consciousness as a way to inspire learning among our students, to influence teaching practices, and as a new and important aspect of students' professional training in various areas of study. The examples presented raise a number of issues, demonstrating how e-portfolios are being used in different contexts for different purposes. They allow discussion of the uses of e-portfolios in individual subject areas and across whole degree programs; their relationships to information technology and development of IT-related skills; their significance as a site for realisation of and exploration of students' multiple identities; and their role in students' control of their own learning.

The relationship between cognitive style and assessment feedback preferences in university students

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This research study investigated the relationships between cognitive style (rational, intuitive, emotional, and imaginative) and the assessment and feedback preferences of university students, as cognitive style has been found to have significant influence on student academic performance. Data from 238 students (62 males, 176 females) from across university faculties were collected via an online questionnaire comprising the *Rational Experiential Multimodal Inventory*, the *Assessment Preferences Inventory* (API), and the *Feedback Preferences and Attitudes Scale* (FPAS). Factor analyses of the API and FPAS identified clear subscales for both measures. For the API, three main subscales were identified: Higher Order Thinking Tasks, Oral Assessment Tasks, and Nonconventional Assessment Tasks (e.g. portfolios). For the FPAS, two main subscales were identified: Attitudes toward Feedback and Utility of Feedback. After controlling for age, gender, and years of education, cognitive styles were unique predictors of variance in preferences for higher order thinking tasks (rational and intuitive styles: 23.8%) and non-conventional tasks (intuitive style: 3.1%) but not for oral assessments where gender was the only significant predictor (4.3%). The rational and intuitive cognitive styles each predicted unique variance in attitudes towards feedback (7.2%), but only the rational cognitive style predicted how much students used feedback (6.1%). These results indicate that different cognitive styles can be used to predict preferences for different types of assessment tasks, and that these styles are related to how much a student is likely to use feedback. This information can be used to inform the development of assessments and optimal ways to provide feedback.

Innovative teaching to develop students' critical analysis skills: Developing a critical analysis for business (CAB) module

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Experience in providing language and study skills support to business students over a number of years has highlighted the fact that many have difficulty with critical analysis during their studies. For example, students find it difficult to critically analyse an article or case study; to develop their position and a logical argument in regard to issues highlighted in study materials; and to evaluate objectively other points of view and 'framing' (Tannen, 1993). These skills are difficult not only for international students but for Australian students as well, although international students sometimes have the added difficulty of negotiating different cultural 'frames'. Based on our observations and experiences as language and learning specialists, a study module adopting a structured and scaffolded approach was designed to develop the above skills. The original module with nine sessions was designed to address the essential skills required to enhance critical thinking and critical analysis. The module was scaffolded to move from the simple to the more complex, and from concrete to more abstract subjects. Now in its third year of implementation, the module has been continually refined and adapted according to feedback from students and the different staff who have taught it. The CAB module now includes 10 sessions and incorporates multimodal texts and texts with numerical and graphic information as well as the original journal and news articles, book chapters and TV programs.

Reference: Tannen, D. (Ed.) (1993). *Framing in discourse*. Oxford University Press, UK.

A laboratory program for future scientists, not master chefs

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We have developed a skills-based practical program in our Level 2 Biochemistry and Molecular Biology units that focuses on sustained learning and critical thinking. The major driver for this was the low level of student engagement in practicals that had predictable results – also known as 'cookbook' practicals. In the new program, each practical module centres on a modern technology in biochemistry and molecular biology, and runs over three to four weeks, which include a pre-lab session, sessions of practising and applying the technology, and a post-lab session. Assessment tasks are associated with each session, and comprise multiple choice (pre- and post-lab) and short answer (post-lab) questions; results sheets (laboratory weeks); and a five-minute presentation (post-lab). Quantitative data on student engagement in the new program and their abilities in analytical skills, comprehension, and quantitation were collected. A student cohort that had experienced the old and new practical programs was asked to evaluate them in light of their own perceptions of learning achievements, problem solving abilities, and intellectual stimulation. The students overwhelmingly favoured (87.3%; N=103) the new structure, indicating a more positive engagement with the practical experience. Across all modules, the average mark for multiple-choice questions that were categorised as testing analytical skills was significantly lower than those for questions falling in the categories of comprehension and quantitation. We propose this quantitative information can be used to further strengthen the program in on-going processes of reflective teaching practices and feedback to unit coordinators, lab designers, demonstrators and students.

Australian university teaching criteria and standards framework

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Innovative, engaging pedagogy may be practised by some individuals in higher education contexts, however, to generate transformative change across the sector, there needs to be a cultural shift in attitudes towards teaching. The power and value in pedagogy of quality teaching needs to be recognised, endorsed and encouraged by educational leaders. The OLT funded *Australian University Teaching Criteria and Standards Framework* project was designed to support educational leaders effect cultural change in attitudes to the work of teaching academics. The primary purpose of the project was to synthesise research and current practice in universities as a foundation for the development of a quality framework

integrating principles and evidence of good teaching practice, which can be implemented at the institutional, faculty and individual staff level across Australian universities. The framework aligns with promotional levels for academic staff. This initiative addresses the place of teaching in the academic profession at a time of significant change in the sector. This presentation will report on how the framework has been adapted by a number of universities developing their teaching criteria and evidence to clarify expectations and standards for each academic level, and discuss how it may be embedded at faculty and institution levels.

Transforming teaching and learning in biostatistics: A simulated classroom scaffolding initiative

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Many students approach biostatistics units with a degree of trepidation. It is therefore important for statistics units to be engaging and to build students' confidence and enable them to succeed. Feedback from students enrolled in a third year undergraduate research methods and biostatistics unit at Curtin University (Applied Research and Biostatistics 381) highlighted the need for support for off-campus and out of class learning. The need is particularly acute for distance learners. This presentation will outline a project undertaken at Curtin University to support student learning in a third year biostatistics unit. The project is in two parts. The first is the design of pre-class interactive and engaging learner-centred activities that familiarise students with the *SPSS* statistical software package and introduce them to basic statistical techniques. Its aim is to ensure students gain confidence in using fundamental concepts in biostatistics, through a series of online self-guided interactive workshops. The second part of the project is the production of five short videos, each a simulation of a biostatistics tutorial. The simulations involve student volunteers who have previously taken the unit and achieved good academic performance. The simulated classroom draws on the peer-mentoring philosophy. The videos are designed to facilitate in-depth integrated learning and each one deals with a different threshold concept. Evaluation of the project will involve the tutors and the students.

Social media and mobile technology in the undergraduate curriculum

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The topic of social media and mobile technology has been of interest to many educators, health professionals and policy developers over the last decade. There are very little literature on the use of information technology and social media within undergraduate nursing curriculum. Today's students have a variety of mobile technologies at their fingertips. It is imperative that higher education facilities explore innovative teaching methods to engage students in this digital era and enhance their learning. In Western Australia, public and private hospitals are adopting latest technology to improve the services and facilities that are provided. The School of Nursing and Midwifery at UND aims to produce graduates who have sound knowledge and skills as professionals, and are prepared to utilise latest technology and applications and understand the concept of digital citizenship. This presentation will focus on the results of a recent survey conducted on first year nursing students, relating to the preferences and utilisation of healthcare social media and tablet technology in the undergraduate curriculum. The aim of the survey was to assess the undergraduate student's usage of mobile technology. Their knowledge of the various social media tools currently available to assist in their education and learning will be identified and their opinions of the importance of incorporating social media as a means of teaching and learning in the higher education sector will be assessed. This presentation will showcase student experiences and new successful innovative methods of teaching undergraduate nursing students.

Shoring up the bastions: The lived experience of teaching and learning academics engaged in transformative thinking about assessment

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This paper reflectively examines the experience of a small part of a large team committed to the "Learning for tomorrow: Transforming learning at Curtin" strategy. The team concerned forms the 'A' in Curtin's ART (Assessment, curriculum Review and learning Transformation) 2015, which refers to the transformative journey into towards a highly engaging, multi-mode approach to learning enhancement. Our team re-examined assessment with the aim of enabling the institution to maintain and further secure its assessment principles and processes, effectively shoring up the bastions to protect and safeguard its integrity for the future. From the start, where team members had to agree on what 'transformed' assessment would look like, through the painstaking experiences of analysing and debating the many aspects of assessment, we have had to meld our teaching and learning knowledges to develop a shared vision for assessment at our institution. This included conceptualising an integrated approach to quality assessment whilst developing strategies for working alongside our teaching peers in promoting diverse and innovative changes. The paper reveals the team's experiences of negotiating the terrain of the assurance of learning that lies at the very core of an education provider's *raison d'être*, and shows them as opportunities for personal and professional enrichment with and for the institution. As such, it is offered as a guide to others planning for a university-wide transformative assessment design experience.

Harnessing digital potential: A curriculum approach to the use of digital learning environments

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A digital learning environment (DLE) offers opportunities to make positive changes to teaching and learning processes, but it has been recognised that the use of technology must be guided by learning design (Herrington & Oliver, 2000; Phillips et al., 2012). This presentation reports one part of a project funded by the Office of Teaching and Learning (OLT). The project used an explicit curriculum renewal process to improve the DLE and better support students in their transition to university, to strengthen authentic learning and to facilitate tutor support for peer learning and peer collaboration. This presentation includes:

- An overview of the OLT curriculum renewal process, the choice of curriculum framework and methodology, and considerations that guided the design
- Discussion of how the DLE contributed to curriculum renewal for both on-campus and online students and facilitated collaborative learning and tutor support
- Evaluation of the changes, lessons learnt and applicability of findings to other contexts.

Engaging tomorrow's leaders: Student leadership development at Curtin

Refereed Professional Practice paper: Full text on website

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Curtin University has established the Curtin Leadership Centre (CLC) to progressively increase the number of students engaged in leadership development, such that by 2017, 25,000 students will have had some leadership development experience. Based on the Social Change Model of Leadership Development the CLC has developed an engaging co-curricular leadership program that is available both face to face and online. Diverse student engagement strategies, fast student feedback loops and researched strategies have contributed to high participation levels and very high satisfaction with the program. As the CLC looks to scale up, we will need continuous evaluation and improvement, more engaging online platforms, content embedded within existing units and new curricula units if we are to reach our ambitious targets.

Work-It-Out: The OLT Fellowship

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In TL Forum 2013 I piloted an idea for a teaching strategy that aimed to help students fill gaps in their basic knowledge and skills, within first year physics. After receiving an OLT National Teaching Fellowship, to continue with my idea, I have made four videos: *A Toolbox of Diagrams*, *Interrogating Formulas*, *Textbook: Your Personal Trainer* and *Designing Experiments*, and developed supporting learning and teaching tutorial material to go with them. The first two tutorials have been tested with students in a first year physics class, as well as academics and teachers around Australia, and have been well received. The "Work-It-Out" teaching strategy works on many levels; it takes a cognitive apprenticeship point of view to learning which provides just-in-time teaching and engages students in peer learning. It places students, as a group, in Vygotsky's zone of proximal development and encourages student talk and communication.

Where to next? The website has to be finished and pedagogical background papers have to be written. Papers also have to be written about the feedback from the student trials and I want to use the videos as starting points for deeper discussion between academics about the topics they contain. Some academics think that the videos could also be useful for tutor training as they answer the 'why' of doing.

Work-It-Out home page: <http://www.workitoutts.com/>

LiveJournal: <http://chris-creagh.livejournal.com/>

Textbook, Your personal Trainer video: <http://youtu.be/dMd6RK1VUR8>

A Toolbox of Diagrams video: <http://youtu.be/Cs2u-iKkwvk>

Interrogating Formulas video: <http://youtu.be/JfIdysUMWxs>

Design an Experiment video: http://youtu.be/zc72_D-B_0w

Industry needs and tertiary journalism education: Views from news editors

Refereed research paper: Full text on website

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This research paper discusses the findings of a 2013 Office for Learning and Teaching (OLT) sponsored project that canvassed the views of news editors in Perth about the "job readiness" of tertiary educated journalism graduates. Data was collected via face to face interviews with eleven news editors in Perth, Western Australia. The editors work in print, online, broadcast and television and all of them employ journalism graduates. The aim was to assess whether the five university based journalism programs in Perth provide graduates with the skillset prospective employers were seeking. Editors are uniquely placed as they employ journalism graduates as interns, or as full time employees when they complete their studies, and they know which attributes and skills will help journalism graduates to succeed. The editors, for the most part, agreed that there was a key role for universities in Perth to provide both an educational background and skills based training for people contemplating a career in journalism and early career journalists. There was, however, some disagreement as to what the ideal university based journalism program should consist of.

What do we need to know about transforming assessment?

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Recent developments in the higher education sector (AQF, Higher Education Standards, TEQSA, etc.) and the rollout of the *Transformation of Learning* at Curtin program have underlined the need to revise many aspects of our current teaching and learning activities particularly in the area of assessment. With the ART 2015 (Assessment-Review-Transformation) project taking a leading role in *Transformation of Learning* at Curtin, there are a number of issues, challenges and opportunities related to assessment that need to be considered. These include managing academic integrity and assurance of learning; redesigning processes and systems including electronic management of assessment, together with the need for improved moderation standards, and a desire for more robust assessment quality indicators and metrics. In this presentation we will endeavour to highlight the direction and approach we are taking to undertake this project, the supporting research that supports our approach, and the many considerations we need to reflect on to engage with academic staff.

Disparate pedagogies and how to negotiate difference

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Our paper reports on the findings of a collaborative project between academics in China and Australia where qualitative research has been conducted in both countries in order to identify and articulate how approaches which are socially, culturally and educationally responsible might be developed to support students from China studying on postgraduate coursework programs in Australia. We report also on the current development of research-based 'toolkits' of learning materials and teaching strategies for use in both China and Australia. The challenges confronting Chinese students studying in Anglophone universities are well documented. Effective communication in English across different language modes and through different text-types is identified as problematic. In response, and in order to support Chinese and other international students in their learning, arguments have been made for the adoption by academics in Anglo-European universities of pedagogies that are culturally inclusive, blended, and/or open-ended. Discussion and actions associated with the uses of such pedagogies are directed towards honouring students' home languages and cultures, and have the aim of benefiting a universal student body. However, our findings suggest that notions of inclusivity and blending may be incommensurable with the disparate pedagogical strategies that exist in China and Australia. It is therefore incumbent on academics in Australia to devise and adopt approaches that make explicit 'difference' in terms of disparate educational contexts, the often conflictual learning expectations and the different disciplinary discourses and text types which Chinese students, particularly those involved in postgraduate coursework programs, are required to both negotiate and perform in their studies in Australia.

The DNA of an innovative, engaging and transformative learning model: A case study in work integrated learning (WIL)

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Despite recent innovations in teaching and learning practice, the trappings of the traditional educational model and educational institution still prevail. Innovative and engaging ideas and models of practice are emerging, for example, blended learning opportunities; the 'flipped' classroom; and increasing use of digital media, but are these models enough in themselves to ensure that transformative learning is achieved? A recently signed Memorandum of Understanding between Curtin University Faculty of Humanities and HASSELL, a Top 100 ranked architecture firm, recognises the need for more innovative models to promote the university to workplace transition, and to ensure that graduates are job-ready. This MOU facilitates a WIL model which aims to be provocative; to push the boundaries of learning. It recognises the trend towards more visually inclined learning and aims to develop scope for greater critical thinking and reflective practice with the overall goal of achieving innovative, engaging and transformative learning opportunities for all involved. To that end, this paper draws on a range of theorists who have contributed to the transformative learning discourse, including Jack Mezirow, Paulo Freire, Malcolm Knowles, Jurgen Habermass and Patricia Cranton, and further explores their theories and ideas in anticipation of developing a viable WIL model for those transitioning from university to the workplace.

Compulsory English language support program: The student perspective

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Australia's higher education system attracts a significant number of international student. In 2009, 22% of university students in Australia were international students and this number has increased at an annual rate of 8% in the last decade (ABS, 2011; Deloitte, 2013). Most international students speak English as an additional language (EAL). Some of these students may not have adequate language skills to be successful in a tertiary academic environment and therefore, will require English language development throughout their course. However, it is generally accepted that generic academic skills programs have poor attendance and do not

appeal to those students who are most at risk. According to the *Good practice principles* a variety of skills and strategies need to be developed and integrated within specific disciplinary contexts for the retention and academic success of EAL students. The purpose of this study was to analyse feedback provided by students enrolled in compulsory English language classes at a pathway college in Western Australia. In 2013, compulsory course specific English language classes were initiated, with 395 students identified through the *College Post Enrolment Language Assessment* (PELA) for these classes. Research data was collected from an optional online survey consisting of 11 short answer questions focusing on student perceptions of compulsory English language support classes. Most respondents to the survey identified the PELA as a fair requirement; however the need to attend compulsory English language classes as a result of poor PELA results was not considered a fair requirement.

Understanding the factors influencing student motivation and engagement

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One of the primary goals of teaching is to motivate and engage students within a variety of learning contexts. Although learning outcomes are strongly linked to students' cognitive abilities, studies in this area have highlighted the role of adaptive and maladaptive thoughts and behaviours related to learning. These characteristics have been shown to be subject to change, dependent on interactions between individuals and the institution/learning environment. Teaching interventions focusing on maladaptive dimensions of motivation and engagement in high school students have been successful in addressing these problems. Similarly, can the identification of negative motivation and engagement dimensions assist academics to facilitate student learning in higher education? The aim of this study was to measure the levels of student motivation and engagement across all four year groups of the Physiotherapy program at The University of Notre Dame Australia. A proxy longitudinal study design was implemented with 233 physiotherapy students, representing 82% of students enrolled in the program, completing the *Motivation and Engagement Scale – University/College*. Despite an overall increase in ratings for adaptive behaviour dimensions per year level, significant gender differences were identified. Female students exhibited higher ratings for persistence, task management and planning (Positive Engagement), although also displayed more anxiety (Negative Motivation) towards learning. Male students demonstrated higher levels of maladaptive behavioural dimensions, including disengagement (Negative Engagement). Results from the study will be presented alongside implications for future research and interventions.

Improving students' engagement in active learning of surveying

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Activities performed to improve student engagement in surveying units which have a substantial practical component will be presented. Motivating the students to engage in an active learning environment includes helping students to realise the value of what they learn, and link what they learn to their life and future career. Some examples of student engagement in core surveying units will be presented including the use of e-learning tools and online activities, which offer learning flexibility through anywhere, anytime access. Class activities were designed to develop students' ability to formulate and solve problems, engage, experiment and reflect. Interactive simulations to practical exercises in real-world scenarios were used. In addition, students were involved in well-structured question and answer sessions (formative and summative), and in reflective practice, where they collaborate, share, communicate and reflect on their knowledge. Students were also engaged in pairing activities "think, pair, and share", preparation of *Flash* presentations, peer-assessment, and group problem-based projects and assignments. These activities facilitate a satisfying and rewarding learning experience for the students, as evidenced from results of a student questionnaire. The presentation concludes by raising some questions and observations to share with the audience.

The pathway experience: A practical approach to academic and language skills development at an Australian university pathway college

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This presentation will describe the work being undertaken at one Australian university pathway college to address the related and complex issues of English language proficiency (ELP) and academic skills development. This is specifically related to the design of assessment feedback on ELP for students, which can be given by content lecturers who are not language specialists. Since 1995, the college has been preparing international students for the transition from the first into the second year of undergraduate studies. The college's experience of the first-year transition issues faced by its students has particular resonance with the changing landscape of Australian higher education. These students are from a wide variety of academic, linguistic, and cultural backgrounds. They need to develop their proficiency in English. English is the main medium of academic expression by which they will demonstrate competence in their chosen discipline and eventual profession. The challenge for the college has been to provide an environment within which both content knowledge and skills development are complemented by ELP development. This challenge poses pedagogical and practical problems. The nature of the feedback given by lecturers is clearly one such issue. Feedback is relevant to students when it is simple to understand and provides directions on how to improve. Being necessarily focused on facilitating the transition of its students into tertiary study, a university pathway college has much experience in dealing with those same issues that will now become increasingly familiar to Australian universities in general.

Everything in moderation: The implementation of a quality initiative

Refereed Professional Practice paper: Full text on website

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This paper describes the development and implementation of a standardised moderation process within the School of Nursing and Midwifery at Edith Cowan University in Western Australia. This quality improvement initiative was the result of collaboration between two nursing course coordinators and a Centre for Learning and Development academic. The school employs a large team of sessional tutors who provide marking support to the unit coordinators. The purpose of this initiative was to standardise the marking of assessments across this team and to enrich the quality of assessment. The process was informed by best available evidence and underpinned by university guidelines and policy. The process was implemented in 2013 and initial indications were that it was well received by academic staff. However, retrospective evaluation revealed low implementation rates by academic staff. Potential reasons for this lack of engagement have been postulated, however, a prospective study will be conducted in 2014 to determine the contributing factors in order to improve engagement with this process.

BEHAVE Taxonomy: Facilitating the action based learning assessment in virtual training environments

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As action-based learning assumes an important role in today's education, assessment of this method of learning needs more attention, particularly in the context of virtual training environments. The *Action-based Learning Assessment Method* (ALAM) was developed to provide alternatives to increased use of scarce financial and expert human resources. Action-based learning involves human actions and any assessment system needs capabilities in recognising these performed actions. Although several different taxonomies of human actions have been developed, generally these were designed for specific research purposes and therefore have limited applicability. In this paper, we present the *BEHAVE Taxonomy* which is being developed to facilitate the *Action-based Learning Assessment Method*. It analyses the action sequences of the learners with reference to solutions by experts and generates automated, formative feedback.

Assessing the impact of work integrated learning on student work-readiness

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This presentation will provide a brief overview of the research methodology and outcomes of the national OLT *Assessing the impact of WIL on student work-readiness* project that has been underway since late 2011. The overarching aim of this research has been to provide an evidence base for judging the impact of WIL on graduates' readiness to commence work and guide university leaders in best practice and curricula investment. Fourteen universities have been involved in the project, providing coverage of a wide range of disciplines and different types of WIL. Data has been collected from students, graduates and employers, thereby providing large data sets from multiple stakeholders. While all data has been collected, analysis is still underway. Preliminary findings from the research indicate WIL does have an impact on student work-readiness, more so for placement than simulation. Evidence also suggests that WIL design throughout the curriculum impacts the quality of the student experience. Key factors that need to be considered in curriculum design and the student experience include:

- Authenticity of the placement or WIL activity
- Preparation and induction processes for both students and hosts
- Access to and quality of supervision throughout the WIL activity (both from host organisation and institution) to optimise the student learning experience and skill development
- Alignment of WIL activity to learning outcomes and integrated assessment with scaffolded skill development and robust feedback
- A facilitated debriefing session for students that enables reflection on the experience and an opportunity to consider areas of strength and areas for further development.

Building partnerships to enhance graduate employability: A strategic approach

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Work integrated learning (WIL) is the intentional integration of theory and practice whereby students develop employability capabilities through simulated or work-based learning opportunities. It enables students to learn through experience in practical settings. WIL supports the provision of authentic learning, in a variety of settings, within curricula and co-curricular programs, which enables students to develop and maximise their graduate employability outcomes. With increasing accountability measures facing the higher education sector and societal demands that the higher education experience prepare graduates for the dynamic environment of a global workforce, curriculum development and focus requires a paradigm shift. Curtin University values authentic learning and is committed to developing graduate capabilities through embedding WIL in all courses through scaffolding skill development across curriculum. Established partnerships and flexible arrangements with business, industry and community enable the development of professional practice to be embedded within those contexts, promoting reciprocal and mutually beneficial outcomes. The three year WIL strategic project aims to enhance the employability of Curtin graduates through industry and community relationships; an experiential curriculum; and co-curricular work experience opportunities. This presentation will outline the methods adopted by the project team to realise the goals set by the University; the strategies for establishing an institutional framework; and the approaches for enhancing the student experience through WIL. The challenge for Curtin is to implement best practice methodologies, and develop a strategy for embedding WIL in curriculum. This strategy will also provide additional evidence for employers in recognising Curtin students as capable and employable.

Developing academic agility for engaging with learning technologies to enhance student learning

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The introduction of information and communication technology (ICT) tools for marking is touted as an innovative solution to managing the provision of quality assessment as participation in higher education increases. Current approaches to professional development (PD) for ICT emphasise up-skilling individuals on the necessary steps for how to use a program. The agile teaching model, however, combines theories of change and change management, academic leadership, mindfulness practice and recognition of faulty thinking. This project aimed to test an innovative approach to ICT teaching and learning change management, which addresses individual attitudes through utilising theories of leadership to build academic competency and skill to be ICT change agile. A pre- post-test online survey was completed by 27 tutors in an intervention group and 7 in a control group to determine tutor attitudes and explore facilitators and inhibitors to the adoption of e-marking workflows. The intervention group participated in a two-day PD workshop focused on shifting participants' ability to engage positively with ICT innovations in teaching and assessment, followed by semi-structured interviews eight weeks later. Preliminary findings indicate that the workshop had a positive impact on participants' cognitions (increased knowledge, awareness and creative thought), emotions (increased confidence and enthusiasm) and practice (action towards improving teaching practice and managing challenges). With the emphasis on, and continuing growth of, learning technologies in higher education, this project has significant capacity to transform teaching and positively impact on students' engagement with their learning.

Digital curation: Opportunities for learning, teaching, research and professional development

Refereed Professional Practice paper: Full text on website

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The concept of digital curation has evolved from its original use. While the digital preservation of artifacts is still the primary domain of digital curation, due to Web 2.0/social media applications it has allowed anyone to easily create a topic centered library online to share with the world. Assets found online can now be quickly collated into a visually appealing web site using freely available tools. This descriptive paper explores the potential use of digital curation within three tertiary institutions.

Can 'citizen-science' style projects increase student motivation in environmental science units?

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Including authentic, real-world exercises into undergraduate curriculum can be difficult. This is particularly the case in environmental science units where logistical constraints present considerable barriers. Recently, 'citizen science' projects have allowed non-professionals to become involved in environmental research, providing participants with benefits such as increased scientific knowledge and ecological skill sets. Using the model of citizen science, this presentation describes the design of an ecological research project for undergraduates that involved students working together to plan their own research project, collect their data, and broadcast their results to the broader community through the use of a class blog (<http://cottesloeecosystem.wordpress.com/>). The effectiveness of this project was evaluated through a survey completed by 29 of the undergraduate students. The authentic nature of the project increased student's perceptions of their learning experience. They enjoyed the Cottesloe Ecosystem Research Project more than other traditional forms of assessment. While students did not see a strong link between their learning experience and the public display of their research, students wanted their research to be built upon in subsequent years, and believed that the project could help inform the public about the Cottesloe Reef Ecosystem. The benefits of this approach to environmental science units include not only enhanced student motivation, but the likelihood of increased public engagement with undergraduate research as well as greater research outputs for teachers who manage long term data sets. Citizen science style projects have the potential to bridge the gap between research and teaching in environmental science.

Nursing student experiences of death and dying during a palliative care clinical placement: Teaching and learning implications

Refereed research paper: Full text on website

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The *Building Capacity in Palliative Care Clinical Training* project commenced in 2012 and is providing a dedicated palliative care clinical learning experience for nursing and medical students as part of preparation for palliative care practice in future workplaces. Many students fear death on a clinical placement. This paper reports on a pilot study as part the broader project evaluation that examined nursing students' experiences of death and how the project driven teaching and learning supported students' learning experiences.

Instructional strategies that foster educational resilience: A holistic approach to student engagement

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As higher education becomes more globalised, where cultural and linguistic diversity is growing, it is important to evolve policies and practices to address the needs of students and faculty (Spring, 2009; Singh & Papa, 2010). In addressing the challenges of an increasingly diverse student population, and essential in the promotion of comprehensive and sustained student success, it is vital to have educators equipped to apply instructional strategies that increase authentic student engagement and foster educational resilience. This session is informed by an instrumental multiple case study (Geste, 2010) which examined the features that contribute to the negotiation of school culture and the development of educational resilience. The case is made for a focus on fostering educational resilience building learning environments, and the inclusion of instructional strategies that can be embedded to increase student engagement at interpersonal and intrapersonal levels. Six key facets are integral in resilience building learning environments. At an interpersonal level, developing a sense of connectedness is addressed by using instructional strategies which engage students in collaborative learning experiences that promote peer relationships, relationships between teachers and students, and connects student personal backgrounds with educational contexts. At an intrapersonal level, student self-agency is engaged by instructional tasks that facilitate the development of academic self-efficacy, self-determination and behavioural control (Doll, Zucker & Brehm, 2004).

The transformative effect of international comparative teaching experiences on pre-service teacher identity formation

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This session describes the transformative effect of an Australian teaching experience on a group of U.S. pre-service teachers. The pre-service teachers were part of the North Carolina Teaching Fellows program, a scholarship program that broadens the experience of an elite group of aspiring teachers. These pre-service Teaching Fellows participated in a cross cultural exchange where they spent several weeks in Australia. This exchange included a 6 week placement in an Australian school where they assumed many teaching responsibilities. The transformative impact of this experience on the Teaching Fellows' professional identity development was significant. Cattley (2007) asserted that in Australian schools, teachers, and subsequently pre-service teachers, are given considerable autonomy in decision making. In contrast to U.S. practicums, these pre-service teachers had an elevated degree of autonomy in their teaching opportunities. This enabled them to engage in authentic teaching and receive corresponding feedback; an integral feature of developing descriptions of self as a teacher (Winslade, 2002). The pre-service teachers reported experiencing collaboration as a structural feature of their Australian school experience, in distinct contrast to the highly

compartmentalised organisational structure of mainstream U.S. schooling. This broadened perspective of shared teaching roles impacted students such that they expressed a belief that they too could incorporate this approach to teaching in the U.S. Exposure to the complexity of teacher's roles and responsibilities, and their inclusion as a near-peers, prompted the pre-service teachers to experience, for some for the first time, the sense of actual identification as teacher.

The need to transform exams: Why do exams fail even when students pass?

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Exams are widely used in the physical and biological sciences and often represent a substantial proportion of assessment. Consequently, it should be expected that exams play a significant role in the determination of students' achievement of intended learning outcomes. Thus it is important to evaluate the validity of exams as indicators of student achievement of those outcomes. Curriculum mapping was used to identify intended learning outcomes in one science course, with regard to Bloom's *Taxonomy* and the *Science Threshold Learning Outcomes* (TLOs). A detailed picture of assessed learning outcomes was captured by analysing every exam, as well as all other assessment tasks by considering associated marking criteria and rubrics. The alignment between intended and assessed learning outcomes – for both exams and other assessment tasks – was measured. Exams formed 46% of assessment across the course. There was generally good alignment between intended and assessed learning outcomes in non-exam tasks. However, exams consistently assessed a lower level of thinking than indicated by intended learning outcomes. This was evident across the course, and especially in the final year when intended learning outcomes tended towards more advanced levels of thinking. Exams rarely measured the achievement of Science TLOs other than 'discipline knowledge', by contrast to non-exam assessment tasks. Overall, exams frequently failed to assess student achievement of intended learning outcomes by comparison to other types of assessment. This analysis of curriculum and assessment practices leads to specific recommendations to improve the design of exam questions to more accurately assess the intended learning outcomes, level of thinking, and Science TLOs.

Dialogue by design: Creating a dialogic feedback cycle using assessment rubrics

Refereed research paper: Full text on website

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Students consistently identify assessment feedback as a troubling aspect of their university experience. They find it confusing, difficult to act upon and unhelpful to their processes of establishing, understanding and fulfilling the criteria for high quality performance. Without a clear understanding of what constitutes 'high quality performance' students find it difficult to engage with learning: they are unable to establish goals to direct their cognitive and behavioural efforts and thereby remain engaged and motivated. Empirical evidence and attendant theorising suggests a need to reconceptualise assessment feedback within a dialogic process through which assessment goals and criterion meanings are shared and expectations and standards are clarified. In higher education assessment rubrics are a valuable but underutilised tool capable of establishing and explicating assessment criteria and providing feedback. This paper argues for a feedback cycle that is embedded in normal teaching and learning processes and encourages staff and students to develop a shared dialogue that supports clear and transparent understandings of assessment criteria and standards. This dialogic feedback cycle simultaneously enables staff to provide high quality, criteria specific, actionable feedback and enables students to develop skills in self regulated learning. This model was tested in a pre-university enabling program in 2012 and 2013 and resulted an overall 14.5 % increase in the student retention rate.

Student course evaluation impacting changes in delivery mode

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Evaluation from a wide range of sources is an essential component of curriculum development and improvement. This is particularly important with courses in their infancy, as they often need a greater amount of refining. The University of Western Australia provides two sources of institutional evaluation by students, the *Students' Unit Reflective Feedback* (SURF) and *Students' Perception of Teaching* (SPOT). Although these tools effectively assess the performance of a course and its teachers, they often overlook specific or detailed comments from students. The course Marine Conservation and Fisheries Management was introduced to the marine science degree at UWA in 2012 as a fourth year/honours course, aiming to give students a broader knowledge of the current issues in both marine conservation and fisheries management by working in small groups. Upon completion of the course in 2012, students were asked to provide feedback on, what aspects of the unit were engaging and enhanced their learning. They were also asked to input recommendations for further improvements. Feedback was categorised into themes to show the most common responses. Three lecturers voted on the validity of each comment and made an action plan to address any issues. The feedback reflected problems of working with small groups, without utilising a team-based learning approach. This prompted the conversion of the course to full team-based learning. The same feedback was collected from students in 2013 and compared to 2012. The continued success of positive aspects, improvements and shortcomings of the course are discussed.

Reclaiming digital literacies in the history classroom: Can online publishing help bridge the knowledge gap in higher education?

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Digital literacy is a major priority for higher education providers who find themselves faced with a cohort of students who will enter the workforce in an age of information abundance, globalisation and growing complexity. The quest to produce graduates competent in a range of digital literacies is deeply implicated in institutional agendas concerned with preparing students for the 'Knowledge Economy', an ambition informed by neoliberal, post-industrial and corporate logics. As a result, digital literacies are often taught as generic skill-sets, rather than within a disciplinary or scholarly context. A focus on competencies in tools and technologies rather than power, knowledge-creation and dissemination has resulted in a stark knowledge gap. Further to this, recent research indicates that university students, often described as 'digital natives', often vastly overestimate their digital literacy skills. In this presentation I will examine the intersection of digital literacy and historical pedagogy to argue that these skill-sets are not mutually exclusive. Drawing from a case study of online publishing in the discipline of history, I will explore the activation of three areas of digital literacy in the history classroom: creation, curation and digital identity. In doing so, I will identify areas where historians can add value and areas in which they could develop further competencies.

Vicarious learning will only get you so far: Learning leadership by doing leadership

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This research focuses on an interactive, experiential, group problem-solving exercise conducted within the core unit of a postgraduate leadership program. Qualitative feedback from four cohort years of students has been utilised as the basis of analysis to identify and track any significant learning that has been achieved during this exercise. Preliminary findings indicate that the experiential activity has a profound impact on students' ownership and understanding of applied leadership. Analysis of the reflective feedback data also reveals that the shift away from an initial 'task focus' mindset enhances the emergence of team cohesiveness significantly. The incorporation of a 'values-based' connection allows each individual to better deal with stress, pressure, ambiguity and inevitable frustrations that are bound to occur during the ensuing days of the experiential activity. Feedback also suggests that the deliberate structure of the activity allows for applied learning that more closely mimics real leadership challenges that are typical outside of the classroom setting. The focused time allocated prior to the experiential learning activity taking place requires the team to develop an ethos and contemplate ethical boundaries in advance of being faced by various dilemmas. This is a significant shift in traditional thinking and task-focused modes of conduct that often take place in actual workplace settings. Implications are considered for a more holistic method of developing well-rounded, ethical, team-oriented leaders. The study aims to

interrogate a fresh approach to leadership development that may help participants to better cope with real-life pressures and crisis environments that often exist in the workplace.

Student motivations for studying online: A qualitative study

Refereed Research paper: Full text on website

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The availability of online courses has continued to grow over recent years with more students now turning to online offerings. The flexibility offered through online learning is attractive to prospective students with some of the benefits including reduced costs, and the potential to increase and diversify the student body. Online courses provide the advantage of reaching those who may be 'too busy' for traditional study, and offer flexibility through anywhere, anytime access. While these benefits may attract prospective learners to the online environment there remains little empirical evidence for the reasons students actually make the decision to study online over more traditional means. Here, it is important to understand students' motivations for choosing an online course. Without this information universities cannot assess if their programs are effectively designed to meet students' expectations, or that students are sufficiently informed and prepared for instruction and learning in the online environment. As part of a PhD, research is currently underway investigating what students expect when commencing an online course at Edith Cowan University (ECU). This paper discusses findings relating to the motivation and reasons why first year students decide to study a course online at ECU.

The importance of action research in teacher education programs

Refereed Professional Practice paper: Full text on website

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This paper explores the experiences of three teacher-researchers, 'Simone', 'Damian' and 'Michael', who undertook an Action Research project in their respective schools as part of their postgraduate studies. As Head of Professional Learning, Simone conducted a research project designed to investigate how to improve a Peer Observation Program at her secondary school. Damian, also a Head of Professional Learning, explored ways to improve the profile of the existing Professional Development program at his secondary school, with a particular emphasis on overhauling the Staff Mentor Program. Michael, a Head of Junior School, investigated ways to reduce the number of playground incidents resulting from primary students not adhering to playground policy rules. The paper initially outlines the construct of Action Research in the light of its applicability to educational research. Particular reference is made to the benefits of Action Research for those in the teaching profession as well as to several challenges associated with Action Research. What then follows is the design of the methodology that was used to examine the experiences of Simone, Damian and Michael. The research used a qualitative paradigm, specifically that of interpretivism, and employed a symbolic interactionist perspective to examine each participant's project as an individual case study. Data collection took the form of three 40 minute semi-structured interviews. The findings fall under three major themes: Action Research as a valuable methodology, the impact of the Action Research on the school community, and challenges encountered when conducting the Action Research. The findings are then discussed in the light of the literature.

Increasing engagement in online learning

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Online learning requires active engagement between students and their colleagues as well as students and instructors. Finding a balance between maintaining flexibility in terms for online students and engagement is a delicate matter. This study presents the results of sequential changes to an online MBA course. In the first trial, the unit was run as it had been for some time, with one discussion period running over 2 weeks. Instructor engagement was low and interactions online were sparse. In the second trial, the discussion periods were doubled to 4

weeks and instructor engagement was increased, although remaining low. For the third trial, discussions also lasted for 2 periods of 2 weeks, but with significant increases in instructor engagement. Student satisfaction scores as well as patterns of engagement were measured. Interactive network maps indicate much stronger interactions as the student requirements increased, as well as increased scores on evaluation reports. Engaging online students requires a delicate balance of forced interactions as well as extensive online presence by the instructor.

Impact of academic integrity sessions at orientation: A case study

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It is important that students are provided with the right form of support and advice when they continue their tertiary studies in any institution. With this view, the students, mostly international postgraduate students at a regional campus, were provided with an on-campus orientation for three days prior to the start of their study. Among the topics included was a two-hour workshop style presentation which discussed aspects of academic integrity. This study examines the impact of this session on academic integrity, as measured by incidents of plagiarism (Levels 1, 2 and 3) that have been recorded and filed against the students. This is based on the assumption that lecturers have identified and reported all incidents of plagiarism concerning students in their units of study. The study also uses data available in an existing online plagiarism reporting tool. A comparison is also made with data for incidents of plagiarism reported prior to the introduction of academic integrity sessions at orientation. The findings of the study will help in the planning of future orientation programs and the delivery of academic integrity sessions for students at regional campuses in Australia.

Flipping the educating: The case for an e-portfolio system in university learning

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E-portfolio systems allow universities to provide students with the tools for extending learning across degree studies, between in-class and work-place learning, and connect learning beyond studies to professional futures. They allow for learning to be learner focused, learner-centred and learner driven. This essentially is in direct contrast to conventional online learning systems which tend to be teacher-driven, teacher controlled, and based on discrete units of learning: the learning management system, lecture capture systems, even contemporary MOOCs. However, flipping educational practices in university contexts from teacher-driven, unit-focused curriculum practice to learner-driven, degree-oriented practice is a challenge. This presentation discusses the role of e-portfolio systems to complete and balance the suite of university online tools, shares the approaches and challenges faced in early pilot-phase implementation practices at UWA in 2013, and highlights challenges and directions for a full university implementation strategy.

A flipped classroom design for meeting the needs of non-standard students

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It's one thing to flip the classroom, but another altogether to ensure equity of access in a participatory and engaged online and offline environment. Flipped classrooms at their simplest are commonly defined as putting didactic, passive-learning oriented lectures online and using the face to face classroom time for active student participation in learning. The classroom time is effective for active, learner-centred approaches, ranging from "active learning strategies, peer instruction, problem-based learning, or mastery or Socratic methods" (Hamdan et al., 2013, p.6). However, in an earlier implementation, we found that a number of students did not fit the standard UWA format of a campus-based student, and solutions to meet their needs proposed by supporters did not allow these students to experience or attain participatory and engaged learning experiences and a number of associated and targeted graduate attributes. As a result, a Teaching and Learning Fellowship was sought to reconceptualise flipped classroom for the learning and graduate outcomes of this unit, and a particular focus on participatory and engaged learning for all students. This presentation will

showcase the resultant new design of the learning and teaching framework and design for the unit, supported by a re-conceptualisation of a large flipped classroom context of more than 850 concurrent enrolments.

Dissolving the online offline divide: Re-conceptualising space in higher education course design

Refereed research paper: Full text on website

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In the rush to digitise aspects of higher education to cater to an increasingly diverse and wide ranging university market, there is a concern that best practice teaching and learning based on sound pedagogy may be left behind. This paper addresses this concern by offering a conceptual re-imagining of the learning space that reaches beyond a digital/non-digital divide. Our argument posits that imagining online and offline as different learning spaces confuses a necessary pedagogical correlation between learning *delivery* and learning *objective* that allows questions of digital (or non-digital) delivery primacy over questions of pedagogical quality. To re-assert the significance of pedagogically driven course structure and design, we invoke Deleuze and Guattari's (1987) image of the non-hierarchical rhizome to de-construct binary thinking and to recognise online and offline as elements of the same pedagogical space. We then discuss Wenger, White and Smith's (2009) *Digital Habitat* model as a way for teachers to re-construct pedagogically framed learning spaces out of the rhizome that reaches beyond a conceptually problematic online/offline divide.

Fine-tuning of a first year engineering foundations unit raises student satisfaction

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Although student evaluations are potentially mired by confounding factors like representative sample size and subjectivity of students, they are still a valuable tool for gauging student learning experiences. We have used student evaluations for a first year foundations unit in Engineering to determine whether modifications made, with a view to improving the unit, resulted in any observable changes in the students' perspectives. Some of the changes included:

- introduction of team-teaching where one tutor from the academic communications area in Humanities team-taught with two technical tutors from Engineering, thereby fully embedding communications skills into the technical content;
- streamlining activities by replacing report-writing with 4 reflections;
- introducing students to public speaking from Week 1.

These modifications were introduced in Semester one of 2013 and student evaluations from this semester were compared with those from semester two of 2012. After the changes, overall satisfaction expressed in student evaluations increased from 71% to 81%. Further, better satisfaction scores were elicited for all 10 quantitative items (QIs) that students were asked to judge, 7 of these increasing by more than 10%. Of particular mention are the QIs "The quality of teaching in this unit helps me to achieve the learning outcomes", and "I make the best use of the learning experiences in this unit", for which satisfaction increased by 12% to 84% and 91% respectively. Although student satisfaction with workload increased from 61% to 66%, this area requires further attention.

Enhancing student learning by targeting the brain

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The explosion of research and information about the phenomenon of neuroplasticity has raised awareness of the unlimited potential for mental development within every individual. Neuroplasticity can be defined as the ability of the brain to change and grow in response to experience. Research has shown that we learn what we practise and the manner in which we

practise can be used to optimise the learning process. There is evidence to demonstrate humour and meditation as well as simply imagining or visualising motor skills, can make an effective contribution to learning. Cognitive development, which involves retaining and integrating new information, requires an individual to focus attention and utilise memory effectively. The memorising process involves 4 stages: Attention, Encoding, Storage and Retrieval. Studies using trans-cranial magnetic stimulation and functional magnetic resonance imaging have demonstrated anatomically, which parts of the brain are "working" during certain activities. This has enabled researchers to determine which areas to activate and which brain activity patterns are associated with learning. By targeting these areas of the brain using innovative tasks, educators can facilitate attention, provide strategies for encoding, improve storage and, most important of all, enhance retrieval. Neuro-linguistic programming is one of several techniques that has been demonstrated to maximise associations within the brain to improve memory. This paper describes some of the practical techniques that educators can employ to promote neuroplasticity, as well as the evidence behind their use.

UniReady AT RISK Program: Strategies to support and retain online enabling students

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The *UniReady Enabling Online Program* at Curtin University is an alternative pathway for students to gain entry into university. The course attracts a diverse cohort of students including mature aged applicants, school leavers, full time employed and students with family commitments. It does not have any entry requirements and is offered fully online. One of the many challenges of an online enabling program is the low retention rate of students. To address the low retention rates, UniReady has put in place an AT RISK program that tracks students through the semester. Students are considered AT RISK if they: have not accessed the learning management system in the first week of the study period; have not submitted the first assessment; are on conditional status from a previous study period; have pre-existing circumstances that may affect their study; or are flagged by teaching staff during the semester. A portion of our students reside in regional WA and UniReady has appointed Academic Support Officers to provide additional support to these students as their experiences may differ from their metropolitan counterparts. In our experience, early intervention is important to capture students who are AT RISK and to address their concerns in the first week of semester. However, continual support is also vital to keep students motivated and engaged with the course. This practice-based presentation will talk about the factors that affect retention and how the UniReady AT RISK program puts in place early and mid-semester intervention strategies for metropolitan and regional students.

Best practices for boosting response rates for course evaluations and surveys

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Join eXplorance for this session to learn how you can implement 10 years of insights developing best practices on how to optimise data and boost response rates in your course evaluation implementation process. The session will cover key points on maximising student and faculty engagement through demonstrating the value of involving key stakeholders in the end-of-term evaluation process, as well as emerging trends in the higher education sector that can allow forward thinking strategies to be integrated to achieve continuous sustainable response rates. The session will also include an overview of eXplorance Blue and its Building Block integration into any existing LMS platform.

Teaching research students to be more critically reflective in documenting their research experience by writing a research journal

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This presentation is focused on encouraging research students to take account of their own learning through engagement in research in compiling a research journal. Documenting

research experience through a research journal helps researchers to examine and evaluate their experiences, develop their research skills and add valuable data to their studies. However, there is a lack of literature in business/management research on the use of reflective journals in the research process, and limited guidance for novice researchers (Jasper, 2005; Ortlipp, 2008). In order to set the context for this presentation, the issue of reflection in research will be highlighted and explained, and in the second part of the presentation guidance will be provided on writing, structuring and presenting a research journal. This presentation will be informed by the researcher's own experience of keeping a research journal in a recent study on family leisure. In summary the benefits of critical reflection through journal writing for research students will be re-affirmed, and it is hoped that many of you will seriously consider the use of a research journal by expanding your thoughts onto paper (Luidens, 1997).

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Luidens, P. M. (1997). Paper thinking: The process of writing. In A. L. Costa & R. M. Liebermann (Eds), *Envisioning process as content: Towards a renaissance curriculum*. Corwin Press, USA.

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55 Minute Workshop

Engaging first year students from diverse backgrounds in learning

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This workshop demonstrates an integrated model of pedagogy and curriculum planning used to engage first year students in their learning. The model draws on Wenger's communities of practice and Tinto's learning communities to support students who may be finding the transition to university study difficult, while assisting their academic progress. The model adopts a multi-faceted approach to this complex task to refocus student support away from a deficit model toward an inclusive strategy that supports and engages all students. Specific strategies include:

- acknowledging the diversity of the students' starting points;
- creation of collaborative learning teams within the classroom;
- development of an integrated curriculum;
- introduction of problem-based assessment and/or staged assessment;
- use of e-portfolios linked to graduate attributes and professional experience;
- intensive and embedded support provided by the CUTL staff.

The model was developed over five years on both metropolitan and regional university campuses with modifications being made in response to student and staff feedback. The workshop will model some of the collaborative learning activities used in class, invite discussion of the lessons learned and further refinements or applications.

Evaluating the effectiveness of training WIL supervisors

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There is an increased emphasis on incorporating work integrated learning (WIL) into higher education to order increase work readiness (Yorke, 2011) and ensure authentic learning in real-life contexts. In order for WIL to be successful for both students and the organisations involved, the evidence suggests supervisors need to be trained (Lester & Costley, 2010; Yorke, 2011). How is the effectiveness of this training to be evaluated? One model of training evaluation that has been widely used in business for over 40 years is Kirkpatrick's model (Kirkpatrick, 1996; Kirkpatrick & Kirkpatrick, 2006). Kirkpatrick's model evaluates effectiveness on a range of levels, including satisfaction with the training and evidence of outcomes of the training in the organisational context. This paper will explain Kirkpatrick's model in detail and give examples of assessment measures for each level. The example of a recently completed Health Workforce Australia funded project evaluating the training outcomes for 42 clinical educators of speech pathology students across Western Australia will

be utilised. This project demonstrates the application of Kirkpatrick's model to a real-life context of WIL supervisor training.

Developing a science and numeracy education module as part of a wider curriculum for an Australian pre-university enabling program

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Over the past two years (between 2011 and 2013), enrolments in Murdoch's pre-university enabling program, *OnTrack*, have increased by 39% to approximately 450 per year. In parallel, the aspirations and undergraduate study choices of *OnTrack* graduands have become increasingly diverse as more students choose to undertake undergraduate studies in a variety of science-based disciplines. These changes signalled a need for the *OnTrack* program to include a module of study specifically focused on developing fundamental scientific and numerical. It was decided that the module should be designed to meet the needs of all students entering Murdoch University via *OnTrack*, not only for those students choosing to enter science courses. This reflects a commitment to the development of an 'interdisciplinary perspective' as an important graduate attribute and an acknowledgement that *OnTrack* students do not nominate a future course of study until they complete the program. The new module was developed in consultation with academics who teach first-year students, within a variety of science-based disciplines. Interviews with the academics led to the identification of the conceptual and pragmatic learning needs of students entering first-year science units. This analysis underpinned the elaboration of developmentally appropriate learning outcomes and a student-centred syllabus for the *OnTrack* science and numeracy module. This paper outlines the consultation process, findings of the analysis and the development of learning outcomes and syllabus for the module. It discusses how it focuses on scaffolding the development of fundamental scientific and numerical literacy, while emphasising the development of critical thinking and the application of what is learned to 'everyday life'.

Transforming engineering communication

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'Engineers do not need to know how to write'. This statement expresses a common belief amongst engineering undergraduate students, which is often compounded by a resistance to communication practice. This attitude is contrary to engineering industry and Engineers Australia expectations, which value communication and rate written communication as a key competency required for engineers (Male et al., 2011). Whilst communication skills form an important part of engineering curricula, some engineering faculty members express the view that it is not their role to teach language and communication skills. The responsibility for the development of these skills is often passed on to the language specialists or the University's Learning Centres. However, communicating technological information involves interpreting and using specialised disciplinary discourse. Therefore, engineering discipline lecturers have a key role to play in teaching their students disciplinary discourse (Airey, 2011). This paper is an exploration of the realities of integrating language instruction by a Civil Engineering discipline lecturer in a core second year unit. An important aspect of the research is students' resistance to the integration efforts, which was primarily due to their expectations of purely technical content for the unit. Another interesting aspect was the resistance to the change in the pedagogical approach taken to integrate language and communication all skills. This paper will question/problematised this resistance to better understand how integration efforts can move forward.

55 Minute Workshop

Transforming communication workshop

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Being able to communicate effectively is now a key graduate attribute at many Australian universities; however, the responsibility for developing communication skills is often passed

on to language specialists or university learning support centres. This is because many discipline specialists consider language and communication skills as separate to discipline knowledge. However, communicating discipline-specific knowledge involves interpreting and using specialised discipline discourse, and discipline lecturers have a key role to play in teaching this to their students (Airey, 2011). This situation is compounded by the perception that learners should arrive for tertiary studies with the necessary English language skills for them to engage with discipline content. Perhaps this was true in years gone by, but this is not always the case in the current higher education context (Murray, 2010). In addition, TEQSA threshold standards for assessment articulate a connection between assessment practices and goals, and demonstrated attainment of higher English language proficiency.

As a result, universities can no longer leave English language proficiency out of the within-course development loop. More attention is needed on formal instruction and assessment of English in order to better ensure that such development occurs. To do this it is necessary to approach the development of English language proficiency in a similar way as other subject knowledge – that is, by instituting a framework for adequate instruction and assessment of English language proficiency, in line with the expectations of the course of study and the university's graduate attributes. Although most discipline specialists are proficient at communicating their discipline knowledge, they falter when they try to address the communicative aspects of their discipline with students. This is because discipline specialists' understanding of the workings of language within their discipline may appear as common sense knowledge (Coffin et al., 2003). A way of solving this issue is by having the language specialist work alongside the discipline specialist.

This workshop will offer a model for such interdisciplinary collaboration, by allowing participants to design a framework for developing communication skills alongside discipline content. Participants will:

- analyse their unit/subject outlines and assessment tasks to identify opportunities for developing academic literacy and communicational skills within discipline content;
- review their assessment/marking rubrics with an eye to integrating academic literacy and communication skills outcomes;
- create learning activities that will allow the development of academic literacy and communication skills within discipline content.

The workshop is designed for both discipline specialists and academic language and literacy (ALL) specialists. Discipline specialists are invited to bring along their unit/subject outlines, assessment briefs and marking rubrics. It is envisioned that participants will work in mixed groups (ALL specialists and discipline specialists) to achieve the objectives of the workshop. There will be two workshop activities where participants will study curricular documents to identify 'hotspots' for content and ALL to be developed side by side, and design learning activities for this alignment.

Renewing the sustainable energy curriculum: Combining theory and industry input to develop multidisciplinary curriculum frameworks

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Curriculum renewal in higher education can be difficult, time-consuming, and arduous, but the payoff is a curriculum that is current, responsive, proactive and effective. (Narayan & Edwards, 2011). Ongoing curriculum renewal is more difficult but vital for multidisciplinary courses preparing graduates to work in a specialised, rapidly changing field. After more than 15 years running tertiary level “sustainable energy” qualifications there was a clear need to assess how these courses are taught and develop curriculum frameworks to guide universities to provide graduates with the relevant skills, knowledge and attributes (capabilities) required to work in this field. The presentation follows the journey of the Office of Learning and Teaching funded "Renewing the Sustainable Energy Curriculum Project" team as they sought to develop a set of industry guided, internationally relevant sustainable energy curriculum frameworks. Building on established curriculum practice and previous work in other discipline areas, the team began with a comprehensive study of the capabilities needed by tertiary trained professionals working in the various areas of sustainable energy. This included a review of existing Australian and international qualifications with significant input from industry employers and graduates as to the main capabilities needed by graduates. For the first time, a sustainable energy knowledge taxonomy and ‘cloths’ showing the capabilities required by practitioners in the different sustainable energy areas were developed. These were mapped into curriculum frameworks for a range of university sustainable energy qualifications and courses that meet the needs of Australian and international graduates and employers.

Impact of the UWA Year 4 Psychiatry rotation on medical students' attitudes to psychiatry

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Psychiatry is an unpopular career choice for medical students. Clinical rotations provide students with an important learning experience and a realistic view of psychiatry as a medical specialisation. The study aimed to assess the impact of the UWA Year 4 psychiatry rotation on (i) medical students' knowledge, interest and attitudes to psychiatry; and (ii) psychiatry as a career choice. Students completed two questionnaires on Day 1 of the rotation (baseline) and at the end of Week 7 (follow-up). Using a 10 point scale, interest and knowledge of psychiatry and the extent of consideration of psychiatry as a career was rated. The questionnaires also measured attitudes towards psychiatry and mental illness stigma. The overall response rate was 63%. There was a significant improvement in knowledge and interest of psychiatry (baseline means 3.5 and 5.7 respectively, follow-up means 6.0 and 6.1). Seven students were definitely considering psychiatry as a career choice at baseline, rising to 17 at follow-up. Students were positive about the teaching during the rotation. Attitudes to psychiatry were positive both at baseline and follow-up. There was a negative perception of psychiatry among friends, family and other medical specialists, and a belief that psychiatry has poor social prestige. The rotation improved students' knowledge of psychiatry. However, consideration of psychiatry as a career remained low even though the quality of psychiatry teaching was rated highly and psychiatrists were seen as good role models. Stigma towards mental illness and psychiatry as a specialisation may account for low career interest.

Performance, assessment and communication in one app: Mobile assessment is here now

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Performance is one of the most difficult tasks to assess using traditional methods. The pen-and-paper method generates multiple administrative bottlenecks that prevent the assessor from focusing on their primary task of professional judgment. The application of mobile technology and tablet devices can now replace pen-and-paper assessment, and achieve significant synergies resulting from the combination of technology with the assessors' professional judgment. The presentation will demonstrate how the application of mobile technology to the assessment of performances can be successfully achieved. The *Touch2Assess* (T2A) software process developed over the last three years was used to develop the mobile assessment app. The assessment task involved a group performance and an individual task of a third-year Education unit. The mobile assessment app allowed the assessment of these two tasks, and the combining of the rubrics and comments into one PDF document. The PDF document was then emailed to the student from within the app. On completion of marking, a spreadsheet of marks was sent to the coordinator. The whole assessment process was done within the app and only required wifi access for the email process. This app has been used in three cycles to date. So far, the results have demonstrated that the technology works and that it eliminates the bottlenecks and saves significant time. Some issues relating to staff training on the use of the email feature within the app are currently being addressed. A discussion of possible enhancements to the mobile tablet assessment process will conclude the presentation.

Engaging in an inter-university undergraduate research group in engineering education

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Engineering students and engineering academics who undertake research in engineering education can be isolated in their faculties because it is usual for engineering students and academics to undertake research in technical engineering fields. To overcome this, as

academics and final year engineering students at two universities, we formed an engineering education research group in 2013, effectively a learning community (Wenger, 1998). In this presentation we will report the group experience and identify recommendations for inter-university undergraduate research groups. The engineering education research group comprised of two engineering academics, one academic in education, and six final-year engineering students from two universities. Each student undertook an individual final-year research project on industry engagement in engineering education, contributing to a national project led by the Australian Council of Engineering Deans. Our investigation of the experience of the research group was framed within *Possible Selves* theory (Markus & Nurius, 1986) in which people are understood to be influenced by their awareness of possible future selves that are perceived as desirable, disconcerting, and/or achievable. These possible selves influence people's perceptions of hopes, fears, goals and threats, which therefore focused reflections by all group members at the start and end of first semester. We hoped to support and learn from each other, and feared time commitments. Challenges included meeting times, differences in project expectations between the universities, and initial difficulty establishing the community learning management system. We all learned from the experience and gained support from the group. The weekly group meetings were critical.

Enhancing industry engagement in engineering degrees

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Engineering education curricula in Australian universities are highly theoretical and detached from applications, especially in the middle years of formative engineering degrees. Enhancement of student exposure to engineering practice, needed in order to increase engineering graduate numbers, quality and employability, is being explored in a project, "Enhancing Industry Exposure in Engineering Degrees". The project is led by the Australian Council of Engineering Deans and funded by the Australian Government's Department of Industry, Innovation, Climate Change, Science, Research and Tertiary Education as a project of the National Resources Sector Workforce Strategy. The project has 12 partner universities and the support of key industry peak bodies and several companies. Early progress was reported at the 2013 Teaching and Learning Forum. This presentation will be an update on the project. In 2013, *Guidelines for Effective Industry Engagement in Australian Engineering Degrees* were refined following focus groups with engineering students at three universities and negotiation of the guidelines by academics and industry members at five forums around Australia. The issues raised have been further explored in surveys and at a recent conference workshop. The guidelines are now complemented by exemplars and a reflection tool to help program leaders in identifying strengths and weaknesses, available at the following website: <http://www.arneia.edu.au/>

Evolution of resilience in transition to medical radiations professional practice: Lessons for professional-entry educational programs

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Health professionals encounter substantial workplace adversity, from high-stakes critical incidents to the everyday challenges of the constantly competitive healthcare environment. Reports from around the world indicate that health professionals' stress, burnout, and workforce attrition have had significant effects on service delivery, productivity, patient safety and outcomes. New graduates are particularly vulnerable to the stressors of workplace adversity. How educational programs prepare students to respond resiliently to the challenges they will face as independent professionals is poorly appreciated. A constructivist grounded-theory approach was used to explore the experience of workplace adversity amongst 21 newly graduated medical radiations professionals from Western Australia, South Australia and Victoria. In thirty unstructured interviews, these graduates described the strategies and processes they employ to respond adaptively to challenges, and the characteristics and capabilities that support them. The gathered data were used to develop a model of resilience as a process of evolution, with phases of impact, energising, maintaining momentum, achieving equilibrium, and beating inertia. Graduate capabilities such as decision making, problem solving, reflection, communication, and critical thinking underpin many of these

resilience processes, yet few graduates recognised how their education had specifically developed these capacities. The strategies that may enhance how education programs foster the capacity for resilience amongst medical radiations students have the potential to inform programs for other health and caring professions.

Internationalisation of professional engineers: A challenge for engineering educators

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Globalisation has forced higher education towards internationalisation and harmonisation in engineering education (Altbach & Knight, 2007). Increased pressure is applied to institutions to demonstrate effectiveness of their engineering programs to produce engineers with competencies enabling them to engage proactively in the global industry (Mhilu, Ilemobade & Olubambi, 2008). Whilst accreditation has been used as method of international mutual-recognition, is accreditation the best method of demonstrating effectiveness? Research shows that international accreditation systems have their short falls, especially in demonstration of global skills, and indicates how the skills can be developed in engineering education (Allan & Chisholm, 2009; Patil & Codner, 2007). Industry perspective research has demonstrated the importance of global skills in engineers and proposed improvement in the engineering education (Zaharim et al, 2009). However the proposed improvements have not taken into consideration their applicability globally. How then do institutions develop appropriate courses of study to equip graduate engineers for the global market? This paper presents current research into a systematic comparative procedure for developing a curriculum that will be globally appropriate.

Teaching in an age of ubiquitous computing: A decelerated curriculum

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Ubiquitous computing describes the current conditions of our interactive, screen based habitats where movement between screens had become a defining trope of everyday life. As students and teachers increasingly deploy screen literacies within the education process where laptops, tablets and mobile phones become the mechanisms by which education is accessed and activated, new ways of thinking, increased attention, learning and scholarship need to be deployed. The possibilities of a decelerated curriculum offers opportunities to re-encode the structures and styles of learning students engage with to enable them time to absorb, ponder and problematise the processes of their learning.

The role modelling of self-regulated learning strategies and skills through enrichment tutorials

Refereed research paper: Full text on website

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The article describes a tutor led intervention based on self-regulated learning (SRL) principles carried out at a School of Accountancy in South Africa. Traditionally, lectures and tutorials in the School of Accountancy emphasise the academic content of the courses taught. This in turn encourages students to become passive learners. In an effort to encourage students to take responsibility for their own learning, a pilot study was carried out to assess the impact of a tutorial system that would introduce students not only to academic content but also to the cognitive, motivational and interpersonal strategies and skills that are displayed by successful students. This was done through the role modelling of self-regulated behaviours by a tutor. A total of twenty one students, studying second year Management Accounting, took part in seven enrichment tutorials. The feedback obtained immediately after the intervention was generally positive, though some students showed resistance to changing their approach to learning. Six months after the intervention further feedback was obtained in the form of a group interview. Students reported that they were implementing self-regulated principles and that this was helping them to cope well with the demands of the third year of their degree. The

academic performance in Management Accounting of the pilot group was also compared to that of their peers and it was found to be significantly better both in their second and third year. The article identifies the benefits of introducing enrichment tutorials as well as the challenges involved in their implementation.

Delivering a beginner astronomy MOOC

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In early 2013 I was tasked with designing and delivering a Massive Open Online Course (MOOC) on astronomy. I will try provide some insight into what motivated this choice of subject, give my assessment of the likely demographic this course would attract, and how this MOOC was designed to be appealing, interesting and distinctive to this demographic. This included the use of resources which would be unusual in a campus-based scientific lecture, such as interviews with other subject matter experts. I will then consider the problem of assessment on a platform which is focused on maximising completion rates, with a student body likely to have a very broad range of knowledge and technical and mathematical ability. Finally I will consider the possible impacts of MOOCs, both positive and negative, and how they might be used to best effect by educators as a tool to engage a broader cross section of society in higher learning.

Reflections on subject centred learning, writing skills, research methods and spirituality for transformative teaching

Refereed Professional Practice paper: Full text on website

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Personal reflections from my own teaching experience based upon subject centred learning, writing skills development, understanding research methods and spiritual inquiry are offered to encourage similar engagement or reflection by other higher education teachers. I explain how my teaching in the environmental sciences has been transformed for each of these themes in a series of narratives or stories from experience. My approach is grounded in reflexivity and phenomenological methods. Subject centred teaching and learning enables students to enter into deep relationship with the mutual subject shared by teacher and student. It transcends alternative approaches to teaching through unity of focus and of being. Teaching writing skills with an emphasis on revision and opportunities for rewriting in response to teacher feedback, and in a broader framing context of writing as story telling encourages deepening of student relationship with their subject. Similarly in-depth understanding of research methods, especially the influence of researcher values and epistemology on research execution and outcomes, invites a deep philosophical encounter with the learning process and nature of knowledge as well as the realisation of research as a form of story telling. I have found that the power of story telling inspires and empowers students in the learning process. It also potentially invites inquiry as to the higher spiritual dimensions of being that lie behind the stories that humans construct to give meaning to the world. My own personal evolution and development for each of these four themes has transformed my own teaching practice and enabled me to realise effective teaching strategies.

Theory and practice: Student perceptions of teaching

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The literature on excellence in teaching encapsulates a number of characteristics of a good teacher. All research into teaching excellence seems to indicate commonality of characteristics, which include enthusiasm, clarity and the caring nature of teachers to name some of the attributes. What comes to mind is the question I have been asked by the lay person, would the response be the same from students on what makes a great teacher if there were no structured questions like those used in surveys. In other words, would the feedback from students align with what is reported in literature? This presentation draws on the qualitative comments of students who responded to the University Experience Survey which

asked two opened ended questions - What have been best aspects of your university experience? and What aspects of your university experience most need improvement? The results throw further light in answering the question of what constitutes good teaching in the 21st Century.

Using web-based polling in lectures to facilitate student engagement

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The traditional lecture can often end up simply being an exercise in the transmission of information without any real learning taking place. As educator Harry Miller famously said, "the lecture is a process whereby the notes of the instructor get transferred to the notebook of the student without passing through the brains of either". Web-based polling can be an effective way to introduce deeper learning into the traditional lecture by using it in conjunction with the 'peer instruction' method. Polling allows the creation of multi-choice questions on a homepage which can be displayed in class. Students discuss the answers in small groups before submitting their agreed answer by phone to the website. The website then produces a graph showing how the group has answered the question with the answer highlighted. Follow up discussion is then provided by the instructor. The central premise of 'peer instruction' is that we learn best when explaining to others, rather than listening. Peer instruction has been demonstrated to increase participation and improve student learning by giving students an opportunity to test what they are learning and engage with the material as they go. As well as exploring the pedagogical benefits of the peer instruction method, I hope to provide practical guidance to those wishing to explore ways to establish a more meaningful, interactive and connected classroom experience.

Enriching the university experience with extracurricular activities: Curtin Robotics Club

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There is growing interest in improving the university experience for students. National surveys like the *Course Experience Questionnaire* rate universities by the opinions recent graduates have on 'the treatment' they received during their university years. To improve the quality of the time students spend on campus, the university experience should encompass more than just structured learning. Student clubs and societies provide students with a non-academic environment where they can make friends, develop social and technical skills, improve leadership abilities, and nurture a sense of belonging to the institution. Currently Curtin students can join student associations that belong to the Student Guild, or clubs sponsored by particular faculties, like the Robotics Club in the case of Curtin Engineering. Robotics is a very popular hobby among engineering-inclined young people. Today it is possible to build simple yet interesting robots investing little money and technical resources. Furthermore, robotics as a hobby offers opportunities to develop skills and abilities desired in all Curtin graduates. The author started the Curtin Robotics Club in 2009. Since then more than 50 members have participated in its activities. The spirit of the club has been 'students mentoring students'; i.e. more experienced members support and guide the learning of new ones. Currently, students from different disciplines collaborate to create robots and participate in national and international competitions, mentor high school students on robotics, visit schools to demonstrate their creations, and are frequently invited to participate in local science museum events and Open Days at Curtin.

The Crazy Machine project: A case study in problem-based learning

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This paper describes the laboratory work offered in two third-year units at the Electrical and Computer Engineering Department, Curtin University. Both units have separate lectures but share part of their laboratory work. The shared part of the laboratory experience followed a problem-based learning (PBL) approach. Students were separated into teams and asked to

conceive, design, implement and operate ('CDIO') a module of a 'Crazy Machine'. The objective of each module was to move a steel ball in an entertaining way for up to one minute. The final machine was made with the modules presented by each of the eight teams. Students had to work with their team, negotiate with other teams the giving and receiving of the steel ball and apply their knowledge of embedded systems to design their module. These learning activities and the corresponding assessments are aligned with the unit learning outcomes of both units. At the end of semester students were asked to reflect on their learning experience in an interview. All students expressed how much they have learnt by developing their Crazy Machines. They recognised the learning of discipline content by application, and also the development of important graduate skills like teamwork and time management. In conclusion, it only takes a bit of imagination and extra work from academics to transform the learning environment in a laboratory. Some students spent more than 15 hours per week in the laboratory and none complained about workload. This demonstrates that students are willing to invest time in their learning if they find purpose in the task at hand.

Using an LMS (*Moodle*) to provide support for casual teaching staff

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This presentation will focus on how we are using a learning management system (*Moodle*) at UWA to provide support for casual teaching staff in large first year units. In first year Human Biology, enrolment around 1200 students, we have over 25 tutors running 73 tutorial classes. In order to provide an equitable learning environment and assessment program, we prioritise tutor support. In 2013, we utilised the LMS *Moodle* to create a site dedicated to providing increased tutor support. The staff-only access LMS unit included announcements, discussion forums and uploaded files. Information on teaching, assessments and employment was provided. The unit coordinators, tutors, lecturers, and unit administration staff were all given access to this site which provided a one-stop shop for our tutors. Our presentation will include a demonstration of this site.

Rethinking the role(s) of the student in academia: Just-in-time, peer-to-peer online learning

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Thankfully, for the most part, we have moved beyond thinking of students as passive recipients of knowledge. The calls for active student participation in their own learning have been growing louder in the context of a higher education environment catering for greater numbers of students with more diverse needs. Two other pervasive conditions that impact the teaching and learning occurring in our universities are stretched resources and rapidly changing technology. Students have been recognised as an "unspent resource" (Gardebo & Wiggberg, 2012) capable of fulfilling many of the university's crucial functions. Increasingly, over recent years, examples of student leadership in teaching and learning are emerging worldwide. This presentation outlines a case study of a student led initiative, which grew out of a recognition of what was needed by students and how it could be delivered. A just-in-time, peer-to-peer online platform was developed by three undergraduate students at The University of Western Australia to support their fellow students' learning. The initiative was trialled in two large undergraduate Business units. Patterns of usage were monitored and compared with raw assessment scores. Students and teachers were surveyed to better understand their engagement with the new resource. Benefits and barriers associated with the resource were identified highlighting the numerous ways forward and potential uses for this platform.

Same, same but different: A case study of high achieving school leavers' transition to university

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High achieving students transitioning to university face their own idiosyncratic challenges. Depending on their previous (high school) experience, they may encounter a range of emotions including complacency, confusion and anxiety. Depending on the context in which they find themselves at university, they may feel bored and disengaged, or, at the other extreme, challenged and uncomfortable. This paper reports on a cohort of high achieving students who were grouped together in an elite academic program. While some of their challenges in adapting to the new tertiary environment mirrored those of other students, they additionally experienced unfamiliar feelings of uncertainty where not everything came easily to them and their comfort zones were markedly diminished. The challenges they faced are described and the supporting pedagogy examined. Lessons learnt from this group's experience can be applied not only to high achieving entrants to university but to all transitioning students.

Engineers, writing and the real world: Using an e-portfolio system to improve critical evaluation skills in first year engineering students

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Engineering students frequently see engineering as a practical field and tend not to recognise writing as useful for their future work. Meanwhile, an ability to critically analyse is fundamental for students to achieve the professional competencies laid out by Engineers Australia. It is, as a result, vital for students to recognise the need to develop and demonstrate higher order thinking skills. To support this process, *PebblePad* was introduced to a group of 179 first year engineering students in Semester 1, 2013. These students were asked to create a brief webfolio including an introduction to themselves, a description of a practical project they participated in and an evaluation of the development of their professional engineering skills, according to the unit outline and Engineers Australia Professional Competencies. On completion of this assessment, it was found that the highest mode in the student results was in the professional skills component. At the same time, however, the variance in the professional skills results was significantly higher than in the results of the other assessed elements. This revealed that a large number of students did not recognise the role critical evaluation plays in the development of their professional competencies. In future semesters, we plan to adapt the *PebblePad* task to provide additional scaffolding for students so students can better recognise the process of their learning and critically demonstrate this learning within the context of their developing professional competencies.

Testing... Testing... 1 2 3: Video recording to enhance students' oral presentation experience

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Oral presentations are often a one off task completed in the presence of peers and a lecturer. Tutors and students alike have no full recollection of performance during an oral presentation, once a task is completed in the presence of an audience. As a one off task, assessment is often based on the assumption that student groups have engaged in practice sessions suffice to reflect or realise effective presentations skills. Consequently, a score and brief feedback on a score sheet are the only tangible result reflecting the on-spot grading of students' performance and learning outcome. The value of self-evaluation through video recordings is a significant learning strategy to help students chart and improve the development of speaking skills, as recordings allow for multiple viewings and learner-paced study (Kirkgoz, 2011; Barry, 2012; Tugrul, 2012). Additionally, provided with the opportunity of replay, tutors would be able to better provide constructive feedback on students' performance (Rian, Hinkel & McGarty, 2012), hence enrich their learning experience. This pilot study proposes the use of video recording as an alternative assessment format to encourage students' engagement, and posits that students would utilise video recordings as a tool to facilitate self-evaluation and improvement of individual and group oral presentation skills. Qualitative data was collected from 161 student reflections and 5 lecturer reflections. The analysis of both student and lecturer experience forms the basis of discussion for this pilot study.

E-portfolio innovation: Transforming evidence into hard outcomes

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As the use of an e-portfolio platform has become widespread amongst higher education institutions (Foley, 2008), the power of using it for reflection is well documented: "we do not learn from experiences; we learn from reflecting on our experiences" (Dewey, 1938). The notion that an e-portfolio is not a container but rather a process is grounded in an educator's hope to transform passive knowledge consumption into an ability on the students' part to actively shape educational experiences. This presentation questions how to move this to the next level, to demonstrate that authentic learning has taken place. At what point does gathering evidence for reflection or an assignment actually become real proof of learning? How can instructors monitor where students are in relation to this Holy Grail of learning outcomes? This presentation will describe the innovative work being carried out in the School of Nursing and Midwifery at ECU, currently unparalleled by any other institution within Australia, which is being showcased around the world. The aim of this work is to transform a student's learning journey into not only hard learning outcomes but a viable asset that will assist them to become registered with the Nursing and Midwifery Board of Australia at the conclusion of their studies.

Peer review of teaching: Collegial support to develop instructional skills

Refereed Professional Practice paper: Full text on website

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Feedback is essential for the development of instructional skills, but many teaching staff do not have access to relevant feedback on their teaching. The most common feedback instruments for teaching staff in Australian higher education are student results and end of semester surveys, which are limited in their capacity to provide meaningful information for instructional skills development. Evidence indicates that an appropriately structured program for peer review of teaching provides valid feedback and has a positive effect on learning and teaching. However, peer review of teaching is not commonly used in Australian higher education, mainly due to concerns relating to performance management and role identity. This paper argues that with a suitably structured program these concerns can be overcome. To support this claim, the peer observation platform from Curtin University's peer-led academic support program (UniPASS), is described along with considerations from the literature. The UniPASS peer observation framework and other models from the literature are offered for contextual adaption by schools wishing to provide developmental support for teaching staff.

Designing exemplary units across a common first year: Experiences from Curtin

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In 2012, the School of Education at Curtin University became the first institution to be accredited to the new Australian Institute for Teaching and School Leadership (AITSL) standards. In order to meet these requirements, the entire Bachelor of Primary Education and Bachelor of Early Childhood Education courses were redesigned. Part of the redesign involved a set of eight Common First Year (CFY) units. These degrees are offered to on-campus and regional Curtin enrollees, and also to thousands of Open Universities Australia (OUA) students. The CFY units were offered in 2013 only to Curtin students. The project reported here focuses on the revision of the new units, following their first offering, for a much larger cohort of students from diverse backgrounds. It is aligned with the engagement and retention elements of the *Curtin University Strategic Plan 2013-17*, and the *Curtin Assessment, Review and Transformation* project. This work is informed by Kift's *First Year Curriculum Principles*, and existing unit designs were analysed in terms of their suitability for fully online study, scalability for OUA class sizes, suitability for students of diverse backgrounds new to university, and effective use of the *Blackboard* learning management system. Approaches used in massive open online courses (MOOCs) were also adopted. They differ in that students pay a fee to enroll and online tutor support is provided. Our analysis led to a set of design principles for high-quality,

contemporary units which make good use of technology. These design principles will be discussed and demonstrated in the presentation.

Belonging and becoming: Engaging, supporting and transforming education students on their journey of emerging professional identity

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The School of Education at Curtin University has recently become accredited by the Australian Institute for Teaching and School Leadership (AITSL). The entire Bachelor of Primary Education and Bachelor of Early Childhood Education courses were redesigned to meet the AITSL standards, including the development of a set of eight Common First Year (CFY) units. Approximately 5000 students will complete the CFY in 2014, across all enrolment modes – fully online through Open Universities Australia (OUA), face-to-face at Bentley campus, or as external students. An analysis of the CFY identified that there was little information about how individual units contributed towards the degree qualification. Students perceived units as 'boxes to tick' rather than seeing them as stepping stones towards becoming a professional who could demonstrate the AITSL graduate standards. The project reported here forms part of the School of Education's response to an increasingly diverse student group who may be approaching study from widely varying academic backgrounds, personal circumstances and expectations. It draws on Kift's *First Year Curriculum Principles*, and is aligned with the elements of the Curtin University Strategic Plan 2013-17. It aimed to develop in students a strong sense of identity as members of the professional teaching community. It will report on the design of resources and activities to engage students across both degree programs in creative, technology-enabled and pedagogically-sound activities enabling them to see how the components are all part of an overall journey towards becoming a professional, and to develop skills that enhance their study success.

Collaboration between the community and tertiary nurse education in bridging the gap between theory and practice

Refereed Professional Practice paper: Full text on website

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Nursing students must be prepared to practice safely, accurately and compassionately in a myriad of health care settings. Nurse educators are continually challenged in seeking strategies to facilitate students' transition to the practice setting. A quality improvement project conducted by final year undergraduate nursing students provided a unique opportunity to collaborate with the community and to combine unit assessments. Both these initiatives were experiential in nature, but were able to achieve positive outcomes with students being able to bridge the gap between theory and practice. This paper will elucidate the sequence of events which took place from a teaching and learning perspective, including the partnership between the community and nurse educators at UND's Broome campus.

Creating an employability 'footprint': E-portfolio case studies in health sciences

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Edith Cowan University embarked on an innovative project in 2013 to bolster and sustain the graduate attributes of Health Science students to engage and inspire their personal 'footprint' for success. *PebblePad*, complementing other IT tools like *Voxpops*, and 'how to videos', were utilised as a learning platform and scaffolded teaching tool to support students to create records of learning, achievement and aspirations with a focus on professional practice. Two case studies will be presented showcasing *PebblePad* activities embedded in first and final year health science units. The initial first year e-portfolio taster allowed students to consider career options early in their academic studies to inspire their personal career and learning journey. The third year unit included the development of a comprehensive e-portfolio, the major assessment, closely aligned to unit learning outcomes with approaches focused on

employability and capturing students electronic footprint. Development of the two *PebblePad* engagement approaches provided the opportunity for students to explore the functionality of the e-portfolio learning space. Challenges and successes of the journey will be showcased with the merit of reflective and other activities demonstrated. This project indicates that career development and professional practice skills can be fostered through the use of e-portfolios, applied across the academic program. Universities are ideal settings to foster engagement in e-portfolios to develop student employability, career based competencies and ensure students are responsive to a dynamic and contemporary working environment.

Beyond the digital divide: Using a video and adopting a cooperative strategy in classes of Italian at UWA

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The use of video in a language learning classroom is only one of the many pedagogical strategies available today, thanks to the digital revolution which has facilitated the exchange and use of audiovisual information. The Internet is already a global archive for the linguistic/cultural patterns of a given culture that the language teacher can exploit for teaching purposes. The importance of using video clips taken from the Internet has already been stressed by many researchers (Manning, 1986, 1988; Canning-Wilson, 2000; Tovar & Barbudo, 2002). However, a more recent stream of studies attempts to re-evaluate the pedagogy of the video in FLT and EFL under a new light: cooperative and collaborative learning (Warschauer, 1996, 2000; Robson, 2002; Wong, Noronha & Chaplin, 2009). Taking this new methodological trend into consideration, this paper aims to offer some specific methodological criteria when using the right clips from the Internet. According to this approach the video is not just a passive "commentary" to the language textbook, or a brief "cosmetic" to enliven the language lesson. Rather, the video becomes, if it is well chosen, the socio-cultural focus of a whole set of activities in which the students' active collaboration and constructivist learning may take place. The video becomes a "linguistic case", a problem space, set in a discursive/narrative frame which the learners have to decode, examine, and re-elaborate in groups, together with the teacher. The video remains a source for the linguistic exercise of all the learners involved, but it also should promote social and interpersonal skills that are this time tested through the linguistic channel of L2 communicative exchange.

A blended learning approach to delivery of a train-the-trainer program

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'Teaching on the Run' (TOTR) is a train-the-trainer program that involves a series of foundation workshops for practising clinicians responsible for teaching and supervising health professional learners. Since it commenced in 2001, it has become one of the most widely used and positively evaluated staff development programs on offer to health professionals in Australia with hundreds of workshops run each year. For the first 10 years the TOTR program was delivered in a standard format requiring 3-3.5 hours of direct contact per workshop. However, in 2011/12 the six foundation TOTR workshops were adapted, becoming available in blended format. This involved participants doing 30-45 minutes online preparation before attending a 1-2 hour face-to-face session per workshop. The overall learning outcomes of the program remained the same. This has provided trainers with greater flexibility in how they deliver the TOTR program, and reduced the amount of direct contact time required. The content also has become readily accessible to participants in rural and remote settings. Evaluation of the overall reaction of participants to the blended approach shows ratings remain similarly high (mean 4.5, Likert scale 1-5) to ratings of workshops without an online component and participants report value in both the online and face to face components. The preparation time required and the usefulness and presentation of the online modules will be discussed. In addition, results from a comparison of the number of workshops and participant feedback on the most useful elements and areas for change will be presented.

Promoting engagement among health professionals using a virtual community of practice

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"Communities of practice (CoP) are groups of people who share a concern, a set of problems or a passion about a topic and who deepen their knowledge and expertise in this area by interacting on an ongoing basis." (Wenger, McDermott & Snyder, 2002)

While some research suggests that the Internet may not be an effective place for learning among health professionals (Sandars, 2006), virtual communities of practice (CoP) within the health sector have the potential to make an important contribution to workplace based learning. Consequently, in recent years there has been an increase in 'virtual' learning spaces for health professionals to support learning, knowledge transfer and information exchange (Ranmuthugala et al., 2011). In mid-2013 an open access virtual CoP was introduced at www.telcentre.org for health professionals interested or involved in teaching and learning. The purpose of the virtual CoP was to support learning and encourage information sharing to enhance and transform practice. Despite a preliminary needs analysis indicating perceived value and need, it has been challenging to engage and maintain online interaction among health professionals who work in a diverse range of settings and with many different organisations. This presentation will explore the literature relating to making a virtual CoP successful, as well as sharing the challenges and how these are being addressed. Furthermore, the resultant strategic plan that has been developed to promote increased engagement and to build sustainability will be shared.

Drivers and barriers to the adoption of electronic management of assessment

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Electronic management of assessment (EMA) describes the end-to-end workflow of managing the varied tasks associated with assessment via the use of electronic systems. Workflows associated with the management of assessments comprise two key components: academic tasks, that require academic judgement and subject matter expertise; and administrative tasks. E-marking tools allow many of the academic tasks to be completed electronically, including marking of student work, the provision of feedback, and some aspects of the assurance of academic integrity (particularly those related to plagiarism). With or without the adoption of these e-marking tools, many of the administrative tasks are now routinely managed in the online or electronic space, due in part to the widespread adoption of learning management systems. These include the communication of assessment task details; management and tracking of submission of assessment artefacts; returning assessed artefacts and results to students; recording, processing and tracking changes to marks; and dealing with the safe and secure storage and archiving of artefacts for appeals and as evidence for accreditation. This paper will explore the various global, national, institutional, course, unit and user drivers for the adoption of EMA workflows. Barriers to adoption, including software/tool barriers, institutional culture and user barriers will also be discussed. Mapping of EMA workflows for different assessment types and comparisons of EMA workflows for different e-marking tools will also be presented.

Teaching non-sciences science at university: A case study of engaging students in physics

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As cohorts of students entering university are becoming increasingly more broad, the degree of assumed knowledge is no longer certain. At The University of Western Australia this phenomenon is even more pronounced since the introduction of *New Courses* in 2012. This new structure of undergraduate courses requires students to take a number of broadening units outside their primary area of study. This results in students from any faculty undertaking units of study in any other faculty, sometimes without any previous background in the subject. This

presents particular challenges for both students and teachers. This presentation describes a project designed to actively engage students with limited or no background in physics and, in so doing, help bridge their knowledge gap. Students conducted experiments at the replica *Leaning Tower of Pisa* situated at the Gravity Discovery Centre at Gingin. They dropped water balloons of various weights from the tower and observed the sizes of the craters created in the surrounding sand. This process was used to simulate asteroids and meteoroids impacting the earth and moon. Students were able to analyse their data by uploading it to a specifically designed website. In addition, the website offered some reading material, as well as a discussion and feedback forum. The webpage has been designed so that future students will be able to add new data, and in so doing, develop more precise findings. Evaluation in the form of student feedback indicated a high level of engagement even amongst non-science students.

The language and discipline content equation: Which 20% of the content are we going to leave out to make space for language?

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The call to embed or integrate academic communication, language and literacy skills within discipline subjects is often met with alarm by discipline specialists. Their main concern is that discipline content will be compromised to make space for communication and academic literacy instruction. This is not surprising given that the words 'embed' and 'integrate' are used interchangeably in the present context as means of developing the aforementioned graduate competencies in higher education. These words reflect ideas of something external being plugged into something that is already in existence. There is a tendency for this idea to promote the perception that academic communication and literacy are extraneous to discipline content, despite the fact that language underlies the process of learning in any discipline. This assumes the view that academic communication and literacy skills are discrete, generic bodies of knowledge that students should possess as pre-requisites for entry into higher education. Thinking of this nature perpetuates a deficit model of academic literacies and often undermines efforts to ensure equitable access to higher education. This paper is an attempt to question these assumptions and to explore insights into academic literacy and communication through the lens of pedagogy and learning.

Authentic, immersive and emotional experience in virtual learning environments: Dying is an important learning experience in a simulation

Refereed research paper: Full text on website

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This paper is about the role of authenticity and emotion to aid learning in immersive virtual environments; in particular the occupational health and safety in the operations and supply chain industry. With the introduction of relatively low cost head-mounted displays such as the *Oculus Rift*, it is now feasible to introduce environments that are more immersive and authentic; and allow for further experiments on induced and experienced emotions. This article describes an experimental design to evaluate how different levels of authenticity, immersion, and emotion affect learning retention, and how they relate to each other. The container terminal scenario prepares students for site visits, showing the health and safety risks by simulating the consequences of accidents and mistakes in a work place that may cause injury or death.

RIVALE: Realistic Immersive Virtual Agent based Learning Environments for learning investigative skills

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Current ways of teaching investigative skills, such as paper based case studies, do not sufficiently support effective and efficient development of skills to investigate a problem situation. This paper reports on research to develop and evaluate an initial prototype of a Realistic Immersive Virtual Agent based Learning Environment (RIVALE) virtual case study. The intention is to provide a more realistic experience and to thereby support better learning as well as more realistic assessment of and feedback concerning student investigative skills. The requirements, design, implementation and early evaluation of the initial prototype as to whether it can support learning in the area of requirements gathering for information systems development are described. The initial prototype shows promise, but specific issues, especially problems with achieving realistic conversation, are identified and recommendations for further research are provided.

What constitutes 'good' supervision for course work dissertations? Student and supervisor perspectives

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This presentation draws upon an Office of Teaching and Learning National Teaching Fellowship which was awarded to identify, develop and disseminate best practice in supporting honours and coursework dissertation supervision (see <http://www.dissertationsupervision.org/>). Over the past six months more than 40 students, supervisors and dissertation coordinators have been interviewed about their supervision experiences, seeking to understand what constitutes 'good' supervisory practice and to identify common supervisory issues. Using a critical incident technique, students and supervisors were asked to describe a time when, from their perspective, supervision has gone particularly well. The responses were analysed using thematic analysis. This presentation compares and contrasts student and supervisor perspectives of 'good' supervision. The findings indicate that supervision is a negotiated practice, with both supervisor and student contributing to good supervision experiences.

Working towards the development of honours pedagogy: Staff and student perceptions of honours dissertation supervision

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There is a paucity of literature examining supervisor and student expectations and experiences of honours dissertation supervision, despite calls for the development of honours pedagogy. As part of our teaching evaluation cycle, we measured student and supervisor perceptions of the Bachelor of Psychology honours program at Curtin University during the final weeks of the 2012 teaching year. Honours students (N=21) and honours supervisors (N=15) completed online surveys including measures of perceived responsibility, importance of the supervisory relationship, support, guidance, interpersonal communication and feedback. Honours students rated their perceived responsibility for key stages of the research process significantly higher and the guidance on specific research tasks provided by honours supervisors significantly lower than did honours supervisors. However, honours students and honours supervisors did not significantly vary in their perceptions of the high level of general support provided by honours supervisors. Responses to open ended questions indicate that uncertainties regarding the practice of supervision are magnified in the honours year where students' future options are dependent upon dissertation grades. The results from this study are informing a fellowship project identifying, developing and disseminating best practice in supporting honours dissertation supervision.

What next if there's no nexus?

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In the mid-90s, Hattie and Marsh comprehensively interrogated fifty-eight studies correlating teaching and research, and concluded that 'the common belief that research and teaching are inextricably entwined is an enduring myth' (1996). As proof of such "endurance", academia still tends towards requiring of academics both research and teaching output with an implicit (if not overt) overtone that output in one is commensurate with quality in the other. Empirical evidence notwithstanding, many academics firmly hold to the notion of a research-teaching nexus, and "sense" (Ramsden & Moses, 1992) that research plays an important part in the teaching and learning process. Building on the work of Neumann (1992) and others to re-interrogate the relationship between research and the teaching/learning environment, this paper argues that although a connection does exist, given current trends, it might be more effectively characterised as a research-learning nexus. Thus although the model proposed here is underpinned by strategies suggested by Hattie and Marsh, it posits a shift in focus from teacher to learner, to promoting deep learning over surface learning, and to creating an environment where the research culture pervades students' learning experiences. This concept will extend into a broader study aiming to develop a mapping tool that records engagement (as well as output) of academic teachers, to identify institutional trends, promote institutional awareness, and actively link in those who remain disengaged or on the periphery of enquiry.

Engaging staff in the academic integrity and plagiarism process

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As evidenced by the recent *Academic Integrity Standards Project 2010-2012*, the issue of academic integrity in Australia's higher education sector is the subject of much current discussion and debate. There has been an apparent shift in the focus from plagiarism to academic integrity; from punishment and penalty to education and promotion of academic values. The concept seems to be making its way into fundamental education principles rather than existing as something separate to the education process. This paper considers how to engage academic staff in the process of academic integrity to achieve a unified, consistent and meaningful approach. Academic staff often complain about a lack of support, inconsistency, and lack of consequences when they go to the trouble of identifying and acting on cheating or plagiarism. On the other hand, there are some who do not consider plagiarism and academic integrity as part of their teaching role or responsibility. The result can be inconsistency between individuals and across faculties and departments within an institution, regarding appropriate penalties and outcomes for plagiarism or academic dishonesty. Clearly, equity demands a clear and consistent approach. The initiatives and practices to engage staff in the implementation of the Academic Integrity Policy at a university pathway college, including revision of the policy, documents and processes, staff workshops, and the implementation of an Academic Integrity Quiz will be described. Quantitative data collected from plagiarism reports over five years will be considered, as well as anecdotal evidence relating to changes in staff behaviour and perceived outcomes.

Effectiveness of peer review in improving science practical teaching

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Peer review is an important component of science publishing and yet is rarely taught at the undergraduate level. We examined effects of student participation in the peer review process. Students (N=45) in a third year science practical class (Comparative Neurobiology at UWA) and worked in laboratory teams of 4-7 students to collect and analyse original data relating to the distribution of neurons in the retinae of different fish species. Each student was required to write a scientific manuscript following the style guidelines of *Visual Neuroscience* (Cambridge Journals). Each student's first draft was reviewed by two of their peers and they received their peers' feedback. Students were then required to submit a final draft of their own manuscript responding to the comments of their two reviewers. First and final drafts were marked. Students were given a survey to obtain quantitative and qualitative feedback on their

perceptions of the experiences. At 78%, marks for the final draft of the manuscript were significantly higher ($p < 0.0001$; paired t-test) than the marks for the first draft (70%). The amount of improvement for assignments by individual students was not correlated with the quality of the peer review given or received by that individual. Qualitative assessment of the student experience revealed that students found the exercise useful; 100% of respondents reported that they gained benefits from the peer review process that they could apply outside the scope of that specific assignment. The finding that the amount of improvement is independent of the quality of peer review is important because it suggests that students who receive poor quality or inappropriate peer review will not be disadvantaged. Rather, the opportunity to submit a first draft and return to it after a short interval may in itself be significant enough to allow students to view their work with "fresh eyes" and identify and correct weaknesses. The opportunity to examine other students' work has been commented on favourably by students as it allows them to see problems that may need to be addressed in their own work.

Badges: An emerging concept for recognising and rewarding learning

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Badges are an emerging feature of online and blended learning contexts in higher education. Conceptually, and most simply, badges provide a visual digital image that in educational contexts represents recognition and reward for the achievement of particular experiences, skills, or knowledge. This recognition can be oriented to internal work, work-integrated learning, or service and non-formal evidence of learning. Badges can motivate students, particularly if achievement requires challenge and meaningful activity. This presentation is for those interested in learning about the concept of badges and their use in a higher education context. In particular, we explore:

- The Open Badge concept
- Badges through the UWA LMS (*Moodle*)
- Examples of use in higher education contexts
- Process and issues with introducing badges
- Future directions

Improving lecture engagement: Online's relationship with face-to-face? It's complicated

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Web Media is an upper level unit, with a one-hour lecture and two-hour tutorial per week for face-to-face students. Lectures are recorded and provided online for external Curtin and Open Universities Australia (OUA) students, with *Blackboard* discussions replacing tutorials. In practice, a number of internal students also use the recorded lectures. This research analyses the possibilities and issues with including short activities in face-to-face lectures also recorded for online delivery. The main aim was to improve the engagement of both face-to-face and online learners with lecture material. The use of activities in face-to-face lectures is known to increase engagement for those in the room, but this project wanted to ensure that the lecture recordings also worked well for those online. *EchoSystem* discussions and *Facebook* groups were therefore trialled as ways to involve online learners in the activities, while keeping the lecture discussions separate from the tutorial-related *Blackboard* discussions about weekly readings. A further aim was to avoid overburdening lecturers with extra work: first, by ensuring there was no need to record a separate set of lectures for online provision; and second, by making the online lecture-related discussions easy to set up and use. The findings of this research indicate that most face-to-face, and some online, learners appreciate lecture activities, with *Facebook* groups preferred over *EchoSystem* discussions. Curtin students, face-to-face and online, were more enthusiastic than OUA students (with another OUA iteration to run). It seems that if 'online' had a relationship with 'face-to-face', its *Facebook* status would read: "It's complicated".

Getting the best student-unit fit

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Is it possible to measure how well students are prepared for a unit at the beginning of semester and use this data to achieve a better student-unit fit? With *Improving Student Learning* grant funding, a project was conducted to address this question. The project goal was to develop online quiz resources that would help identify whether enrolled students had the appropriate levels of knowledge and experience to meet the academic requirements of postgraduate course units. Students were required to attempt a mandatory online quiz; scores were not included in their final unit mark but were referred to in relation to providing guidance to students regarding their continued unit enrolment and/or the provision of supplementary support and resources.

Leadership development lessons for you from the SaMnet experience

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One-hundred leaders of change have been cultivated by the *Science and Mathematics network* of Australian university educators (www.samnet.edu.au). Funded by the ALTC/OLT, SaMnet was launched in 2011. We have been supporting the development of leaders (SaMnet Scholars) in university science and mathematics teaching by (1) engaging them in action-learning projects (A-LPs) and (2) incorporating them into national communities of practice on standards, inquiry learning, and digital media. The journeys of the A-LPs and SaMnet Scholars suggest ways in which your own efforts can become increasingly effective, as we have begun to identify key factors that are needed to build leadership effectiveness. We have tracked the A-LPs using a mixed-method approach – triangulating data from workshop reports, online surveys, post-workshop surveys, minute papers and interviews. These data suggest fundamental shifts in how Scholars perceive leadership in general and the development of their own capacity to lead. We have noted the development of SoTL capabilities and the increasing confidence of education-focused academics to participate in cross-disciplinary projects, to garner support from research-focused colleagues, and to exert influence at the institutional level. The SaMnet model is now being transferred into faculties and institutions to support the leadership of those who dedicate most of their efforts to teaching and learning. Our presentation will enable delegates to see how they can join this effort or launch/contribute to something similar in their discipline or institution.

Exploring the boundaries of science inquiry, sustainability and ICT

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Constructing learning experiences is a challenging task; constructing them within the tight parameters of the tertiary environment poses unique constraints. Recent impetus towards increased online learning has necessitated the need for learning designers to interrogate the

affordances and limitations that e-learning presents. In the new Bachelor of Education course at Curtin University the units were also informed by TTF (Teaching Teachers for the Future) project, the new Australian Curriculum, and the Australian Institute for Teaching and School Leadership (AITSL) teaching standards. In science education it was decided that the focus would be on the process of inquiry and 21st Century learning skills within the context of sustainability, to give the learners (pre-service teachers) skills and knowledge transferable to industry. A raft of Web 2.0 tools and skills were embedded within the unit to facilitate the inquiry process and also enable it to be taught in Open University Australia. Educators needed to consider content knowledge, pedagogies to adopt, which technologies to embed, and how to scaffold the tasks to guide the learners through the process. The unit was mapped against the TPACK (Technology, Pedagogy and Content Knowledge) framework which captured the framework's authentic application in a tertiary setting. Educators were also able to study the learners' perceived knowledge, confidence and skills in technology in particular Web 2.0 tools, through an online survey and podcast at the beginning and conclusion of the unit. This presentation describes the process undertaken to create the unit, documents the intersection of pedagogy and technology, explores the affordances of embedded ICT technology tools which were used to develop a foundation of essential science inquiry skills, and maps the learners' experiences and understanding of inquiry and Web 2.0 tools during their study of the unit.

Assessment zone: Bringing students out of comfort zone

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The educational principles adapted by The University of Western Australia provide an excellent framework to unit coordinators for building the learning experiences within their unit. In this presentation, the author advocates a creative approach to embed these principles within teaching and assessment. In the postgraduate unit "Principles of Assessment and Evaluation" students have an option to submit an individual portfolio or a group portfolio, in the form of a magazine which is useful for beginners in health professions education. Eleven out of 18 students elected to participate in the group project over the period of 13 weeks. Timelines and opportunities for feedback were provided by the unit coordinator while the group members were responsible for keeping the minutes of their meetings and completing the allocated tasks. The group also selected the title of the magazine as ASSESSMENT ZONE and critically reviewed the content provided by each other. In addition as part of the exercise they also designed the assessment criteria for the magazine which is now undergoing assessment by experts. Through informal feedback all students have commented this experience of assessment has taught them more than what they would have learnt from regurgitating pure facts. Similarly the collaborative experience of working on a project has provided them an opportunity to *learn from each other* as well as *about each other*.

Transforming hearts and minds: Teaching in 21st Century learning spaces

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Over the past decade, there has been a gradual move in many Australian universities towards the development of collaborative learning spaces to replace traditional lecture theatres and tutorial rooms. This trend has provided an opportunity for the introduction of a range of new learning designs to take advantage of technology rich learning environments and the affordances that these provide. Although early adopters have embraced the availability of new generation learning spaces, for others teaching in such spaces requires a paradigm shift from traditional pedagogies towards learner-centred, technology enriched learning. To support this, a just-in-time professional learning opportunity was developed to encourage a change in pedagogy and, at the same time, provide an authentic learning experience which models effective teaching in collaborative learning spaces. In this session, we will discuss the strategies used to promote engaging learning in collaborative settings and stimulate teaching innovation. We will also elaborate on some of the barriers encountered in offering professional learning that aims to transform well-entrenched teaching practices.

Student motivations and attitudes in first year chemistry at UWA

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The first year introductory chemistry unit CHEM1003 is a unit at The University of Western Australia with an enrolment of over 300 students each year. It is designed to provide an opportunity for students with little or no background in chemistry to gain an understanding of basic chemistry concepts. This study aims to investigate students' perceived motivations for undertaking the introductory chemistry unit and aims to assess how these motivations and the student's attitude change over the course of a semester. We paid particular attention to different aspects common to chemistry education in a first year university setting. One of the major findings from this study was that students were highly overwhelmed and worried about the compulsory laboratory component of the unit (over 55% of the cohort indicated they felt worried or overwhelmed by the laboratory sessions at the completion of the unit). This along with other major research findings from the study will be presented and explored in more detail. Finally the presentation will also focus on what we plan to do with these findings moving forward with regards to alleviating the stress associated with the compulsory laboratory sessions in CHEM1003 and other chemistry units.

The AUSAid Introductory Academic Program (IAP): Reflections of a facilitator

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This presentation focuses on AUSAid's Introductory Academic Program (IAP), a month-long series of compulsory workshops for international scholarship students from low socio-economic countries, conducted as they commence their studies at Australian universities. The presentation reflects on the academic program by detailing the experiences of both participants and staff collected by the researcher during their facilitation of the program for Edith Cowan University in early 2013. It outlines the major goals and objectives of the IAP program, catering to a corpus of academic skills and literacies. It examines the program developed by the facilitator looking at required course components, methods of delivery and assessment tasks. The study is evidenced by feedback collected from participants at the end of the program, covering a range of questions relating to these themes. The presentation concludes with an analysis of the nature and intention of the IAP within a wider University context, identifying the strengths of the academic program and its potential to enhance other orientation and university commencement activities.

55 Minute Workshop

Scaffolding the learning journey: Designing e-portfolio assessment items across a course

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Documentation of achievement is an important outcome, and it is well known that the quality of the learning process determines that outcome (e.g. Yancey, 2011). Although the software is important, the value adding provided by teaching staff, learning designers and students is essential in demonstrating effectiveness and learner satisfaction. The perceived applicability and timeliness of the scaffolding is paramount. In this workshop, we present methods for building a structured program that is readily understood and is meaningful to the learner. We share best practices for designing e-portfolios into a curriculum in a scaffolded and embedded manner that spans the university learning journey from the first year experience through to the end of course experience. The process includes understanding and documentation of course learning outcomes, as well as scaffolding of unit learning outcomes, related to professional competencies, work-integrated learning and employability.

Participants will be provided with an overall course description of a generic course, including generic course learning outcomes that can be applied to most university courses (e.g. developing communication skills and developing reflective thinking skills). They will also be provided with unit descriptions and learning outcomes for each of the units (1st year, 2nd year, 2nd year WIL, and 3rd year capstone). Participants will work in small groups to design

an appropriate e-portfolio assessment item that is applicable to the year of study they have chosen to work with (1st year, 2nd year, 2nd year WIL, and 3rd year capstone). They will be provided with a task worksheet which prompts them to design the assessment item whilst thinking about key concepts covered in the workshop, e.g. thinking about what to assess, scaffolding the activity, planning for challenges, etc. They will also be asked to document any assumptions they have about the unit (e.g. number of students, previous learning, etc.). At the end of the activity, as a whole group, we will put the activities together and gain a better understanding of the scaffolding design: participants will present their activity to the larger group and the facilitators will prompt participants to think about how the activities are scaffolded across the year levels (and thus across the course). At the end of the workshop, we will collect one worksheet from each group, scan the worksheet, and share back with interested participants so that they will have a collection of scaffolded e-portfolio assessment items that can be tweaked to be used across a course in their own institutions.

55 Minute Workshop

An evidence-based guide to designing lecture slides

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An estimated 1.25 million *PowerPoint* presentations take place every hour, many of them presumably in university lecture theatres. But despite *PowerPoint's* popularity, several commentators now claim that lecture slides reduce audience engagement and encourage boring lecturing. A brief overview of the literature does not help to resolve matters. Experimental studies consistently produce conflicting results: using *PowerPoint* in lectures can increase student retention of the talk material, decrease retention or make no difference at all. This is because the design of the *PowerPoint* slides is instrumental in determining the outcome. Well-designed *PowerPoints* can improve student's retention of the lecture, but poorly-designed *PowerPoints* actually decrease student performance.

This workshop will take you on a tour of the relevant literature to answer common slide design questions, including:

- What is the optimum amount of text on a slide?
- Should you include clip art?
- What is the best font to use?
- Which colours are best?
- How will designing your *PowerPoint* better help your students to retain more information?

In the workshop you will have an opportunity to reflect on your current practice and practise re-designing existing *PowerPoint* slides to meet evidence-based guidelines. Unlike other recommendations you may have seen for designing *PowerPoint*, the guidelines in this workshop are fully supported by recent, peer-reviewed research. You could spend your day on *Google Scholar* condensing all the literature yourself ... or you can attend this 55-minute engaging and informative workshop. Choose wisely.

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A how-to guide for increasing student engagement in language and literacy support

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Collaboration between language specialists and discipline specialists is a practical and proven approach for ensuring students' academic language development within the discipline context. The purpose of this presentation is to introduce a framework in use at Curtin Business School (CBS) for collaboration between these specialists across the curriculum. Following a brief background to the notion of embedding language and literacies, practical examples of each of the four stages of the CBS framework will be shared. The framework includes the 'plan', 'act', 'observe' and 'reflect' stages inherent to experiential learning. Practical examples of how this framework is used in a specific context and suggestions for extrapolation into any broader teaching and learning environment will be explored.

Transforming and engaging students through peer learning

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This paper will report on two pilot projects that have run recently in the Faculty of Arts at UWA. Both were concerned with engaging peers in the learning and teaching of French studies, but the two projects have taken quite different forms. The first was more closely allied to the 'traditional' notion of peer tutoring, in which senior students who had successfully completed the course (beginners French) facilitated student-led study sessions. The second was aimed at students more advanced in their study and was focused on intercultural learning, where French-speaking international students acted as peer leaders. Both methods were devised in accordance with UWA's stated aims to produce students who are globally aware and independent learners. This paper will focus on the reception and evaluation of the two pilot projects, and how they might be improved and integrated into the French studies program and other language programs in the future.

Inter-professional practice in action: Practical strategies for initiating a community-based inter-professional practice program

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The research evidence for inter-professional education and inter-professional practice has evolved significantly over the past decade, with many tertiary institutions now looking to embed associated learning opportunities into their curricula. Such opportunities are considered effective in preparing both students and graduates for the workplace, through enhanced communication, collaboration and client-centred competencies, as part of contributing to the provision of quality community-based services in an era of smarter provision of health care for people with the greatest need. Since 2010 Curtin University has been at the forefront of inter-professional education in Australia, with Curtin's Inter-professional Education Program winning the 1st International Best Practice Competition in 2012. Curtin University leads a range of successful inter-professional fieldwork programs operating throughout Western Australia, supported through funding made available by Health Workforce Australia, with the view of growing students and graduates with an 'edge' in employability. The complexity of establishing such a program can be attributed to the various elements involved, such as selecting an appropriate context in which inter-professional clinical training placements can be supported, ensuring the right student mix, generating appropriate inter-professional activities, aligning the backgrounds of student learners, meeting curricular learning objectives, and ensuring the abilities and competence of inter-professional facilitators. During this presentation participants will hear from experienced leaders in inter-professional practice about effective designs and strategies that nurture successful and sustainable community-based inter-professional practice opportunities in 'high-need' contexts. Strategies will be revealed for leading the establishment of inter-professional practice fieldwork programs that benefit both students and the community.

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Facilitating physiotherapy students' confidence in handling and communication with the young child

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Evidence suggests that new graduate physiotherapists' uptake of paediatric practice may be hampered by a lack of confidence in working with young children. This study explored physiotherapy students' perceptions of factors affecting their confidence in paediatric practice, and set out to find teaching strategies to increase their confidence. An action research study involving 57 students and their teacher was conducted over a full teaching semester of an undergraduate paediatric physiotherapy unit. Data were collected through focus group interviews, surveys, participant observation and the teacher's reflective journal. Intervention included a variety of practical teaching strategies. Data were analysed using descriptive statistics and a grounded theory approach. Students identified skills and knowledge they felt they needed to increase their confidence in paediatric practice, relating mostly to communication and handling, as well as challenges to the application of skills and knowledge. Video and guided practice with dolls were teaching strategies suggested by students as helpful, though teaching and learning limitations were discovered and highlighted. Students reflected that they needed to invest time outside of teaching hours to increase their confidence to work with children. This study confirms that communication and handling skills are primary factors affecting students' confidence to work with young children. The use of simulation with dolls together with video of experienced clinicians and time with real children was found to be effective in building confidence. Our study suggests teachers need to assist physiotherapy students to reflect on their personal interactions with children to build their confidence.

When language fails: Bringing services together to help tutors support ??? students

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First year tutors are at the forefront of teaching at university, and as such are the first to encounter and respond to the diversity of new students and their adjustment to the university. Much has been made of this in terms of the first year experience, where the major focus is on the student experience and retention of students. Less attention is directed to the tutors themselves, who are often in ongoing casual employment. What attention there is tends to focus on raising tutors' awareness of cultural, socio-economic, gender and learning diversity, where the focus is primarily on social inclusion and academic performance. Largely absent is discussion and attention to support tutors in their dealings with ??? students for whom mental health and behavioural issues result in interpersonal difficulties with their peers and staff, both in and outside of the classroom. Our concerns are with the social, not academic, dimensions of staff interaction with students. There are multiple support services for students in need, framed within health, counselling and equity. However, at present, these services require self-selection by the students and as such disempower tutors in their interactions with these students. We argue that, in terms of students' mental health and behavioural issues, many tutors feel isolated and alone in their relationship with these students. First year tutors currently do not receive training, and do not know how to respond when problems arise or how to bring students and services together. Moreover, there are no tutor-focused procedures detailing relevant services and policies. What is missing is the interface between services, students and tutors. Our aim is to begin to bridge the interface through the development of tutor training and a set of procedures.

Designing postgraduate coursework around the AQF: Challenges and proposed solutions

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This presentation will use UWA's recent experience of designing a consistent, university-wide framework for postgraduate coursework as a context to discuss the challenges that arise with regard to the Australian Qualifications Framework (AQF) and associated policies. The purpose of the 2013 version of the Australian Qualifications Framework is, amongst other things, to contribute to "contemporary, relevant and nationally consistent qualification outcomes which build confidence in qualifications" (p. 8). UWA has recently implemented a Bologna Process style curriculum, but has struggled to create a framework for the postgraduate coursework aspects of the curriculum that is consistent with the AQF, applicable in different disciplinary contexts and suitable for the different purposes of postgraduate degrees. Some of the main issues include whether to continue with Honours or not; accommodating conversion students; variation in volume of learning; admission and selection of students for competitive courses; embedding adequate research training; international recognition of courses; and the naming of degrees. These problems and UWA's proposed solutions will be presented and discussed.

First encounters in video conference supported foreign language learning

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Although access to video conference (VC) facilities has been facilitated due to technological developments, research on VC supported language learning environments has been relatively scarce to date, particularly when intercultural learning is concerned. The present study explores typical features and critical success factors of first encounters of foreign language learners in a VC supported language learning environment in the tertiary education sector. 17 students of German based in Western Australia and 24 English as a Foreign Language students in South-West Germany engaged in mediated intercultural communication in a three week series of VCs in 2010. The data analysed comprised transcriptions of the VC sessions, 42 emails, lecturer field notes on both sides of the exchange, student evaluations and observations from colleagues. The findings indicate that participants can verify and possibly diversify emerging cultural theories about the respective target culture if certain prerequisites are met.

Leadership in teaching: Coaching for success

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The provision of effective leadership support in teaching is varied across universities and can differ greatly within each university and even further within faculties. Recent research conducted by the author around levels of support in completing higher education teaching programs showed the day-to-day positive and negative experiences that academics encounter, highlighting the critical need for leadership support in promoting a positive culture of teaching. Coaching has gained great momentum in the past ten years, being used successfully in businesses globally with executive leaders and in education as a focused plan for achieving goals. It has shown to be effective in higher education in assisting staff and students. The methodology of coaching is a partnering process that inspires individuals to maximise their own professional potential and pathway. Applying a coaching model may be an optional tool in driving leadership in teaching, and as a way to keep a focus on teaching in an environment where research may take priority. The presentation outlines what coaching means, its place in higher education and how it may be used to drive and embed teaching success.

Walking my talk as an intentional, embodied, (co)constructed environmental educator

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Exploring the question (how) can I use personal change to inspire educational and social/cultural change, this work was embodied and action orientated with a thesis that the doing (action) is as important as the thinking and talking about it. A three dimensional model of exploring personal change through transformative education leading to social/cultural change was employed throughout this research. A critical, post-structural, eco-feminist frame undergirded an auto-ethnographic self-study where I changed my living practices to become more sustainable while living within society, and used this as a platform for how I could become a better environmental educator and activist. I reduced my ecological footprint from 16.4 ha to 1.8 ha and taught a pre-service teacher course in environmental education, where I explored student resistances, power and relationships, a critique of curriculum, and personal change as a result of transformative education. Now I look to the Australian Curriculum and wonder if we are setting our students up for success and an ecologically sustainable future.

Implementation of an interprofessional learning workshop for pharmacy and dietetic students

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The Faculty of Health Sciences at Curtin University has a strong commitment to interprofessional education. An initiative for final year pharmacy and dietetic students was developed to examine embedding IPL as a component of curricula, and to determine the acceptance to students of obligatory participation. Logistics of synchronising timetables led to the design of a half-day workshop for 84 participants. The acquisition of knowledge of respective roles was facilitated through small group, case based learning, developed around diabetes mellitus and international travel. Online pre-reading materials and completion of a quiz were pre-workshop requirements. Initially, student groups reviewed a client's medications and diet to formulate a collaborative management plan. Stage two of the narrative introduced consideration of travel and stage three, the formulation of preventative measures to a series of unforeseen events. The workshop prompted students to consider issues from a global perspective through inculcating awareness of the implications of travel with chronic disease (97.5%). The scenario-based interprofessional problem-solving approach (100% agreement), and critical reflection on real or simulated experiences adopted in the workshop was effective. 97.4% of the students agreed the information gained would be useful in future practice. 80.7% of participants favoured a similar workshop being integrated into curricula as a compulsory non-assessed unit component. 33% preferred inclusion as a compulsory, assessed task. The workshop was worthwhile with 98.8% of students rating the workshop highly, despite compulsory participation. The students highlighted the positive influence of learning about each other's roles and how they can collaborate to improve client care.

Using movies to reflect on tertiary pedagogy: UWA Education Futures project

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In the context of UWA's major curriculum innovation and the re-visioning of its student experience, this presentation examines the making of movies as a process for stimulating talk about tertiary teaching, as well as celebrating some of the pedagogical innovation across the range of Faculties. During Semester 2 2013, a draft *Vision for UWA Education Futures* was circulated for feedback from UWA students, staff and external stakeholders. The draft *Vision* and key findings from the feedback will be discussed. A small exploratory activity was undertaken, involving 20 academic staff making movies of aspects of their teaching that illustrate features of the drafted *Vision* statement. The presentation includes description of the selection of the movie makers, the movie making process, and excerpts from a number of the movies that demonstrate teachers experimenting with ways of using ICT to support their students' learning, leading the learning in small groups within large undergraduate classes, adapting pedagogy from undergraduate courses to cater for postgraduate students' needs, and

integrating research into teaching and learning. Feedback from participants in the movie making activity will be reported. The presentation concludes with suggestions for the application of the movie making strategy for reflection by individual academics, for collaborative review of innovation, for sharing of teaching approaches across disciplines, for unit and course promotional activities, and for enhancing the status of teaching.

Researching tertiary pedagogy: Cross-faculty collaboration

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In the context of UWA's major curriculum innovation, we present our journey of collaboration between academic staff in the Faculty of Education, Faculty of Engineering, Computer Science and Mathematics, and Faculty of Science, in researching innovative teaching strategies. We report a small scale study involving 10 staff who voluntarily, and without funding, engaged in designing and collecting data to enrich their understanding of their pedagogical practice. Although we had many years of experience teaching postgraduate research methods units at UWA and elsewhere, the approach we adopted here was innovative and enlightening both to us and to our inter-faculty colleagues. We describe our actions as facilitators of learning throughout the 10 meetings over 7 months in 2013 and challenges of paradigms, jargon, and research protocols. In addition, we present issues our colleagues faced in their experimentation with designing studies that robustly controlled extraneous variables; developing quiz items to stimulate engagement; portraying qualitative data as narrative accounts. We recount the shifting focus from what students did or did not know, towards what the teacher was or was not doing to enhance students' learning, and from the use of assessment data as judgement of students' achievement towards the appreciation of assessment data as a rich source of information to inform teaching practice. Our presentation is illustrated with video and audio recordings of participants' accounts of their experiences in the project.

Transforming the thesis writing experience for postgraduate coursework students

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The Master of Biotechnology and Bioinformatics (MBB) degree at La Trobe University is a postgraduate coursework degree incorporating a research project, which challenges a large cohort of international students to write a thesis in English for the first time. Collaborative writing groups, also known as writing circles, have previously been shown to be an effective way to support thesis writing for postgraduate research students within universities in Australia (Larcombe et al., 2007; Maher et al., 2008). Traditionally, writing circles are small groups of students or academics, often from different academic backgrounds, who meet to discuss, peer review and critique each other's writing, with the common goal of improving their work. The MBB course has implemented short term, deadline-oriented writing circles to help students engage with their thesis writing within a classroom-like setting. Our version of a writing circle involves mediation by staff members from the La Trobe Academic Language and Learning Unit as well as a subject specialist to tailor the process for students at different stages of their research year. This presentation aims to encourage critical discussion about our use of non-traditional writing circles within the MBB course, and proposes ways to evaluate this approach to thesis writing for postgraduate coursework students.

Wireless Internet access

Two types of wireless access will be available during the Teaching and Learning Forum:

- The University Club's *Unify Guest* network
- *Eduroam* (education roaming) is the secure, world-wide roaming access service developed for the international research and education community. *Eduroam* allows students, researchers and staff from participating institutions to obtain Internet connectivity across campus and when visiting other participating institutions. You need to be set up for *eduroam* at your home institution.

Unify Guest network

We have arranged with the University Club wireless access through their Unify Guest network. They will generate usernames and passwords for all registered delegates attending the forum, which will be printed on cards and placed in the delegate bags. Access will be available for both days of the forum.

Eduroam

Eduroam, or **education roaming**, allows staff and students from participating universities to access the local institution's wireless network access and the internet using their standard username and password just as they do at their home institution. A wireless-enabled device, such as a laptop computer or a smart phone, is required.

UWA staff and students

Eduroam allows UWA staff and students, when visiting participating institutions worldwide, to use their UWA PHEME credentials to access the internet and connect to resources at UWA. *eduroam* does not function for UWA staff and students while they are physically located on a UWA campus.

Visiting staff and students

Staff and students visiting from participating institutions are able to connect via UWA's wireless network to the internet using their credentials from their home institution, without needing to obtain a UWA account.

Details for previous conferences may be obtained from the TL Forum proceedings website
http://ctl.curtin.edu.au/professional_development/conferences/tlf/tlf-pubs.cfm