ATN Assessment Conference 2008

ENGAGING STUDENTS IN ASSESSMENT

Conference Program and Abstracts

AUSTRALIAN TECHNOLOGY NETWORK OF UNIVERSITIES

UniSA

AUSTRALIAN LEARNING & TEACHING COUNCIL

2008 ATN Assessment Conference:
Engaging students in assessment

On behalf of the ATN (Australian Technology Network) and the University of South Australia and the Conference Committee, we would like to welcome you to the seventh ATN Assessment Conference. We are looking forward to two days of inspiring and challenging presentations and an opportunity for you to meet new colleagues and share experiences and ideas in a relaxing and collegial environment.

The Conference committee would also like to acknowledge the significant support of the Australian Learning and Teaching Council.

Assessment processes are an important part of university life for all students and staff and they are integral to quality learning experiences. These areas are being given critical priority in the current higher education environment and involve attention at all levels within an institution. In practical terms this means that assessment practices devised by staff are linked to the learning process so that productive and engaging learning outcomes can occur.

We are delighted with the number of abstracts and papers received for the conference on the following themes:

- transforming assessment and feedback for student engagement
- cultural and academic diversity: designing assessment to engage all students
- discipline-based practices in engaging students in assessment
- using technology to enhance engagement in assessment..

We are hoping that this conference will offer you the opportunity to share your experiences of student assessment.

Diana Quinn

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November 2008

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Conference support

We would particularly like to thank the following people for their support in bringing this conference together:
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The review process

All papers published in the Conference Proceedings have undergone a double-blind peer review process, with de-identified feedback and suggestions for revisions provided to authors. The Conference committee gratefully acknowledges the generous work of the reviewers, who all provided constructive and invaluable feedback to ensure the high standard of published papers.

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- The University of South Australia
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Disclaimer
The papers published in these Proceedings have been reviewed, edited and proof-read to the best of our ability within the timelines permitted. We acknowledge that there may be outstanding proofing errors.

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20-21 November 2008

General Information

Hawke Building

The conference is being held at the Hawke Building, City West Campus of the University of South Australia. The venue is located on North Terrace, Adelaide.

Registration

The registration desk will be located the Kerry Packer Civic Gallery. Delegates can register from 8.00-9.00am on both days. The registration desk will be staffed during tea breaks and lunchtimes for general enquiries.

Conference rooms

The keynote sessions will be held in the Allan Scott Auditorium that can be accessed from the ground floor of the Hawke building and from the Kerry Packer Civic Gallery (3rd floor).
Paper sessions will be held in the Bradley forum (Level 5 of the Hawke), and in adjacent rooms on level 5 and 6 (see floor plans on next pages). H6-10/11 are free rooms for delegates to use.

Food

Lunches will be set up in the space adjacent the Bradley Forum or in the ground floor Rowland Rees space. On the Thursday evening the gala dinner will held at the National Wine Centre. Dinner tickets for delegates who are attending the dinner will be distributed at the registration desk.

Computer facilities

The University of South Australia participates in the eduroam community so delegates who are also from participating institutions can connect personal laptops to the UniSA wireless network. Also, a nearby student computer pool (GK 3-21) with 20 computers, has been booked for delegates use. For non-UniSA delegates a special log on will be provided when they arrive.

Transport

A free bus 99B travels around and through the city every 5 minutes. The tram (leaving from in front of City West Campus) provides free transport through the city, stopping at the shopping precinct (Rundle Mall) and Victoria Square (Adelaide Central Markets, Gouger Street Restaurants). Note that, for a fee, you can continue on this tram to the seaside suburb of Glenelg.

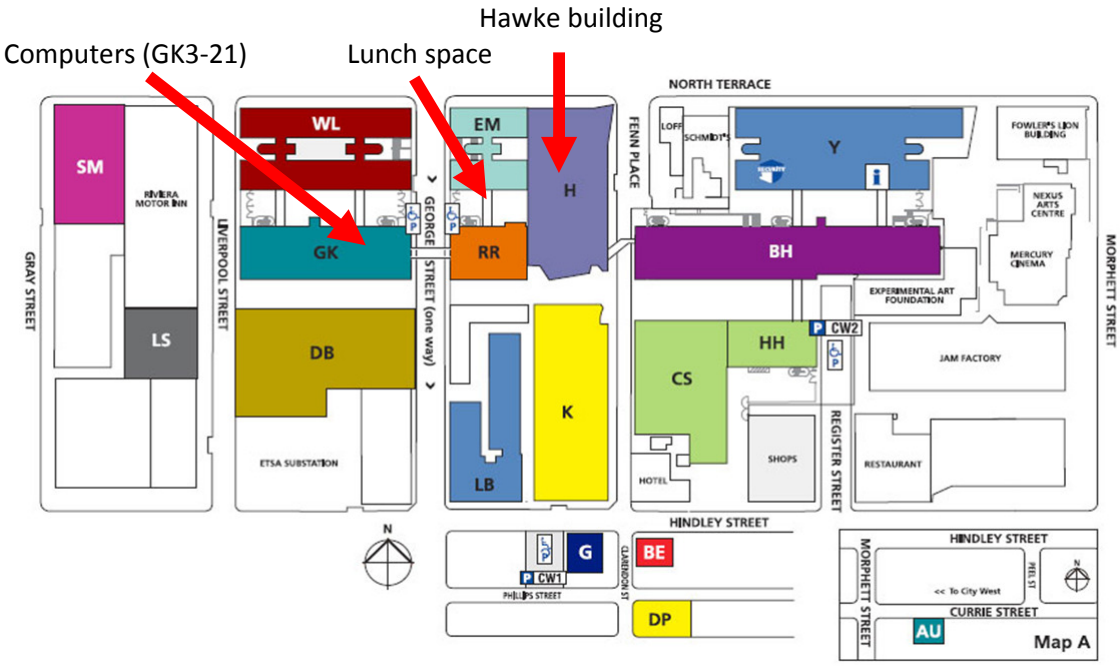
Other public transport information can be obtained from http://www.adelaidemetro.com.au/

Proceedings

Digital copies of refereed papers are available from
http://www.ojs.unisa.edu.au/index.php/atna/issue/view/ISBN%20978-0-646-504421/showToc
and are supplied to delegates on a USB flash disk on registration.

Maps

City West Campus



The conference is based in and around the Hawke building (image below is view from North Terrace).

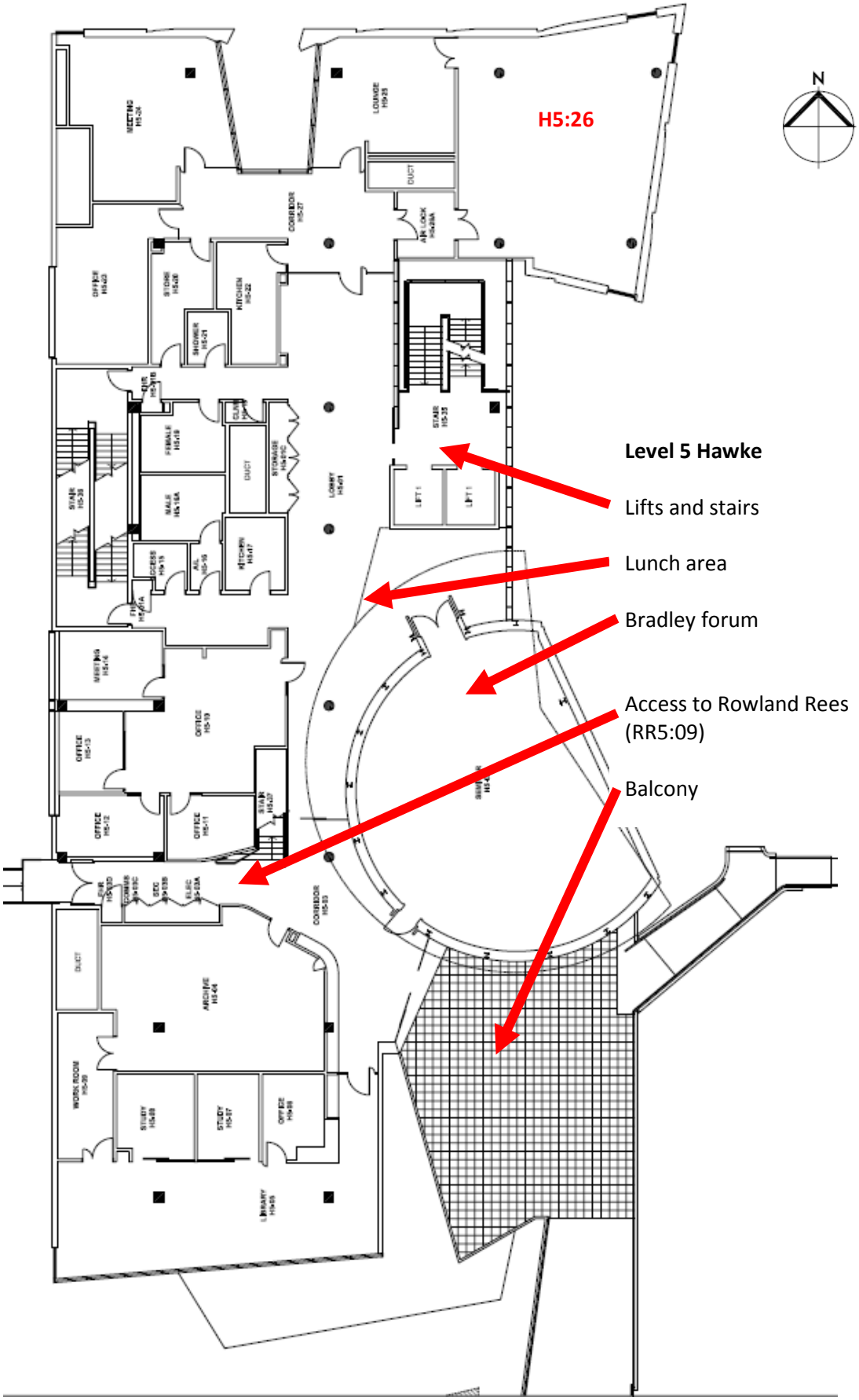
Kerry Packer Civic Gallery

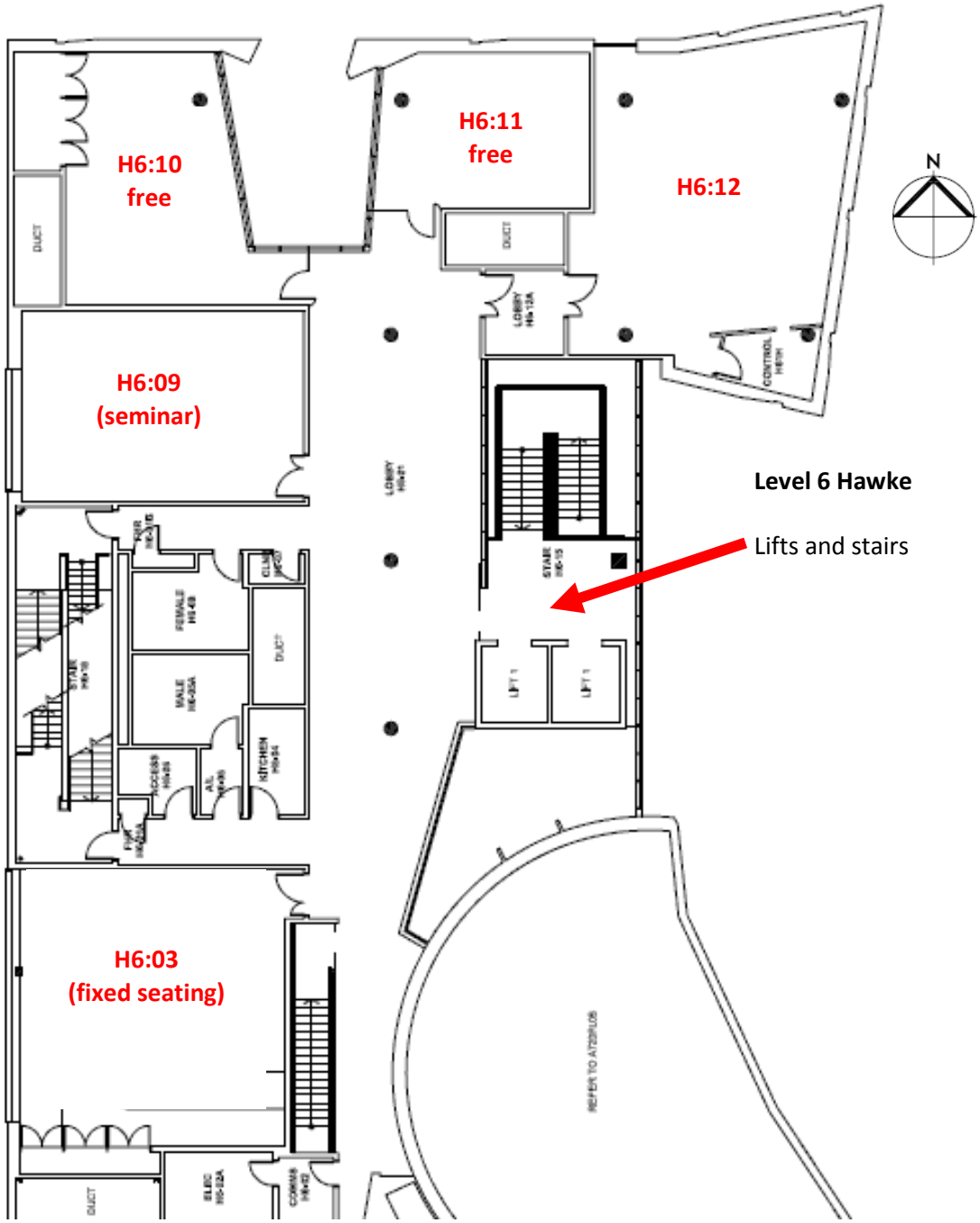
The Registration desk is located in the Kerry Packer Civic Gallery on Level 3 of the Hawke. Enter from the North side of building and take lift to third floor and turn right to enter the Gallery.

Here you can

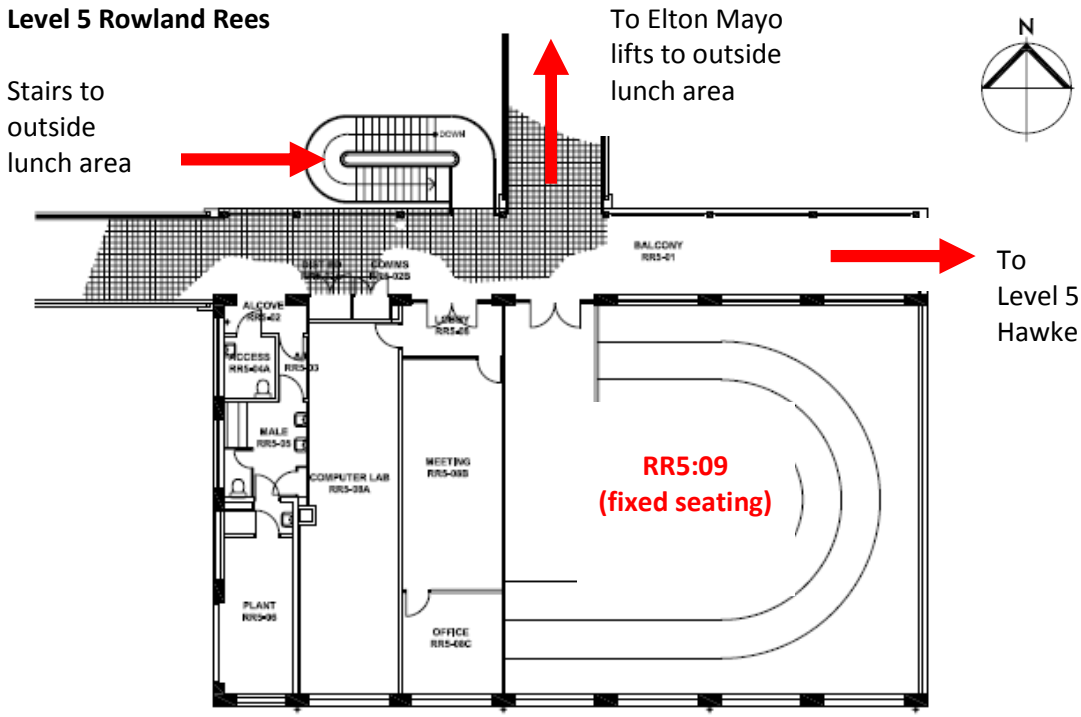
- register
- grab something to drink
- gain access to the Allan Scott Auditorium for the Keynote presentations
- view our posters.

The parallel presentations are primarily held on level 5 and 6 of the Hawke building.


H5:26
N
Level 5 Hawke
Lifts and stairs
Lunch area
Bradley forum
Access to Rowland Rees (RR5:09)
Balcony


H6:10
free
H6:11
free
H6:12
H6:09
(seminar)
H6:03
(fixed seating)
Level 6 Hawke
Lifts and stairs
N

Level 5 Rowland Rees



Environs (Google map)

The tram travels along North Terrace and King William Street (no charge in city limits)

Keynote Sessions

Professor Sally Brown is Pro-Vice-Chancellor (Assessment, Learning and Teaching) and Professor of Higher Education Diversity in Teaching and Learning at Leeds Metropolitan University. Originally trained as a classroom teacher of English and therapeutic drama, she was previously Director of Membership Services for the Institute for Learning and Teaching (now merged into the Higher Education Academy). Prior to that she worked at the University of Northumbria at Newcastle for almost 20 years as a lecturer, study-skills practitioner, educational developer and Head of Quality Enhancement. Growing from her commitment to student learning, Sally has co-written or co-edited more than thirty books and is an enthusiastic keynote speaker in the UK and internationally on innovative teaching approaches, inclusivity and especially assessment.

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Professor John Biggs is Honorary Professor of Psychology, and Adjunct Professor, Centre for Teaching and Learning, both at the University of Hong Kong. After graduating in Psychology from the University of Tasmania in 1957, John went to England to peruse postgraduate study. After a year of school teaching in Luton, he carried out research into methods of teaching arithmetic at the National Foundation for Educational Research, London, leading to his doctoral thesis (Birkbeck College, University of London, 1963). Hence the thrust of his subsequent academic career has been attempting to establish the link between psychological theory and educational practice.

John has written fourteen books, edited six, and published approximately two hundred articles. John Biggs has held Chairs in Education in Canada, Australia, and Hong Kong. He has published extensively on student learning and the implications of his research for teaching. His concept of constructive alignment, a form of outcomes-based education, is outlined in Teaching for Quality Learning in University (McGraw-Hill/Open University Press). The third edition is co-authored with Catherine Tang, based on their experience in implementing constructive alignment in several universities in Hong Kong. Post-retirement, John is exercising his right hemisphere by publishing fiction.

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Catherine Tang was the former Head of staff development centres at the Hong Kong Polytechnic University and the Hong Kong Institute of Education. Her main interest is student learning, with a particular focus on enhancing teaching and learning through constructive alignment, and the implications to staff development. She is the co-author of the 3rd edition of "Teaching for quality learning at university" with John Biggs. Catherine Tang has conducted a large number of workshops and seminars on student assessment. She is currently an educational consultant based in Australia and is consultant to several universities in Hong Kong on implementing constructive alignment in teaching and assessment.

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Fit for purpose assessment

Sally Brown

Effective assessment significantly and positively impacts on student learning, as I suggested in my Big Ideas posting on the conference blog. Assessment shapes student behaviour and the signals we give students through the assignments we set them can influence the extent to which they spend their time on task productively. A fit-for-purpose approach enables us to foster productive behaviours and establish good learning patterns, enabling our students not only to succeed at university, but also to become effective lifelong learners. This keynote will explore how we can achieve this as individuals, course teams and institutions.

Notes:

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KEYNOTE

Constructive alignment in learning, teaching and assessment

John Biggs and Catherine Tang

Constructive Alignment is a design for facilitating student learning, which has become the framework for teaching and quality assurance in several countries. The 'constructive' aspect refers to the idea that students construct meaning through relevant learning activities; 'alignment' refers to a learning environment where teaching and learning activities, and assessment tasks, are linked or aligned to the Intended Learning Outcomes (ILOs) of a subject or programme. The key is that the ILOs state a learning activity, such as 'explain' or 'apply', which students are required to perform during learning and in assessment. In this session, we adopt a hands-on approach to defining outcomes and designing aligned teaching and assessment tasks. It is recommended that those attending come to the session with a specific subject they are teaching in mind.

Notes:

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8.00 -9.00 Registration (Kerry Packer Civic Gallery)

9.00 – 9.25 Conference opening and Welcome to Country (Allan Scott Auditorium)
9.25 – 10.30 **KEYNOTE: Professor Sally Brown** (Allan Scott Auditorium)

10.30 – 11.00 am Morning tea (Kerry Packer Civic Gallery)

Session A - Morning Tea to Lunch; Thursday 11.00 am - 12.30 pm

	Bradley forum (Level 5) Chair: Kate Andre	RR 5-09 Chair: Andrea Duff	H6:03 Chair: Scott Copeland	H6:09 Chair: Margaret Faulkner
11.00 - 11.30	Assessment for learning in and beyond courses: a consultation *David Boud* (p 26 Transformation)	Promoting creativity in computing via portfolio assessment *Steve Cassidy* (p 29 Discipline-specific)	Why wikis work: assessing group work in an online environment *Catherine Snelling, Sophie Karanicolus* (p 70 Technology)	Assessment in Australian Universities: What they say they do to engage students *Stephen Russell* (p 63 Transformation)
11.30 – 12.00		Engaging students: encouraging success *Helen Johnston, Mahfuz Aziz, Yalcin Kaya, Diana Quinn* (p 48 Diversity)	Assessment of collaborative learning in online discussions *Judith McNamara, Catherine Brown* (p 54 Technology)	Assessing graduate attributes: Engaging academic staff and their students *Alex Radloff, Barbara de la Harpe, Helen Dalton, Jan Thomas, Anne Lawson* (p 60 Discipline specific)
12.00-12.30	Sowing the seeds *Simon Housego* (p 45 Transformation)	Engaging engineering students in learning how to successfully communicate research plans *Tim Ferris, Elena Sitnikova, Andrea Duff* (p 38 Disciple-specific)	Online learning techniques: using wikis and blogs for assessment in first year engineering *Elizabeth Smith, Julie Mills, Baden Myers* (p 69 Technology)	"Not another essay!" Transforming assessment in an evidence-based practice nursing unit. *Leigh Davis, Moira Cordiner* (p 34 Transformation)

12.30 – 1:30 **LUNCH** Optional guided walk to Pinky Flat picnic area (Grassed area adjacent to River Torrens, 10 min walk, with stairs, each way) or stay in Hawke, or grab fresh air in the shaded outdoor area adjacent to conference building (Roland Rees Space) or visit computer pool (GK 3-21).

Session B- Lunch to Afternoon tea; Thursday 1.30 pm – 3.00 pm					
	Bradley forum (Level 5) Chair: Simon Housego	H 6:12 Chair: Margaret Faulkner	H 6: 03 Chair: Gavin Sanderson	H 6:09 Chair: David Birbeck	H 6:10 Chair: Margaret Green
1.30 – 2.00	What can you learn in 3 minutes? *Natalie Brown* (p 28 Technology)	Use of assessment in professional learning of project managers *Adam Krezel, Gayle Morris* (p 50 Discipline-specific)	Wanted! Evidence-based guidelines for unseen invigilated examinations *Ieva Stupans* (p 74 Discipline-specific)	Connecting feedback to results – how engaged are students in connecting the dots? *Bill Willesee, Judy McGowan* (p 79 Transformation)	Academic diversity: what is good for students with disabilities is good for all students *Nikki Kenney, Stephen Manson, Margaret Faulkner* (p 49 Diversity)
2.00 - 2.30	Online simulation *Colleen Smith, David Gillham, Helen McCutheon, Tahereh Ziaian* (p 68 Technology)	Reviewing assessment practice in the computing curriculum *Steve Cassidy, Christophe Doche* (p 30 Discipline-specific)	Establishing a multi-dimensional quality framework for assessing workplace learning *Joan Richardson, Beverley Jackling, Kathy Henscke, Fredrika Kaider* (p 62 Transformation)	Developing functional feedback: A case study *Margaret Green* (p 41 Transformation)	An inclusive assessment practice: Student engagement through feed-forward and feed-back *Ursula McGowan* (p 52 Diversity)
2.30 – 3.00	Using self and peer assessment for professional and team development *Keith Willey, Anne Gardner* (p 80 Technology)	Assessing a virtual law placement – from concept to trial *Melinda Shirley, Tina Cockburn, Caroline Cottman* (p 67 Technology)	Assessment as learning: Engaging students in academic literacy in their first semester *Timothy Curnow, Anthony Liddicoat* (p 33 Discipline-specific)	Testing the applicability of a four-way typology of feedback in the university setting *Catherine Scott* (p 65 Transformation)	Engaging students with higher order learning (or not): insights from academic practice *Margot McNeill, Maree Gosper, John Hedberg* (p 55 Technology)

Session C- Poster session during Afternoon tea; Thursday 3.00 pm – 4.00 pm				
	P1	P2	P3	P4
3.00 – 3.30	Constructing authentic assessment that links students to professional practice from day 1 *Berni Murphy* (p 56 Discipline-specific)	Letting students teach and learn using YouTube e-clips *Diana Quinn* (p 58 Technology)	Developing assessment for service learning in business *Diana Quinn, David Birbeck, Helen Johnston, Duncan Murray* (p 59 Discipline-specific)	Using video analysis software to develop managerial tasks and reflective practice in Physical education university students *Paul Rycroft, Beth Hands* (p 64 Technology)

NOTE: Posters prepared for the Australian Learning and Teaching Council: Assessment forum (held the day before the conference) will also be on display.

Session D- Afternoon tea to close; Thursday 3.30 pm – 5.00 pm					
	Bradley forum (level 5) Chair: Jonathan Yorke	H 6:12 Chair: Simon Housego	H 6:09 Chair: Dale Wache	H 6:10 Chair: Andrea Duff	H 6:03 Chair: Sandra Barker
3.30 - 4.00	Engaging speech pathology students in design and validation of competency based assessment in the workplace *Sue McAllister, Michelle Lincoln, Alison Ferguson, Lindy McAllister* (p 51 Discipline-specific)	Improvements in the self and peer assessment tool SPARK: Do they improve learning outcomes *Keith Willey, Anne Gardner* (p 81 Technology)	A model for holistic studio assessment in the creative disciplines *Barbara de la Harpe, Fiona Peterson* (p 35 Discipline-specific)	"The question is a bit vague, I don't know what to do." Addressing ambiguity and uncertainty in assessment *Collette Snowden* (p 71 Transformation)	Charting the territory - Assessment terrains in undergraduate education *William Allen and Kylie Readman* (p 22 Transformation)
4.00 – 4.4.30	A student vote for alignment in experiential placements *Ieva Stupans, Susanne Owen* (p 75 Discipline-specific)	Providing immediate formative and summative feedback for individualised paper-based accounting assignments *Ian Hamilton* (p 43 Technology)	Affecting change through assessment: improving indigenous studies programs using engaging assessment *Kristina Everett* (p 36 Discipline-specific)	Are we speaking the same language? Student and staff perception of assessment in a teacher preparation course *Heather Sparrow, Maria Northcote, Sue Sharp, Yvonne Haig, Julia Wren* (p 72 Transformation)	Assessment design to engage students with Service learning in the Australian Defence Force *Margaret Faulkner* (p 37 Transformation)
4.30 - 5.00	Engaging educators and students in the national roll-out of a new assessment tool (COMPASS) *Alison Ferguson, Sue McAllister, Michelle Lincoln, Lindy McAllister* (p 40 Discipline-specific)	Software as a facilitator of graduate attribute integration and student self-assessment *Darrall Thompson* (p 76 Technology)	The role of participatory action research in leading the development of engaging assessment *Marina Harvey* (p 44 Discipline specific)	Do students look at feedback or do they just want the grade? *Nerilee Flint* (p 39 Transformation)	An integrated approach to teaching undergraduate biotechnology *Helena Ward, Elizabeth Elliot* (p 78 Discipline-specific)
7.00 pm – 11.00 pm Gala Dinner at National Wine Centre (East end of North Terrace)					

8.00 -9.00 Registration (Kerry Packer Civic Gallery)				
9.00 – 11.00 **KEYNOTE: Professor John Biggs and Catherine Tang** (Allan Scott Auditorium)				
11.00 – 11.30 Morning tea (Kerry Packer Civic Gallery)				
Session E - Morning Tea to Lunch; Friday 11.30 am - 1.00 pm				
	Bradley forum Chair: Margaret Green	H 6:03 Chair: Timothy Ferris	H 6:09 Chair: Dale Wache	H 5:26 Chair: Gavin Sanderson
11.30 - 12.00	Responding to plagiarism: The need to engage with students' real lives *Tracey Bretag* (p 27 Diversity)	Using 'Mastering Biology' to formatively improve student engagement and learning *Gerry Rayner* (p 61 Discipline-specific)	Engaging staff and students with graduate attributes across diverse curricular landscapes *Abby Cathcart, Gayle Kerr, Marty Fletcher, Janet Mack* (p 31 Transformation)	The confidence levels of course/subject coordinators in undertaking aspects of their assessment responsibilities *Clair Hughes, Merrilyn Goos, Anne Webster-Wright* (p 46 Transformation)
12.00 - 12.30	Counting words is worse than counting sheep *Marie Stevenson, Dale Wache* (p 73 Diversity)	Is implementing criterion-referenced assessment worth the effort with GenY? *Moira Cordiner, Deb Stenzel, Louise Hafner* (p 32 Discipline-specific)	Moderation assessed: Policies and practices *Beverley Oliver, Kathryn Lawson, Jonathan Yorke* (p 57 Transformation)	ROUND TABLE: Approaches to the assessment of graduate attributes in higher education *Simon Barrie, Clair Hughes, Calvin Smith* (p 24 Transformation)
12.30- 1.00	The effect of learners' perceptions of ethnicity, gender and qualifications on assessment: Some qualitative and quantitative evidence *Elvia Shauki, Ratnam Alagiah, Brenton Fiedler, Krystyna Sawon* (p 66 Diversity)	Assessing student understanding in the molecular life sciences using a concept inventory *Tony Wright, Susan Hamilton* (p 84 Discipline-specific)	Engaging students in reflective practice through a process of formative peer review and peer assessment *Denise Wood, Frank Kurzel* (p 83 Transformation)	
1.00 pm – 2.00 pm Barbeque lunch in the shaded outdoor area adjacent to conference building (Roland Rees Space) or visit computer pool (GK 3-21).				

Session F – Lunch – Afternoon tea; Friday 2.00 pm -3.30 pm

	Bradley forum (Level 5)	H 6:12 Chair: Scott Copeland	H 6:09 Chair: Kate Andre	Computer Pool GK 3:21
2.00 - 2.30	WORKSHOP: Student Engagement Swap Shop: Where speed dating meets teaching and learning	Rethinking problem-based learning to better understand what and how students learn *Carmen Joham* (p 47 Discipline-specific)	Engaging students in graduate qualities through assessment *Sandra Barker* (p 25 Discipline-specific)	WORKSHOP: Peer review of online learning and teaching *Denise Wood* (p 82 Transformation)
2.30 – 3.00	*UniSA Academic development team* (p 77 Discipline-specific)	Student engagement through assessment in Applied Finance: Evaluation of changes at UniSA *Ronald McIver, Michael Burrow* (p 53 Discipline-specific)	The role of role-playing in assessment *Helen Ashman* (p 23 Transformation)	
3.15 – 4:00	Close and Happy hour (Kerry Packer Civic Gallery) - Presentations - Conference song performed			

Charting the territory: Assessment terrains in undergraduate education

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This paper explores potential sources of misalignment between lecturers' expectations of student learning and assessment and students' consequent attempts at engagement. Based on data from two research projects conducted at the regional 'Irwin' University, the authors chart the territory of undergraduate study in the context of increasing diversity, including many students who are the first in their families to attempt tertiary study. First there is an analysis of observable assessment practices typically undertaken as part of a three year program. Second lecturers' beliefs, knowledge and actions in relation to assessment are investigated and reported on. Their views on assessment are compared to students' reported experiences of assessment that lead to a sense of mis-engagement. Finally, the authors propose a set of non-negotiables that respond to student 'mis-engagement' and enhance alignment between the lecturers' and students' expectations of assessment.

Keywords: *mis-engagement, assessment conditions, non-negotiables*

The role of role-playing in assessment

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The assessment of large classes of students is generally time-consuming for the lecturer as well as somewhat impersonal for the students. The limits of the lecturer's time available for feedback is the main constraint with larger classes, inevitably leading to less time per student and a concomitant lower level of feedback. Engaging the students' interest can also be challenging in a larger class, with many students feeling disenfranchised by the lack of individual attention. This paper discusses two case studies in assessing students with two group-based and problem-based learning exercises. The students contribute directly to creating the environment of the exercise, assessing their peers at two levels and creating part of the examinable materials as well as exchanging mutual feedback in a post-mortem session. This sharing of the assessment duties amongst the student body supplements and augments the lecturer's own grading. The students gain in many ways, with more detailed, comprehensive and timely feedback from their peers, and a generally improved student assessment experience.

Approaches to the assessment of graduate attributes in Higher Education

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Graduate attributes (GA) have received considerable attention in recent years as universities seek to renew and articulate their purposes. Though many claims are made with respect to the implementation of GAs, there is a growing acceptance of the proposition that the strongest evidence of their achievement is their explicit embedding in assessment. Assessment was therefore a key focus of a recent national study called The National Graduate Attributes Project investigating Australian universities' efforts to achieve graduate attributes. Data collected through literature review, document analysis and interviews with representatives of each Australian university revealed a broad range of approaches to the assessment of GAs. The project identified a number of interrelated issues impacting on practice and confirmed earlier conclusions that the ways in which GAs are conceptualised strongly influence how they are taught and assessed. This paper considers the challenges of assessing the sort of complex higher order learning outcomes described as graduate attributes. It analyses different approaches to the assessment of GAs and uses Barrie's (2006) model of conceptions of graduate attributes – precursor, complementary, translation, enabling – to develop a typography that associates each conception with specific assessment strategies. This typography provides additional insights into some of the reasons behind reports of uneven or patchy GA implementation and identifies assessment approaches that best support institutional efforts to assist students in the development and demonstration of the outcomes intended of their university experience.

Engaging students in Graduate Qualities through assessment

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The University of South Australia (UniSA) Code of Good Practice states that it is important for educators to "select content and teaching and assessment methods which aim to develop students as both independent and collaborative learners; promote critical and creative thinking; and meet the requirements of the professions". In addition teachers are encouraged to implement student-centred learning approaches that will develop analytical and critical thinking skills, communication skills, self-reflective skills and critical understandings of the student's own work, as well as the work of others. This policy reflects the University's commitment to the embedding and assessment of Graduate Qualities in teaching and learning programs. The statements of Graduate Qualities for a UniSA student were accepted by the Academic Board in May 1996 and have been gradually embedded into on- and off-campus courses over the past ten years. The Graduate Qualities were introduced in response to requests from prospective employers for universities to produce "more employable graduates". The assessment of Graduate (generic) qualities of students has been a subject for discussion since their introduction and increasingly, academic staff are being required to articulate how and where these qualities are being developed in the course materials. This paper uses categories developed by Boud and Falchikov (2006), to evaluate the extent to which a current assessment item engages students in the development of certain Graduate Qualities for the students in an undergraduate business degree.

***Keywords**: graduate qualities, authentic assessment, problem solving*

Assessment for learning in and beyond courses: a consultation

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Much assessment in higher education does not equip students for a lifetime of learning and the assessment challenges faced in practice. How can assessment activities be adapted to ensure that they make an impact on students beyond graduation? This is the theme for a Senior Fellowship from the Australian Learning and Teaching Council. As part of this a website is being established: Assessment Futures—assessing students as if learning was of the greatest importance. Part of this development will involve those who have made a commitment to innovation in assessment to comment on the role and structure of the site and to offer examples of their own to help populate it.

The session takes the form of a presentation of the structure and content of the website to date and discussion among participants about how it is likely to be able to meet their needs and that of their colleagues. Suggestions for fruitful examples will be considered and discussion will focus on how such a resource can make an impact on practice. Consultation sessions have taken place at different universities—in the UK, the Netherlands, Belgium, Australia and Hong Kong—and further Australian input is being sought.

The assumption behind the resource is that all assessment activities must have a positive contribution to make to learning, whatever else they may do. It highlights those features of assessment that focus on learning in the longer term. It will particularly feature practices that, for example:

- *involve students in an active role in the design or execution of assessment*
- *prompt students to consider and/or develop their own judgements of their learning*
- *build students' capacity to assess themselves and others*
- *build students' capacities to work with others in assessment roles*
- *promote reflexivity and self-regulation*
- *involve students utilising feedback from staff, peers and others*
- *involve students utilising evidence of their learning?*

Responding to plagiarism:
The need to engage with students' 'real lives'

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This paper uses hypothetical case studies to explore the idea that academic integrity policies and processes need to provide enough flexibility for investigating staff to take into account the real life circumstances of students, when determining outcomes for breaches of academic integrity. The paper argues that investigators of academic integrity breaches have a responsibility to demonstrate compassion, as well as consistency in determining outcomes, even in cases of deliberate, intentional plagiarism. Finally, the paper recommends that those in a position to determine penalties for such breaches need to be 'exemplars' and provide mentoring to others as part of a community of practice.

Keywords: *academic integrity, plagiarism policy, compassion*

What can you learn in 3 minutes?

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The integration of technology into teaching, learning and assessment has the potential to improve not only student engagement but to encourage higher order thinking and deep learning. However, in order to capitalise on this potential, teachers need to gain the necessary knowledge, competence and, importantly, confidence to implement productive technology-based tasks. This paper describes and evaluates a rich assessment task implemented in a pre-service teaching program. The task, planning and production of a three minute video, modelled an approach to assessment that engages and motivates but also provided the opportunity for students to develop and demonstrate generic and subject specific learning outcomes and gain experience with appropriate technologies. The evaluation draws on student reflections of the task and broader student feedback in the form of unit evaluation reports from two successive cohorts of students. This data has been analysed against the learning outcomes of the unit, broader principles of assessment design and, the extent to which modelling a technology-based task was seen by the students to be transferable to their own practice.

Keywords: *assessment, science education, video-making*

Promoting creativity in computing via portfolio assessment

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One of the challenges in teaching Computing is balancing the need to have students carry out well defined programming tasks with a desire to encourage exploration and creativity. To try to address this issue, a portfolio assessment task has been developed that allows students to develop their own work over the semester and present it for assessment. The portfolio task is structured to allow formative feedback to students throughout the semester and to encourage students to reflect on the work they are producing as it develops. In the first version of this task there were problems both for the students and the staff; students were a little confused about what they were supposed to do and staff spent a lot of time providing feedback due to the need to unpack and run each individual assignment. For the 2008 version, we implemented a server based software system that tried to address both of these issues by providing a framework for the students to work within and a smoother work-flow for staff providing feedback. This paper will provide an overview of the assessment task from the point of view of the student and the staff providing feedback.

Reviewing assessment practice in the computing curriculum

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Over the last year and a half our department has been involved in the project Leadership and Assessment: Strengthening the Nexus coordinated by the Learning and Teaching Centre in our University. As part of this project we conducted the first comprehensive review of assessment practice in the Computing curriculum. The outcomes of this review were twofold: firstly we now have a much better picture of what and how we asses across the whole curriculum; secondly, the review process has acted as a catalyst for change in assessment practice. This paper will provide an overview of the process we went through in carrying out the review and some reflections on fostering change in our colleagues through the discussion of assessment that the review provoked. The assessment review first tabulated the types of assessment and the learning outcomes for each unit offered in the Department during 2007. We then collected more detail on each assessment task including the way that the assessment was graded and a broad categorisation of the kind of task. This assessment matrix then provided the starting point for a discussion with some staff on their attitude towards assessment in their teaching. It is now clear that we are seeing some change in the attitudes of staff to assessment as a result of the process that we have gone through in this project. This can be characterised as a general increase in assessment literacy as a result of the discussion that has gone on through the Department and particular changes in some individuals who were part of the more detailed discussions as part of the review. Reflecting on this process, we can see indications of how effective change can be fostered in the Department by encouraging reflection by individuals.

Engaging staff and students with graduate attributes across diverse curricular landscapes

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The alignment of curricula with desired generic higher education learning outcomes, widely referred to as graduate attributes, has been on the agenda for some time. To be implemented widely, graduate attribute initiatives must accommodate variations in curricular landscape between and within institutions, disciplines and programs. QUT Faculty of Business is a partner (along with University of Sydney, University of Technology, Sydney, and University of Queensland) in the ongoing Australian Learning and Teaching Council funded project Facilitating Staff and Student Engagement Graduate Attribute Development, Assessment and Standards in Business Faculties. Each project partner is implementing and evaluating strategies and tools, and the extent to which students and staff can be engaged with a focus on higher level attributes, into the assessment procedures of units in their faculties. This paper describes the progress of this project and the use of the ReView software tool within the QUT Faculty of Business, where three distinctly different units have participated. These units include 1) a high enrolment undergraduate first year core unit, 2) a capstone unit for students in a particular major, and 3) a graduate unit with a high percentage of international students. The adaptation of high level strategies to accommodate institutional, student and operational diversities is elaborated and discussed. A significant reflection of project staff participants has been their increased appreciation of the differences between the ways curricula is structured, documented and administered in Business faculties of partner institutions, and how that impacts upon applying graduate attribute engagement strategies and tools. Also, technological tools, such as the ReView software application, which is being utilised across the project, must cope with varying local requirements. The differences between the three QUT units include such characteristics as numbers and profiles of students, curricular purpose, the integration of Learning Management Systems and other technologies, and size of teaching teams.

Is implementing criterion-referenced assessment worth the effort with gen Y?

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Well implemented criterion-referenced assessment (CRA) requires dedicated time and effort, especially in describing realistic expectations of evidence of achievement to students in the form of criteria sheets (or grading rubrics). It is also takes time out of delivering content to teach students how to judge their own work using criteria sheets. In 2007, to engage third year Microbiology students in using criteria sheets for the first time in their degree, we devised an innovative assessment tutorial supported by online resources. We were sceptical of much of the literature that reported 'agreed' characteristics of our predominantly gen Y cohort, because of the older ages of the majority of authors. These authors claim gen Y has a propensity for digital media, overconfidence in their own abilities and a collaborative orientation. We rejected this stereotype when developing the tutorial. Evaluations by students were positive and there was no dramatic change to grades for the unit. These results are similar to those in the literature for non gen Y cohorts. This lends support to our claim that giving students control over their own learning, irrespective of their generational label, is worth the time and effort.

Keywords: *criteria sheets, students judging grades, role play*

Assessment as learning: Engaging students in academic literacy in their first semester

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All assessment across the applied linguistics core courses at the University of South Australia was recently redesigned to respond to the academic literacy needs of all students in the major; this paper reports on the redesign of the assessment in the two courses normally taken by students in their first semester at university. Following a realisation that there was a need for all students (both native English speakers and others) to exit the major with appropriate academic literacy practices, the required practices were evaluated and 'divided up' between the assessment items in the different courses. Thus, the assessment items in one course focus on the development of essay writing and critical reading skills; in another on the analysis of data and the strong development of discipline-specific argumentation techniques. Importantly, these are developed in a way which is integrated with the discipline's body of knowledge and applied to students' specific areas of interest in the courses. Thus, by proceeding through the courses, the students acquire discipline specific knowledge, as well as academic literacy practices, through an integrated teaching and assessment approach.

Keywords*: assessment, academic literacy, applied linguistics*

Not another essay! Transforming assessment in an evidence-based practice nursing unit

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Evidence-based practice (EBP) requires the provision of care that will deliver the best possible patient outcomes, reduce practice variation and be consistent regardless of the clinician, hospital or geographical location. Learning how to apply the complex skills of EBP is therefore considered essential, so that health professionals can base their clinical decision-making on up-to-date and best evidence. This paper explores some of the issues associated with the first iteration of an introductory core EBP subject (unit) for third year undergraduate nursing students at an Australian University in 2007. Specifically, it focuses on the provision of an innovative assessment task for a diverse student cohort. The task was 'not another essay', but a submission for clinical practice change to a hypothetical Director of Nursing. This allowed students to apply their EBP skills in an authentic way related to their future professional practice. Various sources of evaluation data revealed that these students needed more scaffolding than had been provided, notably more explicit teaching and practice in how to apply EBP skills.

Keywords: *nursing, evidence-based practice, assessment*

A model for holistic studio assessment in the creative disciplines

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A key issue facing educators in studio is deciding on what to focus when assessing creative work. Some studio educators highlight that assessment of creative work throws up challenges, because of the very complex nature of getting to the final 'creative' artifact. Whether assessment should focus on the 'process', the 'person' and/or the 'product' in the creative disciplines remains under debate today. In this paper, we present a model developed to guide holistic assessment in studio in the disciplines of Architecture, Art and Design. The model is designed to engage teachers and students in assessing creative practice and focuses on outcome dimensions (product, process and person), knowledge and skills (underpinning content knowledge and core skills) and reflective and professional practice (acting and thinking like an architect, artist or designer and industry capability). The model is based on good assessment practices and a synthesis of findings from a study that explored what these three disciplines appeared to value as the outcomes of learning in studio. As a result, the model is underpinned by a conceptual paradigm that holistically values the person's (well)being, the process and the product; seeing all three as being integral to good learning experiences and outcomes in studio. It also recognises the different emphasis likely in each discipline, given that each of the disciplines privileged different aspects of learning in their publications on studio. Overall, the model acknowledges the different disciplinary perspectives, highlights holistic assessment of learning that is explicit, fair and balanced and is aimed at engaging both teachers and students and good assessment practices.

Keywords: *assessment model, creative practice, studio assessment*

Affecting change through assessment: improving indigenous studies programs using engaging assessment

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Warawara, the Department of Indigenous Studies at Macquarie University offers a degree in Community Management, the BCM, which is a designated program exclusively for Indigenous students. It also offers Indigenous Studies units which are available to all students. The Australian Learning and Teaching Council funded the Leadership in Assessment Project (LEAP) which was first implemented in the Department in July, 2007 and has achieved some extraordinary outcomes in that short time. The leadership provided over the course of the LEAP project has created opportunities to open up previously closed avenues of communication, training and support for Indigenous and non-Indigenous academics working in the department. This has resulted in a gradual but radical change in culture which has improved units of study using engaging assessment as the catalyst. This paper reflects on the processes involved in creating a productive, generative interface in which important issues in Indigenous education may be discussed.

Assessment design to engage students with service learning in the Australian Defence Force

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Universities are continuing to extend the boundaries of learning opportunities. For many years, links with professions have provided opportunities to develop work-related skills and qualities. More recently, universities have explored greater levels of community engagement by their students. Whilst community service is a worthwhile activity, this presentation argues that academic credit should not be given purely for time spent in the community. It is vital that universities ensure that academic learning relevant to professional practice has occurred. The inclusion of service learning as a key component of the University of South Australia's Teaching & Learning Framework reflects this perspective.

- *The framework distinguishes service learning activities from community service with the inclusion of a significant reflective component in the assessment of its service learning courses. Reflection on service learning engages students to:*
- *Take time to critically reflect on activities and increase self-awareness of their personal strengths and weaknesses.*
- *Draw on concrete examples to articulate their strengths*
- *Build a portfolio of experiences for later use, e.g. in applications and interviews.*
- *Identify weaknesses prior to graduation so that students have the opportunity to develop these areas further. This encourages self-direct learning and aids the development of important life-long learning skills.*
- *Explore their commitment to ethics and to explore how they can demonstrate social responsibility, in both personal and professional contexts.*

These concepts are explored by using the course Service Learning in the Australian Defence Force (ADF) as an example. Students select the focus of their assessment by negotiating the specific learning outcome. Their first assessment task is a plan on how they will develop qualities valued in their profession. Reflective pieces are assessed and provide evidence that the qualities were developed. The final assessment piece is a professional development plan that demonstrates principles of life-long learning.

Engaging engineering students in learning how to successfully communicate research plans

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This paper describes an assessment strategy used to engage students in their learning in an engineering research methods course. This strategy drew on the expertise of engineering faculty (content specialists) and learning advisers (academic skills specialists). The paper evaluates the effect of a change in course assessment processes from a set of disparate assignments related to generic research skills, to a set of discipline specific scaffolded assignments which built toward the capstone assignment – the research proposal. We determined that a scaffolded curriculum design and embedded academic skills development - focusing all activities of the research proposal - resulted in better outcomes and a stronger engagement of students with their learning than prior cohorts who did not have the same support.

Keywords: *engage, discipline, embed, scaffold, assessment*

Do students look at feedback or do they just want the grade?

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The importance of assessment in the life of a university student cannot be understated; it drives and directs their learning. If a student perceives assessment as unfair it is likely that student evaluations of teaching will reflect their dissatisfaction. But what of assessment feedback? How important is it? Although much has been written on the essential role of feedback in students' learning, few studies have investigated, from a student perspective, the impact of feedback on students, and the role it plays in students' judgments of fairness. A recent study of university students' perceptions of the fairness of educational assessment has identified that feedback regarding assessment is one of six key considerations university students take into account when deciding if assessment is fair. To attempt to transform assessment and feedback without understanding the student point of view is to miss an important contribution. This paper outlines the significant role feedback plays in students' consideration of whether assessment is fair.

Keywords: *assessment feedback, fairness perceptions, effort*

Engaging educators and students in the roll-out COMPASS™ - a new assessment tool

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This paper presents key results of an evaluation of a project (funded by ALTC), that led the integration of a newly developed competency based assessment tool (COMPASS™) within all 13 speech pathology education programs nationally. As part of the roll-out process, workshops were provided to close to 1,000 speech pathology clinical educators and students were introduced to the new tool through their lectures and tutorials. In order to provide formative feedback in the early stages of the project (end 2006 – early 2007); a questionnaire (designed to elicit both quantitative and qualitative data) was used following the first 6 workshops (214 educators) and after the first lectures to students at 2 universities (145 students). Most educators (95-97%) and students (74-85%) reported understanding the main concepts that inform key components of COMPASS™ (behavioural descriptors, generic competencies, and use of the Visual Analogue Scale). Qualitative feedback indicated a need for further support in relation to understanding the need for direct observation and the use of the Visual Analogue Scale. Toward the completion of the project (end 2007 – early 2008), a similar questionnaire was distributed to clinical educators (33 respondents) and to students in 3 universities (76 respondents). Results continued to be positive for understanding of main concepts for educators (79-100%) and for students (75-92%). An important finding was the close similarity between educators and students in relation to their understandings about the tool, the areas in which they reported wanting more support/training, and the ways in which they would like to obtain further experience. The implications of these findings for the further embedding of the new assessment tool are discussed.

Keywords: *assessment, professional education, speech pathology*

Developing functional feedback: A case study

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It is universally accepted that giving feedback to students is important. But is all feedback functional? Can students use it to improve their performance? Is it being used as a teaching tool rather than an assessment tool? Increasingly the literature is suggesting that feedback needs to be given quickly and students need to be able to use it to improve performance. As a result of poor student evaluation regarding feedback, significant changes were made to the course Physiotherapy Clinical Studies 101. The course is taught as a series of interactive tutorials, with the main aim of the course to teach a reasoning process rather than content. Criterion based assessment forms were developed for the tutorials. At the end of each tutorial there is designated time for interactive discussion and reflection on how the students performed in relation to the criterion. Immediate verbal feedback is given and written feedback is provided on-line within 24 hours. The emphasis of the feedback is to identify areas where students can improve performance and to provide strategies as to how this might be done. The student evaluation of feedback has since risen from being the lowest quartile (as measured by the University Course Evaluation Instrument) to being in the highest quartile. The change in response to feedback has also been reflected in the overall satisfaction of the course which has also moved from the lowest quartile to the highest. Interestingly, this type of feedback has also reduced the overall assessment workload for the tutors as well.

Keywords: *feedback, functional, criterion based*

Collaboration in designing assessment tasks and feedback: From foundation to professional development

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Reflective practice is an important skill within the health care professions, and an important, generic development in undergraduate programs. The Medical Imaging program at Curtin University is no exception, and encouragement for students to reflect upon their developing clinical practice abilities is an important component of the clinical program. From a clinical observation period in the first year, which follows on the foundation communication unit, through to the final, largely clinical year of the program, reflection on practice is developed. Many programs at Curtin University of Technology include a first-year foundation unit in communications as preparation for further studies. This paper outlines the collaboration that has developed between the leaders of foundation communication studies and a health care program in establishing students' reflective abilities. The foundation program, over the course of the semester, provides successive writing opportunities that receive early formative feedback leading towards a final summative assessment. At the end of the semester students are required to reflect on their learning through a reflective writing process, with the aim of encouraging their metacognitive understanding. One of the issues that has consistently been raised – and contributed to limiting the use of reflective writing as a formal assessment item – is how it should be assessed. The outcomes of a study where different levels of reflection have been defined as four broad categories has been used to establish a grading framework for both the foundation unit and the professional program. These levels are labelled 'non-reflection', 'understanding', 'reflection' and 'critical reflection', and clear descriptions of each level support the nature of feedback students receive.

WITHDRAWN

Automating formative and summative feedback for individualised paper-based accounting assignments

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This paper reports on the rationale behind the use of a unique paper-based individualised accounting assignment supported by a facility developed by the author utilising Microsoft's Excel spread sheeting tool. As students worked towards completing their assignment, the package provided each student with feedback on the accuracy of selected items in their solutions to a rule-based accounting problem. This immediate formative feedback provided sufficient indicators for the student to identify they had made an error and provided encouragement for the student to take appropriate corrective action until they were satisfied their answer was correct. Pedagogically, providing students with immediate feedback has been shown to enhance the acquisition and retention of knowledge from the learning process. Once the student was satisfied with their work, their submission was automatically marked by the assessment package according to the pre-set marking scheme. The marking package generated a detailed summary providing important feedback to students clearly identifying correct answers and specific problem areas enabling the student to review these aspects. The package also provided feedback to the teacher identifying the cohort's performance on each item in the assessment.

Keywords: *individualised, automated, formative feedback*

The role of participatory action research in leading the development of engaging assessment

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The Australian Learning and Teaching Council funded project Leadership and Assessment: Strengthening the Nexus succeeded in building the capacity of a group of cross-disciplinary leaders to create effective and engaging assessment practice. A Participatory Action Research (PAR) methodology underpinned the project. This paper presents an evaluative perspective on the methodology and process of PAR and its role in the assessment focused action research projects across thirteen departments in one Sydney metropolitan university. It also outlines the range of outcomes achieved across the multiple of the organisation (unit, program, department and faculty). Multi-phase development initially included three departments in the project with Action Research Enablers leading the initial "assessment profile" in their department, supported by an "influencer". The Action Research Enablers formed a community of practice known as the "Leaders in Effective Assessment Practice" (LEAP) group (also presenting on this panel), and this community grew as each subsequent phase was rolled out. At each phase of the project a scholarly approach was adopted to developing new and engaging assessment practice. Individual and collaborative reflective practice informed the identification of theoretical models for leading assessment, informed strategies, aided development of tools used in each department, and informed the evaluation framework. The paper provides examples of the many outcomes that have been achieved including intended project outcomes such as profiling assessment, introducing new and engaging assessment practices and new policies. In addition to the planned outcomes, serendipitous outcomes include the acknowledgement of the leadership capacity of each Action Research Enabler in driving assessment change across the organisation, as well as many additional outcomes resulting from drawing on the synergies made possible by an organisational academic restructure and a corresponding shift in the culture of assessment across all levels of the university.

Keywords: *assessment, Participatory Action Research, leadership*

Sowing the seeds

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Reasons for wanting to engage learners more directly in assessment are plentiful. These include the ability for learners to make judgements of their own work, as this capacity will be essential for learners' future lives and careers (Boud & Falchikov, 2006). Excellent guides on how and why this might be done already exist (Falchikov 2005). A puzzle exists, therefore, in why we see so little evidence of assessment practices that engage the learner more directly. To encourage the wider adoption of these practices we must understand the challenges teachers face when considering significant changes to assessment. There are good reasons for believing that the most effective way to transform assessment practices would be to take a whole-of-program approach, with decisions about what, how, and where something is assessed being made after careful consideration of the program's structure and intended learning outcomes. Whole-of-program opportunities, however, are infrequent, and even when they occur, they are not always recognised as opportunities for major refocusing of assessment. The reality for most courses is that choices about assessment are made by teachers on a local basis, within their subject silos, and without much consideration of program-level issues. This paper focuses on ways of engaging teachers in discussion of assessment using the work of Rust, Price & O'Donovan (2003), and of Boud & Falchikov (2006), to develop activities that engage the student directly in assessment by developing their ability to provide and respond to feedback. Contextualised support for teachers undertaking changes to assessment can be very effective in helping teachers negotiate the inevitable missteps and hiccups of unfamiliar assessment activities. This support is also sowing the seeds for a future occasion when their developing understandings of assessment can be employed to influence choices about assessment when whole-of-program opportunities arise.

Keywords*: graduate attributes, assessment criteria, feedback, whole-of-program responses, subject silos*

The confidence levels of course/subject coordinators in undertaking aspects of their assessment responsibilities

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This paper reports the findings of an investigation of the confidence levels of course/subject coordinators in undertaking aspects of their assessment responsibilities at a large metropolitan university. The investigation was one element of a situational analysis which formed the first phase of a broader project aimed at supporting the leadership capacities of course/subject coordinators as assessment innovators. This group was targeted because, though significant in the implementation of institutional assessment policy, the role is scarcely researched despite it being highly likely that improved performance would benefit student learning. Confidence is considered central to the ability to learn about, and master, new practices and was identified as an issue for this group through an earlier pilot conducted by of one of the project team. The investigation took the form of an online survey of all course coordinators (response rate 33%). Survey items were developed from the responsibilities and expectations either explicated or implied in institutional policies and rules. The survey identified areas of particularly high (e.g. making and defending summative judgements) and low (e.g. dealing with plagiarism and locating support when needed) levels of confidence. This paper reports survey findings in relation to individual items as well as the influential factors that emerged from analysis and the correlation of particular factors with demographic data such as years of experience and gender. In addition, coordinators provided open-ended comment, the analysis of which was used to elaborate on or clarify particular findings in relation to their positive or negative impact on confidence. The project was funded through the Fellowship Scheme of the (Australian) Carrick Institute for Learning and Teaching in Higher Education.

Rethinking problem-based learning to better understand what and how students learn

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This paper argues that problem-based learning (PBL) is an effective learning strategy in a management discipline, where learning how to think critically and how to problem-solve 'messy' situations, are core principles for the future of management (Hamel, 2007). This paper reflects upon and explores the facilitation of a student-centred problem-based learning approach in a postgraduate business course. The focus of this reflection is guided by the goal to explore the nature of individuals' experiences with learning and teaching in a PBL setting. Of particular interest is the identification of basic indicative factors that can impact on the assessment of problem-based learning. Being able to articulate these factors is an important step in guiding tertiary educators' scholarship of teaching and in assisting others gain knowledge of PBL facilitation and assessment. The study investigates: (1) how students experience the PBL context (2) student perceptions of PBL assessments and (3) what type of learning arises from PBL assessments. Examples from a Masters course designated as problem-based learning are provided as initial empirical data. Further, the paper briefly describes an interpretative evaluation of the problem-based teaching and assessment system conducted using narratives from the students' reflective-learning journals.

Keywords*: problem-based learning, postgraduate learning, management creative thinking tools*

Engaging students: encouraging success

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New university students need to enjoy early academic success to engage fully with their learning community from the start of their first year. Yet in the first few weeks students are so overwhelmed with new experiences and demands that they can misread the learning environment and underestimate the relevance of early attendance and assessment to their final grades. Students unaccustomed to managing their own study can find their focus easily directed away from assessment. The 'Supporting students at risk'(SSAR) strategy is an initiative within the Division of Information, Technology, Engineering and the Environment (ITEE) and supported by the Learning and Teaching Unit (LTU) at Mawson Lakes campus of the University of South Australia. Through SSAR student attendance and their early results in core first year courses are monitored. Those who may be struggling are contacted and encouraged to adopt study and personal management strategies that will increase their chances of success. The strategy has a clear focus on providing options and support to foster success in assessment. This paper describes the implementation of SSAR in the new common first year engineering program in 2008. In particular it examines the student response to this early intervention and its impact on their performance in assessment.

Keywords*: assessment, engineering, students at risk, first year experience.*

Academic diversity: What's good for students with disabilities is good for all students

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The Australian Disability Standards for Education (2005), ancillary legislation to the Disability Discrimination Act (1992), obligate education providers to accommodate students with disabilities so they can participate equally with their non-disabled peers. At present, such accommodations or adjustments to assessment are generally ad hoc; something extra that academic staff are expected to engage with, rather than a standard part of their teaching practice. To help embed the Standards into academia, in recent times, higher education disability practitioners have embraced the drive toward a more universal design model. In this approach, assessment becomes inclusive and far less ad hoc. Shifting away from individualized learning and teaching practices, inclusivity or universal design, encompasses the needs of a diverse student cohort, of whom students with disabilities are but one group. As a contemporary approach, literature pertaining to the theory of academic diversity is not surprisingly limited and therefore provides little guidance to academic staff about how they can design their courses in ways that make them broader and more flexible. This paper serves to address five key issues related to the existing gap in the literature and the subsequent necessity to meet legislative requirements that, although are specifically targeted at students with disabilities, will benefit all students once employed. The first issue identifies the importance of understanding the context of disability in higher education and the functional implications for creating inclusive assessment. Secondly, the worth of understanding and actualising what is meant by "inherent requirements" in course design/delivery will be addressed. The third issue considers the need to effectively consult, problem solve and develop reasonable adjustments that conform to proven assessment methodology. Fourthly, the requirement for internal assessment policies to reflect external legislation, whilst ensuring academic integrity is not compromised will be discussed. The final issue will explore professional development opportunities to facilitate a move toward academic diversity in learning and teaching.

Use of assessment in professional learning of project managers: A practice-based approach

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Project managers require technical expertise and a body of knowledge, but like all professionals, professional practice requires a much richer set of phenomena; a capacity to make judgments, sensitivity to intuition and an awareness of the purposes of the actions are all involved (Beckett & Hager, 2002: 12). This paper introduces an integrated assessment model developed within a project management discipline stream in a Construction Management course. Following Boud and Falchikov (2007) this model starts with practice, that is, the actual 'doing' of project management as the basis for shaping assessment that equips students to learn for the rest of their lives. A practice-based approach can be usefully interrogated for an understanding of how professionals learn. Practice theory as advanced by Gherardi, 2006 and Nicolini, Gherardi and Yanow, 2003 provides a framework for exploring individuals' social engagements within their settings and in understanding the development of knowledge in those settings, as they occur. This approach opens the way for assessment that engages with, and cultivates certain kinds of professional learning and identity formation. Integral to the model is the non-linear and overlapping roll out of assessment activities; fluid student groupings and an enduring self and communal reflection. The paper concludes that the use of an authentic and integrated assessment model creates a compelling learning environment that contributes meaningfully to the development of skills, knowledge and identities for future professional learning.

Engaging speech pathology students in design and validation of competency based assessment in the workplace

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COMPASS™: Competency based assessment in speech pathology *is an assessment tool designed and developed through a process that included student engagement. This paper will describe why student engagement was initiated, how it was facilitated during project design and validation, and the outcomes of this process. Student opinion regarding the assessment design and process will be described and compared to feedback from clinical educators. The congruence between these perspectives will be highlighted and implications for assessment design and promoting learning in the workplace discussed.*

Keywords: *assessment design, lifelong learning, professional education*

An inclusive assessment practice: Student engagement through feed-forward and feed-back

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The purpose of this paper is to explore the possibilities of an inclusive assessment practice that assists students from diverse backgrounds in effective engagement with feedback provided on their written assignments. The particular focus is on their development of evidence-based writing in the tertiary research environment. The strategies examined include: the development of the skills of gathering information; critically evaluating their sources; analysing, categorising and synthesising their data; and communicating their findings in an academically acceptable manner. Student engagement is provoked through a system of feed-forward and feed-back by the use of assessment rubrics that identify and reward specific aspects of evidence-based writing. Criteria provided in the rubric serve firstly to feed-forward, i.e. provide explicit information to guide individual aspects of student academic writing – including the number and quality of sources to be cited and the manner in which these sources should be critiqued. Secondly such rubrics can serve as assessment cover sheets to be used for instant feed-back in terms of a student's level of attainment against each of the criteria. The approach provides a means of integrating the development of academic writing skills into the core curriculum, in order to accommodate both international and local students from diverse backgrounds. It supports an apprenticeship model of learning for inducting students into the purposes and values of research skills and evidence-based writing in the tertiary research environment. The process is based on the author's work in supporting the tertiary writing skills of local and international students, and is proposed as a holistic, curriculum-based alternative to remedial support for students from culturally and academically diverse backgrounds.

Student engagement through assessment in Applied Finance: evaluating assessment changes at UniSA

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This paper discusses the form of and rationale for changes made to assessment structures of final-year courses within the Applied Finance program at UniSA. It also evaluates their impact in terms of student course evaluations and completion rates. Its main contributions are to demonstrate the benefits of reflective practice and the impact of choice of assessment structures within the Finance discipline. The revision of assessment structures was undertaken following our completion of a UniSA Assessment Development Grant (2003-04). Our aim was to determine how to assess to better develop the UniSA Graduate Qualities associated with the characteristics most required of Finance graduates. This required assessment activities that encourage student engagement and attainment of higher-order cognitive outcomes within Bloom's Taxonomy (deep learning). Analysis supported greater use of individual and group presentations, research reports, and open-book exams. These forms of assessment: encourage development of lifelong learning, and verbal and written communication abilities; need not detract from the heavily quantitative emphasis required in finance; and are consistent with assessment that meets a range of regulatory requirements for professional licensing, and also with industry/professional body exams. Changes to assessment in final-year courses were made to embody these ideas. Changes to assessment practices in these courses have been associated with several positive outcomes. First an improvement in student success rates, with a significant reduction in course failure, without reducing either the range or level of material covered in each course. This suggests significantly better student engagement with course content. Second a significant increase in the level of student satisfaction with these courses, as determined through increases in scores achieved in Course Evaluation Instrument survey results. Students are more positive about their learning outcomes, providing additional support for the argument that greater student engagement resulted from this process.

Keywords: *student engagement; graduate characteristics; assessment in finance*

Assessment of collaborative learning in online discussions

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This paper will examine how an online forum can be used in work integrated learning as a vehicle for students to demonstrate their learning in the workplace and to facilitate collaborative learning. Collaborative learning is valuable in work integrated learning subjects because it enables students to make linkages between their experiences and those of others, share positive and negative aspects of placements with their peers and gain an overall picture of work in the relevant sector. It also enables students to demonstrate to their peers what they have learned. Collaborative learning can be readily facilitated in face to face classes, for example, in teacher or student led discussions or by means of student presentations. However, where a work integrated learning subject is offered to external students or where face to face classes are minimal, the collaborative aspect of student learning needs to occur by other means, such as an online forum. The use of an online forum can also enable students to demonstrate their learning by reflecting upon their work and self evaluating their own performance. This paper will review the literature regarding the benefits of using online discussion forums to promote collaborative learning and reflection and the design and assessment of such forums. Despite the value of online discussions in work integrated learning, it has been argued that a truly objective tool to measure learning evidenced by online discussions has not yet been developed. This paper will suggest a model for assessable online discussion forums that will facilitate student collaboration in legal work placement subjects.

Keywords: *online discussion forum; assessment; technology; work place learning, work integrated learning; collaborative learning; collaborative refection; legal internship*

Engaging students with higher order learning (or not): insights into academic practice

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Assessment is recognised in the literature as a driver of student learning; framing how they engage in and prioritise their learning. With this growing recognition, a plethora of literature has emerged about how to improve student experiences of assessment in universities. While the development of higher order skills of analysis, synthesis, evaluation and creation are espoused in the literature of good assessment practice, how well represented are they in the teaching and learning practice of academics? This paper reports on the environmental scan undertaken as part of a wider study into the use of technologies to support assessment of higher order learning at an Australian university. The scan surveyed 133 academic staff to canvass the scope of the learning outcomes being addressed and how they were being assessed.
The initial findings from the scan indicate a predominance of lower order learning outcomes, raising questions about academics' understanding of:

- *The processes underpinning higher order learning*
- *The design of learning outcomes to include a focus on higher order learning*
- *The development of assessment strategies to support higher order learning.*

The challenge for academics in engaging students more actively in their learning lies in addressing the predominance of lower order and the paucity of higher order outcomes at all levels, from first year to post-graduate level.

Keywords: *assessment, higher order learning, learning outcomes.*

Constructing authentic assessment that links students to professional practice from day 1

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The 2008 Bachelor of Public Health and Health Promotion cohort are the focus of an innovative approach to student engagement. A new level 1 unit deliberately seeks to link students into their future professional work practice from day 1, while also building an understanding of the knowledge and skills set they will require to address current and emerging population health trends. Constructing an authentic assessment strategy has been pivotal to the process. Incorporation of targeted field visits and a real world process for sharing the learnings from these visits has been enthusiastically embraced by students. Requiring students to link what they have learnt from the field with an exploration of core competencies (Keleher and Joss 2007), and the development of a structured approach to reflective practice (Johnson and McDougall 2007) has also worked. Attempts to build functional teams that replicate the collaborative practice typically required within organisations/networks have however been mixed. The unique method utilised for allocating students to teams and topics was effective, but the inquiry learning approach implemented to explore topics engaged most but clearly not all students. Some teams utilised the university's eLive virtual meeting space to work on their projects but there appears to be no correlation between eLive usage and the quality and sophistication of final submissions. The impact of the assessment strategy on student engagement, and demonstrated student attainment of knowledge and skills has been measured periodically during the semester through a range of methods including anonymous surveys, observation, online student feedback, and analysis of student journal entries. This data provides valuable insights into what works and what doesn't in constructing an authentic assessment strategy that engages students with context and professional practice. An overview of the assessment strategy, links to relevant literature, and an analysis of the data will be presented.

Moderation assessed: policies and practices

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This paper reports on work in progress at an Australian university which aims to develop an improved understanding of the gap between policy and practices in the moderation of assessment. The research comprised two discrete phases. The first phase aimed to quantify the gap between moderation policy and current practice in a sample of 364 units. This established broad consensus that policy was in the main reflected in practice, but brought to the surface a number of issues relating to clarity of communication, workload and the need for professional development in this area. The second (and current phase) is aiming to support the enhancement of existing moderation practices through the provision of targeted funding for units that have more than 100 students enrolled. 19 unit coordinators (representing 7,853 students) are currently drawing on this funding to improve moderation processes with a view to establishing examples of effective practice. Interim results concur with a substantial body of literature suggesting that the moderation process can be enhanced by supporting the development of a broad consensus between markers with respect to assessment standards. Further research is needed to establish the extent to which moderation processes improve or impact on the formative and summative dimensions of assessment.

Keywords: *assessment, moderation*

Letting students teach and learn using YouTube e-clips

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This poster presents the trial of a new assessment activity to engage students. Students created short (3 minute) online movies about the content they were learning and shared their products (e-clips) using YouTube. A YouTube 'channel' was created for the course. Students' e-clips were linked to the course channel by tagging them as 'favourites'. Moderated tutor assessment of the product [e-clips} for accuracy and problem-solving skills was conducted and recorded using online conferencing software. After viewing the e-clip, each assessment criteria was subjected to anonymous voting by tutors. Feedback was discussed verbally and comments were recorded using text chat. Peer assessment of the e-clips for engagement and their impact on student learning was also undertaken using online conferencing software. An evaluation of students' reactions to creating publicly-available educational material as a form of assessment activity was also conducted.

Key words: *YouTube, online conferencing, moderation, peer assessment*

Developing assessment for service learning in business

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The teaching and learning framework at the University of South Australia identifies student engagement through experiential learning and Graduate Qualities as central to enabling students to develop the knowledge skills and attitudes to succeed as a professional. Assessment is the key to ensuring these attributes are developed, and each assessment item at the University must be explicit about the Graduate Qualities integral to each assessment item and provide feedback in relation to the development of these qualities. Service learning has been identified as a dimension of student engagement through experiential learning, together with practice-based learning and teaching-research nexus. A pilot study introducing service learning into the practicum component of a business program (Sport and Recreation Management) is in progress. The project team includes discipline-based academics and supporting academic staff from the Learning and Teaching Unit. This describes the logic, process and rationale for the development of assessment for service learning in a suite of business courses with reference to the Graduate Quality Framework at the University of South Australia and service learning indicators.

Assessing graduate attributes: Engaging academic staff and their students

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The expectation that graduates are able to demonstrate the attributes needed for learning, work, and life is shared by employers, the community and graduates alike. Universities have accepted and responded to this expectation by defining a list of desired graduate attributes, requiring that these are embedded in all university programs. This focus on teaching and assessing graduate attributes over the last decade has proven to be a major challenge for universities, since academic staff finds changing their assessment practices one of the most confronting tasks they face. Thus, assessment of graduate attributes is proving to be an indicator for uncovering the challenges behind this work, namely academic staff beliefs about graduate attributes and learning and teaching. Assessment is proving to be the litmus test of what academic staff value as the outcomes of their teaching. In this paper, we draw on the literature to present an opinion piece that summarises the drivers for assessing graduate attributes, outlines progress to date, identifies and acknowledges the 'elephant in the room', namely the role that academic staff beliefs about graduate attributes play in their approach to teaching and assessing these, and considers the impact of these beliefs on staff engagement in an informed and pedagogically sophisticated way in assessing graduate attributes. Only when the custodians of the curriculum, namely academic staff, engage deeply in this work can they ensure the engagement of their students in developing the attributes they need, to be what they want to be.

Keywords: *graduate attributes, academic staff beliefs, assessing attributes*

Using 'MasteringBiology' to formatively improve student engagement and learning in first year Biology

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Undergraduate students lacking prior learning in a particular discipline area often struggle with subject content and in particular with complex processes or the application of concepts. Consequently, such students may not engage as fully with their learning as students with prior learning. This paper describes the implementation, into a first year biology subject, of a 'Socratic' online learning and assessment tool, MasteringBiology®, to ameliorate the learning discord for students without prior learning in biology. There were a number of very positive outcomes to the implementation, including significantly higher grades on routine assessments for students completing MasteringBiology®, both within and between years, and higher final exam grades. Further, in spite of the increased workload, a high proportion of students engaged with the process of integrating prescribed textbook readings together with pre-lecture, online, formative assessment. Additionally, a high proportion of students considered the combination of readings and pre-lecture assessment to provide reasonable or excellent preparation for lectures and weekly summative assessments. The integration of this type of learning technology, which combines both tutorial and assessment approaches, provides considerable scope for increasing the engagement of students in large enrolment subjects, and enhancing the learning experience for all students, regardless of their degree of prior learning in a particular discipline area.

Keywords: *engagement, assessment, feedback, learning*

Establishing a multi-dimensional quality framework for assessing workplace learning

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Work-based learning, known as Work Integrated Learning (WIL) is a signature component of study at RMIT and takes many forms including business projects, field work, practicums, and co-op years. These WIL programs components are integral to the creation of 'work ready' students which necessitates learning activities and assessments where industry needs and students' professional development are aligned and of paramount importance. Work Integrated Learning (WIL) learning experiences embed personal development and ensure that 'work readiness' is the product of both professional and generic requisite capabilities. Innovative assessment practices that use industry and academic supervisor feedback, student peer review and student mentoring were identified. This presentation summarises and discusses an assessment activity work-based learning mapping exercise that involved an exploration of a diverse suite of existing practices designed to suit a range of professional and program needs. An in-depth evaluation of assessments and associated capabilities in a sample of WIL courses in the Business Portfolio at RMIT University was conducted. Common attributes of WIL assessments embedded within curriculum, such as the type of assessment tool, capabilities and stakeholder involvement, were used to develop a holistic picture of assessment tools and delivery attributes in the field. A natural extension will be a framework that will serve as a guide for academic staff involved in measuring workplace learning and developing innovative assessment tools.

Key words: *workplace learning; assessment; student capabilities*

Assessment in Australian universities: What they say they do to engage students

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There are as many guidelines for good assessment practice as there are educational institutions to write them. Many Australian universities make publically available statements as to their view of good assessment practice. There are clear consistencies between these guidelines and current thinking world-wide. However there are also outliers – attributes 'voted for' by only a few universities. Both mainstream principles and the outliers hold some interest. The purpose of this research is to collate the publically available assessment guidelines from the majority of universities in Australia to determine a consensus view of the most important assessment principles, particularly with respect to engaging students, and the degree of support given to each principle by the universities. These data raise many questions that need to be examined in future studies.

Keywords: *assessment guidelines, university assessment, assessment principles*

Using video analysis software to develop managerial tasks and reflective practice in physical education university students (Poster)

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Barnett's (1989) model of 'reflective thought through action' highlights the importance of reflective observation of an event in order to plan and implement positive behavioural changes. Video analysis has been used for this purpose in universities for some time; however recent developments in camera technology, motion and performance analysis software in sport science are now able to support the superior learning outcomes of improved teaching skills through critical self reflection. The current software has features that work with digital images to allow students to code, annotate and export sections of referenced video footage to enable them to make qualitative and quantitative analyses of their teaching performance. This poster compares the managerial tasks and depth of self reflection of 3 groups of second year Bachelor of Health and Physical Education students delivering two 15 minute teaching episodes. One group (n = 15) used the software to review video footage of both episodes, a second group (n = 15) had access to video footage only for the first episode and the software for the second episode, and the third group (n = 16) had access to the software and video footage for the second episode only. Initial results indicate that this is an effective strategy for developing deeper reflection in beginning teachers. In addition, the software motivates students to identify and implement effective strategies for the improvement of lesson management tasks. The software is now being trialled in other units across a range of disciplines within the University.

Testing the applicability of a four-way typology of feedback in the university setting

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While aspects of teaching and learning vary by context: preschool, school, higher and further education - there are also commonalities across all sectors in the characteristics of good teaching. Research conducted as part of the ongoing NSW ACE/Minister for Education and Training Quality Teaching Awards (QTA) has confirmed that the higher order attributes of good teaching apply equally to teaching the very young and to postgraduate students and everyone in between. Meta-analyses by John Hattie of research conducted on predictors of student outcomes in school settings has demonstrated that one of the most powerful predictors of student learning is feedback, with effect sizes that can exceed 1.00. This effect can be both positive and negative, with effective feedback leading to beneficial student outcomes and ineffective feedback hampering learning. Hattie has proposed a four-way typology of feedback, with each type differentially affecting aspects of student learning. A pilot study was conducted at Swinburne University to test the applicability of the typology to the university setting. A random sample of examples of written feedback given to students was collected and content analysed using Hattie's four types. Results suggest that the typology can be validly applied in the university setting.

The effect of learners' perceptions of ethnicity, gender and qualifications on assessment

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This study aims to determine whether different perceptions of ethnicity, gender and qualifications (academic background) of the learner, provide an explanation of assessment. More specifically, we test if the learner's ethnicity, gender and qualification provide an explanation to the way the learner believe that they are going to be assessed by the teacher. This study involves consideration of ethnocentric, gender and pre qualifications bias evident in post graduate students undertaking accounting related courses. The study applies both qualitative (i.e. interview), and quantitative (i.e. online survey) approaches. Initially, a quantitative pilot study will be carried out to collect data from all students enrolled in four courses and their perceptions of assessment, followed by an interview by a sample of students to demonstrate that:
(a) that learners' perception of assessment conducted by the teacher is influenced by their gender, ethnicity and qualification and
(b) this perception has been formed through their own ethnocentric, gender bias, together with their academic background.

Key words: *ethnicity, ethnocentric, gender bias, qualifications, learners' perceptions, student evaluation of assessment*

Assessing a virtual law placement - from concept to trial

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This paper introduces an innovative model for work-integrated learning using a virtual paradigm – The Virtual Law Placement Unit at University One. The teamwork, communication and leadership skills developed through collaborative learning are especially important in the context of learning for workplace transition, as opposed to mere knowledge accumulation. This Unit has been designed to offer students the opportunity to develop those skills in completing an authentic workplace task under the supervision of a real-life workplace mentor, where student- student communication and student-mentor communication are all conducted virtually (and potentially asynchronously) to create an engaging but flexible learning environment using a combination of Blackboard and SharePoint technologies. This paper will outline the online collaborative learning tools being utilized in the Virtual Law Placement unit and the assessment tasks and criteria being created to support its pilot offering in semester two, 2008.

Online simulation: Innovative strategies to promote student engagement in learning and assessment

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There is increasing interest in the use of simulation for the teaching of clinical skills and decision making amongst nursing, medical and allied health professional students. However, with a single human simulator costing as much as $500,000 AUD and many students studying via distance education, it is useful to explore alternative simulation approaches able to be delivered online to large numbers of students. This paper describes the Online Simulation project which uses a combination of video and text to simulate the health care workplace. Nursing students were provided with clinical decision making activities and then, according to their decisions, directed along complex, non-linear learning pathways as the condition of the simulated patient evolved according to the decisions made. The Online Simulation project focuses on nursing assessment and cross-cultural health care and demonstrates the use of effective strategies for student engagement. The Online Simulation project has been evaluated using a multifaceted evaluation framework, based on the work of Agostinho et al. (2005). The results of the evaluation are reported in the context of a broader discussion, related to the general use of online simulation in higher education. The implications of the Online Simulation project extend beyond nursing, as the approach used has the potential to be applied across multiple disciplines and professions.

Keywords: *e-learning, scenario based learning, simulation*

Online learning techniques: Using wikis and blogs for assessment in first year engineering

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In 2008, The University of South Australia introduced a common first year course for all engineering students called Sustainable Engineering Practice (SEP), which gives students an insight into the disciplines of engineering and emphasises the skills required for working in multi-disciplinary teams. The course introduced students to the profession of engineering and how it is practised within a sustainable context. The major assessment task for the course was the Engineers Without Borders (EWB) challenge, and for the first time, wikis and blogs were used as assessment tools to evaluate student progress in meeting the course objectives. The purpose of using online wikis and blogs was to ask students to reflect on industry interactions, SEP course content, and self-awareness exercises and evaluate their individual contributions to the group EWB project. The paper will consider some strengths and weaknesses of the on-line pedagogy, and discuss proposed future developments.

Keywords: *wikis, blogs, online assessment*

Why wikis work: assessing group work in an on-line environment

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The emergence of effective contemporary on-line learning and assessment environments is well documented. In semester 2, 2007 first year Bachelor of Oral Health (BOH) students at Institution Name undertook a group research assignment using Wikis as the platform for their projects. A major aim of this project was to create a learning community which promoted collaboration rather than competition, and which provided a flexible environment where a social and interactive approach to learning could be fostered. It also provided an opportunity to use the Wiki on-line learning tool as a means to formatively and summatively assess both the student's individual and group work contributions. Further to this, there is growing evidence that Wiki-style technology supports collaboration and communication in on-line group work and provides an accessible repository for shared resources and readings As a social learning tool, the Wiki promotes a constructivist learning experience whilst enhancing student engagement. Initial post-project evaluation indicated a significant increase in students' knowledge, skills and confidence in using Wikis for group-based learning, with an associated rise in the percentage of the cohort who rated the on-line learning experience as highly positive.

Keywords: *online assessment, wiki, group-based learning*

“The question is a bit vague, I don’t know what to do.” Addressing ambiguity and uncertainty in assessment.

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Despite intensive efforts by university teaching staff to ensure clarity of purpose and intent in the design of tasks for assessment at undergraduate level students frequently misinterpret or fail to understand the requirements. This paper examines efforts made in an undergraduate course in Public Relations over four years (2005 -2008) to address the pedagogical, administrative, and emotional aspects of this problem for both teaching staff and students. It uses and applies communication theory and principles to assess some of the possible causes of the disconnection between the intent of the assignment designer and understanding of the requirements for the task by some students. The paper discusses the assignment tasks, and the particular efforts made to clarify and explain the assignment requirements to a large and diverse cohort of students. These efforts include redesign and reframing of questions, the introduction of specific assignment ‘briefings’ and the development of online learning resources, including assignment guides and discussion forums. The paper examines issues arising in this process in the context of the requirement at university level to develop skill in critical analysis, problem solving and independent thinking in students. It also examines some of the issues that arise in assignment design relating to the appropriate amount of information required by students to address uncertainty and undertake assignment tasks with confidence.

Are we speaking the same language? Student and staff perception of assessment in a teacher preparation course

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Assessment is a significant and complex issue in teaching and learning, particularly in higher education contexts. It has many forms, serves diverse purposes, is defined in different ways and involves a range of stakeholders who may hold quite different positions, expectations and perspectives. The study this paper reports explored the perceptions of assessment held by students in the context of a Bachelor of Education course, preparing teachers for kindergarten to year seven settings. It also investigated the beliefs, practices and perceived outcomes related to assessment as reported by the staff involved in teaching in this program. Finally, the data from both of these perspectives were related. These data were collected through systemic student evaluation processes regularly conducted as part of university accountability structures, self-directed student focus groups, on-line discussions, staff focus groups and written reflections. The study found that whilst the students' perceptions of the process and intent of assessment practices within the course were sometimes well aligned with staff perceptions there were also significant differences. These findings have implications for the way assessment is conducted in higher education contexts and for the way the intention of that assessment is communicated to students. Given the importance of assessment in the context of higher education, this also has implications for students' level of satisfaction with their university experience.

Counting words is worse than counting sheep

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For most academic staff specifying the word count or word limit is an automatic component of designing written assessment tasks. However the meaning and interpretation of these word counts is not always clear to students. Consequently debates and even disputes arise sporadically between staff and students over "the number of words". These disputes may seem, but are not in fact, trivial. They arise from a number of underlying factors including changing technologies and changes in the demographics of the student population, and can have a significant impact on student engagement. This paper traces how these issues have arisen and suggests a range of solutions.

Wanted! Evidence based guidelines for unseen invigilated examinations

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Assessment has been the subject of vast amounts of literature in higher education for at least the past two decades. In undergraduate health science and science courses assessment of practical classes or clinical performance are quite common assessment components for students. Additionally, assessment components also frequently include unseen, invigilated, timed examinations. They are widely used to summarise what students know at certain times i.e. assessment of learning, in order to report achievement and progress. This is in spite of extensive literature around engaging students in assessment for learning through coursework assessments, particularly in the context of group work. This paper explores aspects of unseen invigilated examinations, such as their alignment with 'traditional' as opposed to 'alternative' assessments, the use of multiple choice questions, whether of a lower or higher cognitive level, the mix of multiple choice questions, short answer and essay questions used in papers, open book versus closed book papers and argues that there is a need for the development of evidence-based guidelines or principles which help guide and inform practice for the construction of unseen invigilated examinations.

A student vote for alignment in experiential placements: Curriculum design to meet the challenge

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There is little literature available to describe student evaluation of clinical practice and the determinants of quality experiential learning. Consultations with key stakeholders interviewed in an Australian Learning and Teaching Council (formerly Carrick Institute) grant, indicated qualitatively considerable agreement among various stakeholder groups about indicators for quality experiential placements. Quality indicators were ranked during a student workshop. Students value placement sites which provide sufficient, varied and ethical learning experiences, which involve a patient centred approach and positive working relationships. The site should offer high professional and ethical standards and value their educative role. Preceptors should be enthusiastic and welcoming and facilitate learning. They should also encourage questioning and the student's own pursuit of learning, allowing students to have a go and assign time for discussion and feedback, which should be honest and constructive. The students should have a positive, professional and ethical attitude and enthusiasm to learn from the placement situation to maximise learning. To facilitate students being able to engage in a quality placement the university needs to ensure students are well prepared for the placement. Clear placement outcomes and clear aims linked to assessment tasks were also viewed by students as essential aspects of quality placements.

Software as a facilitator of graduate attribute integration and student self-assessment

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*The rhetoric about the benefits of an educational focus on graduate attributes has been in evidence in the educational literature since the early nineties. But an identified gap between attribute mapping in documentation, and the inclusion of graduate attributes in assessment, is a current concern for higher education, government and industry associations. In 2002 the author developed online criteria-based assessment software (*ReView), together with a process involving a 'bottom-up' reconsideration of the constructive alignment of assessment tasks. This was part of a University of Technology Sydney (UTS) School of Design initiative to integrate graduate attribute development through the assessment of student work. The time-saving features of the online software and the engagement of students in self-assessment were significant parts of the success of this approach. Pilot schemes in a range of contexts using both the process and the ReView software led to an ALTC funded project with business faculties at four Australian universities. One of the aims of this project is to facilitate the practical integration of criteria-based assessment linked to graduate attributes. Another aim is to enhance awareness, of both staff and students, about graduate attribute development across subject boundaries and throughout the years of a program of study. This paper attempts to clarify some graduate attribute terminology issues and identifies problems with 'top-down directives' about graduate attributes. An outline of the process used in the aforementioned ALTC project is followed by a discussion of both positive and negative feedback from research results to date. The paper also describes the ReView online criteria-based assessment software used to facilitate graduate attribute integration and student self-assessment.*

** An article about the first version of ReView was published in The Australian, 10 December 2002 - IT Section 'Online marking speeds University Results'.*

***Keywords**: graduate attributes, student self-assessment, online criteria-based software*

Student Engagement Swap Shop: Where speed dating meets teaching and learning

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Have you had a teaching experience that really engaged your students that you would like to share? Would you like to hear others' stories of what has worked for them? Then you need to schedule in participation in a Student engagement swap shop. Prior to participating, participants need to complete a short description of their engaging teaching and learning event. A pro forma (~1 page) will be available to guide description of various elements of their context and approach. At the workshop, participants are separated into groups of five to six. Each member of the group has five minutes to talk to their colleagues about their engaging teaching and learning experience. A further five minutes is available for the other group members to ask questions and gain a better idea of how this approach might be applied in their own contexts. Each person has a chance to share their best ideas. After the Swap Shop, and with participants' approval, the engaging teaching and learning descriptions are entered into a public online environment called VITAL (Valuable Ideas in Teaching and Learning) http://vital-unisa.blogspot.com/.

An integrated approach to teaching undergraduate biotechnology

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One of the major challenges for undergraduate students is integrating and linking knowledge and skills between courses and across the various years of their degree. Many students struggle to actively engage with their discipline and also to appreciate how individual courses allow them to develop skills that can be used in their careers. The compartmentalisation of undergraduate degrees can lead to a fragmented study experience and thus create considerable barriers to quality learning outcomes for students. The Medical and Pharmaceutical Biotechnology degree at the University of South Australia includes the scientific and commercial aspects of drug development. The first two years cover a basic science background, before students study more specialised topics. One of the final year courses, Commercialisation of Biotechnology, includes a major assessment task involving a group project where students design a novel therapeutic strategy, such as a pharmaceutical drug or diagnostic test, for a particular disease. The stages involved include a review of the disease, current treatments, and designing and testing a novel treatment. In the first year this course was taught most students had difficulty with the assignment. The background information of the topic was usually treated in a superficial manner and, without enough knowledge of the disease and its current treatments, they were unable to design a novel strategy. The feedback from the students was analysed and changes made to the assessment tasks, to allow students to complete all sections of the project and achieve the desired learning outcomes. An integrated approach was used in which the project was assessed over a range of tasks in two courses. This paper reports on this initiative, including details of the various assessment tasks and the outcomes of this strategy.

Connecting feedback to results – how engaged are students in joining the dots?

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Lecturers are being urged and even required to provide timely and meaningful feedback on the work students submit for assessment. They are told it is the hallmark of a good teacher. It is accepted that students will use this feedback to improve on their next assessment task. What does it take for feedback to be 'meaningful'? Elaboration feedback is specifically given to students individually, informing each about the general domain principles that are violated by that individual's solutions. It is assumed that this method of feedback, elaboration feedback, would be more meaningful than, say, just supplying the whole class with a model/correct solution. The researchers in this study set about testing that assumption. Results were collected from two groups of students in an attempt to connect the effect of feedback given to each. Each group was given a different method of feedback. This research compared their results in assessment tasks both before and after they had received feedback. This paper reports the results. To the extent possible there was an attempt to determine whether students were engaged in the use of the feedback. This paper makes some observations on whether students use feedback to increase their chances in improving their assessment outcomes. Did they join the dots between feedback and improving results? Some results came as a surprise.

Keywords: *methods, feedback, assessment*

Using self and peer assessment for professional and team skill development: do well functioning teams experience the benefits?

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Self and peer assessment has proved effective in promoting the development of teamwork and other professional skills in undergraduate students. However, in previous research approximately 30% of students reported its use produced no perceived improvement in their teamwork experience. It was hypothesised that a significant number of these students were probably members of a team that would have functioned well without self and peer assessment and hence the process did not improve their teamwork experience. This paper reports the testing of this hypothesis and finds it to be incorrect. We found that it is often easy for students to simply focus on the free riding deterrent aspects of self and peer assessment. To increase the benefits for all students we recommend that feedback sessions be focused on learning and not just assessment outcomes.

Keywords: *self and peer assessment, groups, professional skills*

Improvements in the self and peer assessment tool SPARK: Do they improve learning outcomes?

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As a way of focusing curriculum development and learning outcomes Universities have introduced graduate attributes which their students should develop during the course of is their degree. Some of these attributes are discipline specific, others are generic to all professions. The development of these attributes can be promoted by the careful use of self and peer assessment. The authors have previously reported using the self and peer assessment software tool SPARK in various contexts to facilitate opportunities to practise, develop, assess and provide feedback on these attributes. This research and that of the other developers identified the need for the addition of features to SPARK, to increase its flexibility and capacity to provide feedback. This paper reports the results of the first trials of these new features to investigate their potential to improve learning outcomes.

Keywords: *self and peer assessment, graduate attributes, SPARK.*

Peer review of online learning and teaching

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In this session, Denise Wood (project leader), will demonstrate and facilitate a hands-on workshop focusing on one of the deliverables of a teaching and learning project funded by the Australian Learning and Teaching Council. The project has involved the development of an open source, Web-enabled peer review tool designed to assist academic staff with the course development of their materials and to provide a structured approach to peer review. Design and development of the tool has been informed by research into online learning and teaching in which criteria relating to online course development and the standards associated with them have been codified into an interactive checklist of simple statements that can be used by staff without technical expertise. The system is linked to a database so that the results of peer reviews can be retrieved by academics to support their applications for academic promotion and awards. The instrument is also adaptable so that academics can choose to tailor their reviews to focus on one specific aspect of the course. This session will therefore be of particular interest to conference delegates wishing to explore the capacity of the peer review instrument to assist in course development and in the review of the use of formative and summative assessment within their courses.

Engaging students in reflective practice through a process of formative peer review and peer assessment

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The benefits of engaging students in reflective practice through a process of peer learning and peer assessment are said to include increased awareness of the quality of their work, increased self reflection on their learning and on their performance as peer evaluators, improved student learning outcomes and the development of life long learning skills. Despite these potential benefits, several studies have reported unfavourable student attitudes to peer assessment, including student fears about the effects of rivalries and competition, a lack of confidence about their qualifications to carry out the work, doubts about their ability to be objective and lack of training for the task. The literature also reports various strategies that can be adopted to address these concerns, such as the provision of training for students and tutors in self, peer and collaborative assessment, and ensuring students understand the benefits to be gained from participation in the assessment process. This paper explores the potential of these alternative assessment models by drawing on the experience of the authors who have employed collaborative formative peer review and peer assessment in their undergraduate media arts courses over the last three years. The benefits for students and teachers engaged in a process of reflective practice are reported as well as the challenges in moving from formative review to a peer assessment approach. In the concluding section of the paper, the authors discuss suggested strategies aimed at addressing the identified challenges and facilitating student engagement in the peer assessment process.

Keywords*: peer review, peer assessment, reflective practice*

Assessing student understanding in the molecular life sciences using a concept inventory

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Concept inventories are rigorously validated web-based multiple choice instruments that are designed to evaluate the nature and quality of student understandings of key concepts. Such tests can also reveal any related alternative conceptions and visualization difficulties, thereby providing educators with vital feedback about their students' learning and, in turn, their own teaching practice and pedagogical content knowledge. Students receive rapid diagnostic feedback on their understanding of key concepts and remediation can be targeted by the educator towards problematic areas. This paper describes the process that is being used to develop and validate a concept inventory, which is tailored for use by instructors teaching introductory university courses in biochemistry and molecular biology. The initial phase of the project has involved the identification of the concept domain through a set of "Big Ideas" which are unique to the molecular life sciences and which capture, in a comprehensive and future-looking way, thinking by experts in the field. In the second phase of the project, a draft set of key concepts that underpin understanding of these "Big Ideas", and which are at an appropriate level of discreteness and specificity to be tested through the concept inventory, has been identified. These include equilibrium, protein structure, metabolic energy and coding of information. A refined set of adaptive questions has been developed around the key concept of chemical equilibrium. Statistical tools to analyse questions for reliability and validity have been trialled and a series of interviews has been conducted to examine students' alternative conceptions. A second set of questions on protein structure has been developed and is currently being refined as an adaptive test.

Keywords: *concept inventory, diagnostic assessment, molecular life sciences*

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