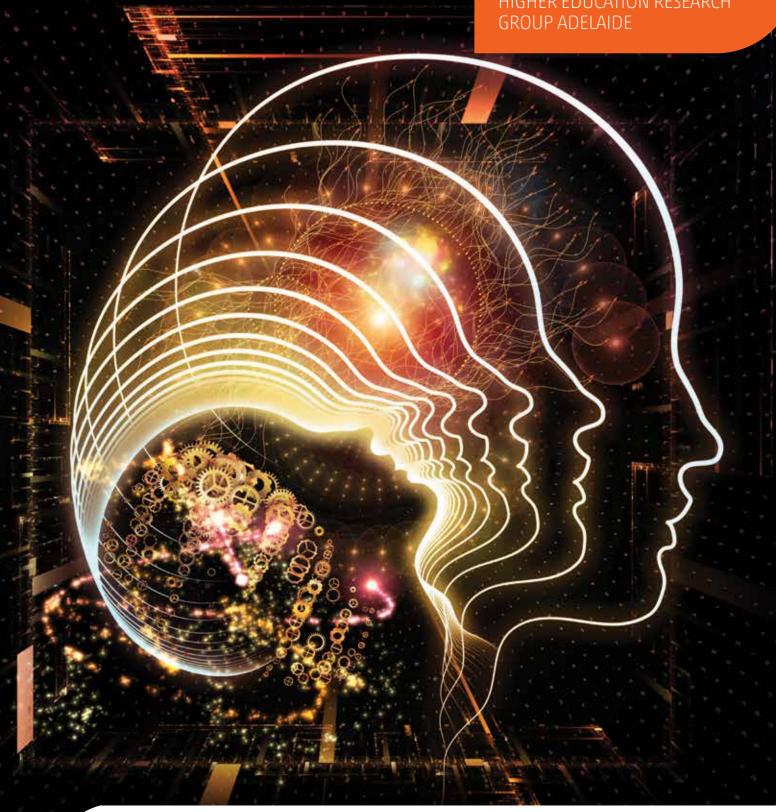
BRAVE NEW WORLD: THE FUTURE OF TEACHING & LEARNING

HERGA CONFERENCE 2015 ADELAIDE 21-23 SEPTEMBER



HIGHER EDUCATION RESEARCH













CHANGING HORIZONS: LOCAL LEARNING FOR GLOBAL IMPACT



The University wishes to acknowledge the Kaurna people, the original custodians of the Adelaide Plains and the land on which the University of Adelaide's campuses at North Terrace, Waite, Thebarton and Roseworthy are built.

HERGA EXECUTIVE

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The University of Adelaide

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The University of South Australia

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ACKNOWLEDGEMENTS

Karl Larsen

this big design

Lea McBride

The University of Adelaide

Kerrie Le Lievre

The University of Adelaide

Rebecca Vivian - website assistance

TafeSA & National wine centre - catering assistance

And thank you to our volunteers on the day.

Special thanks to the Faculty of Arts, The University of Adelaide

SPONSORS



HERGA would like to thank the following:













HERGA 10 YEAR ANNIVERSARY



10 Years ago

Excerpts from the Minutes of Inaugural "Education group" Meeting. Wed 21st September 2005

Present: Ed Palmer (EP), Joy McEntee (JM), Lynn Rogers (LR), John Willison (JW) (observer/lecturer in charge), Katrina Falkner (KF), Jamie Botten (JB) (Minutes)

Purpose:

- As a group we want to be a dynamic, vibrant community to support each other, disseminate information to wider community and be relevant to educators.
- [Vision] example: To establish a community of Educators who provide mutual support and innovation in educational activities. Other concepts we may wish to include Educational research, Innovative/scholarly practice, devising/creating/testing new educational practises

Membership Criteria: (much debate on this topic!)

 Participation is voluntary, however Membership requires: active engagement in teaching activities or significant prior teaching experience, A demonstrated commitment to developing effective educational activities and resources

Conference 2006:

 Motivator for activity, Organising a conference will give the group some credibility

and now...

HERGA is 10! And we think we've done a great job of meeting those early aspirational goals.

This year is the 10th HERGA conference and the 10th anniversary of HERGA. As we enter an exciting new era, it is an opportune time to reflect on our history as an educational research community and to thank those who have supported the group over this time.

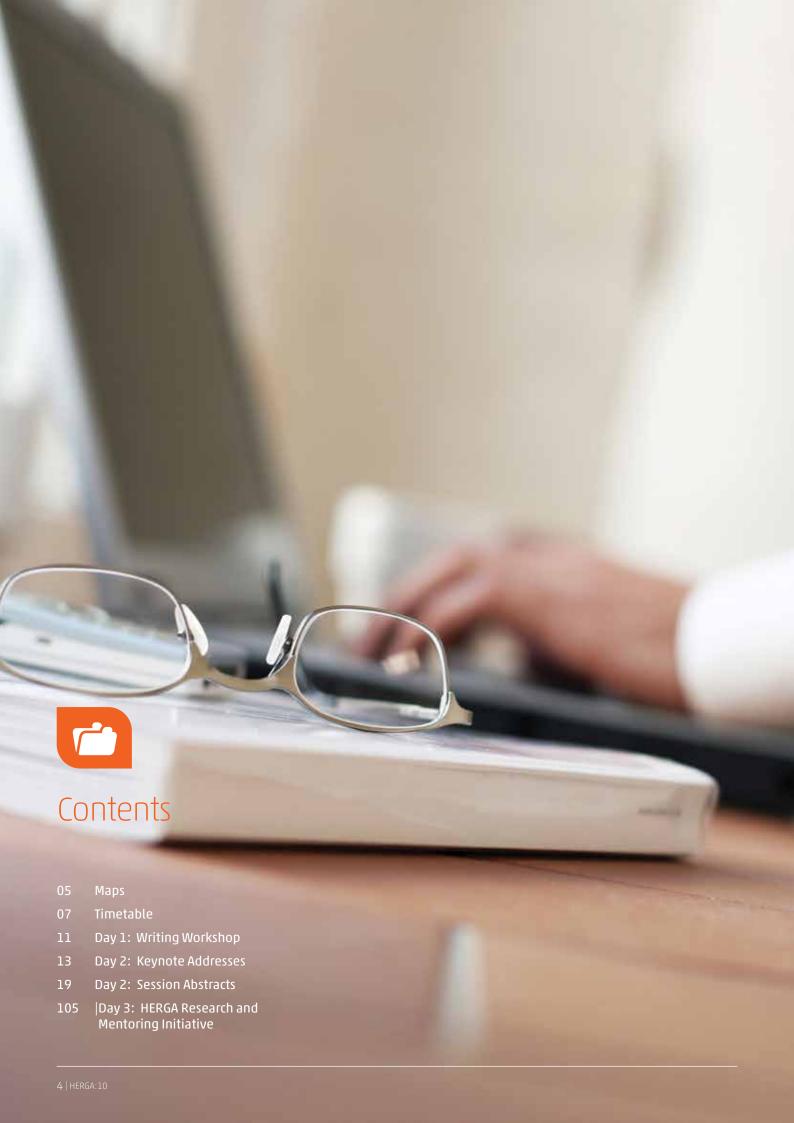
The Higher Education Research Group of Adelaide (HERGA) was formed by the first cohort of graduates from the University of Adelaide's Graduate Certificate of Higher Education. Wanting to maintain the mutually supportive and stimulating relationships they had developed as students in the Graduate Certificate, the group decided to keep meeting

after graduation, forming their own organisation initially called ERGA. The group ran the first HERGA conference, started their own journal ergo, and has helped in providing networking opportunities for academic educators throughout South Australia and beyond. We thank you all for your ongoing support and contributions over the last 10 years. With the advent of teaching specialist roles and the greater need to collaborate and build supportive networks, HERGA is more important than ever and we hope to have a meaningful impact on higher education over the next 10 years.

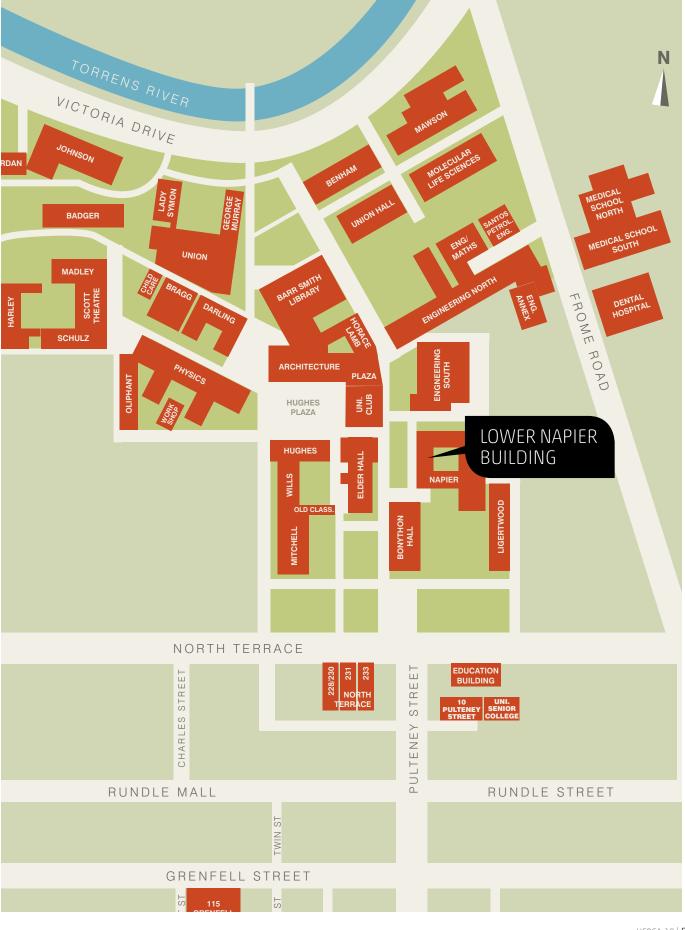
SPECIAL THANKS

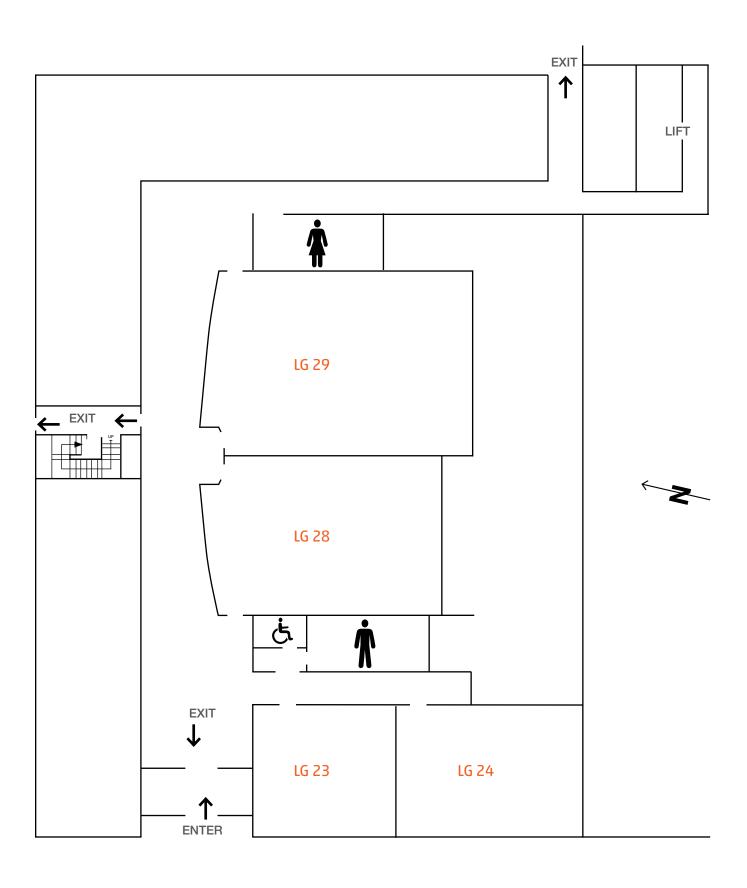
Thanks to the original founders of HERGA for their enthusiasm and vision: Peter Ashman, Brad Alexander, Joy McEntee, Edward Palmer, Katrina Falkner, Kirsten Farrand, Mignon Watson, Lynn Rogers, Said Al-Sarawi, James Botten. Michelle Coulson

The group has relied upon strong support from the University of Adelaide, Flinders University, UniSA, Tabor College and TAFESA. We thank the leaders of these institutions over the last decade for their support and look forward to future collaboration.



MAP: NORTH TERRACE CAMPUS/ADELAIDE CBD







Venue: Flinders University City Campus | Date: Monday 21 September

Room 10.1, Level 10, 182 Victoria Square, Adelaide, South Australia (the old Reserve Bank Building) Enter from Flinders Street or Victoria Square

START	DURATION	EVENT
1.00	30 MINS	WELCOME AND INTRODUCTIONS
1.30	1 HR	GROUP ORGANISATION AND PLANNING
2.30	1 HR	AFTERNOON TEA
3.00	90 MINS	RESEARCH PROPOSAL AND DESIGN
4.30	90 MINS	DRINKS AND NIBBLES

DAY 2 TIMETABLE

Venue: Lower Ground Napier | Date: Tuesday 22 September

START	DURATION	EVENT					
08.50	10 MINS	Prof Allan Evan	OPENING OF CONFERENCE Prof Allan Evans Pro Vost & Chief Academic Officer, The University of South Australia				
9.00	1 HR		KEYNOTE ADDRESS 1 LG29 Brave New World: The Future of teaching and learning sociate Professor Angela Carbone, Monash Univers				
		Independent Learners LG28	Analytics LG24	Assessment LG23			
10.00	30 MINS	Risks and Dividends: Creative Approaches to Teaching in the Arts and STEM (Science, Technology, Engineering and Mathematics) Evans & Deller-Evans i Can: empowering students in transition through digital literacy Stokes	Setting up learning analytics for research - strengths and limitations. Abigail, McCloud & Fitzgerald Course analytics for quality design: metadata, interpretation and skills Murdoch & McIntyre	Better Judgement: Assessment in a Complex World Schmidt, Schuwirth, King & O'Keefe Secure online exam capability: dimensions and trade-offs Zutshi			
10.30	30 MINS		MORNING TEA				
		MOOCs LG28	Gamification LG24	Assessment LG23			
11.00	30 MINS	MOOCs: The AdelaideX Experience Ricci, Vivian, Nursey-Bray, de Zwart & Wilkinson	Badges! Badges? Badges Lessons learned playing with digital badges Garnett & Button	An Instructor's Reflections on the Use of a Video Assessment Tool for Group Project Work Whitaker & Franceschilli			
11.30	30 MINS	MOOCs: Perspectives from Higher Education in South Australia Wanner & Palmer A new tool to improve educational films in MOOCs Hall	Revision with PPT games Warland Game Based Learning to Frame Knowledges in 'Both Worlds' Emery & Habel	Why do they think that? Using the Genetics Concept Assessment to characterise student misunderstanding. Coulson Introducing work readiness skills and assessment practices in the curriculum Banadraneike & Torres			

DAY 2 TIMETABLE

Venue: Lower Ground Napier | Date: Tuesday 22 September

START	DURATION	EVENT			
		In the Classroom LG28	Blended Learning LG24	Assessment LG23	
12.00	30 MINS	A rollercoaster ride: Performance as learning Hamilton At the heart of social work: Emotion in the practice-based classroom Cowie & Summers	A class above: Evidence-based action research into teaching that is connected, mobile and accessible in a higher education context Taylor Increasing Personalisation in a First-Year Language Course: Exploring the possibilities Strambi	Feedback without grades in an online mathematics course Butler & Crouch The Challenge of Aligning Assessment and Competency in Health Care Management Using Self Reported Changes in Knowledge and Skills Mackay & Maddern	
12.30	1 HR		LUNCH		
1.30	1 HR	KEYNOTE ADDRESS 2 LG29 Developing and Assessing Graduates who are 'Work ready plus' Emeritus Professor Geoff Scott, University of Western Sydney			
2.30	30 MINS	Creating independent learners through group research projects Smallhorn, Young-Kirby, Hunter & Burke da Silva	Implementation of the new Learning Pathway tool in MyUni: Investigations into student uptake and usage. McGrice, Chan, Reidsema, Kavanagh & Munguia	Flipping the laboratory: The value of pre-practical activities for encouraging Agricultural and Viticultural Science students to become independent learners. Loveys & Riggs	
		Pathways LG28	Blended Learning LG24	Groupwork LG23	
3.00	30 MINS	Navigating Pathways to University: Key Considerations for African Refugee Youth in South Australia King Navigating Rough Terrain: Low SES Student Transitions into Higher Education through Enabling Programs Whitman & Habel	Role-playing in Reacting to the Past: Online versus Face-to-Face Buchanan & Palmer Blended learning to improve student learning in experimental design and biostatistics Leterme & Young-Kirby	Using Digital Media Presentations in Assessment Ogilvie Tailoring group project design and assessment to individuals within a team Bunch & Zeinijahromi	

DAY 2 TIMETABLE

Venue: Lower Ground Napier | Date: Tuesday 22 September

START	DURATION	EVENT				
3.30	30 MINS		AFTERNOON TEA			
		Teaching LG28	Blended Learning LG24	Assessment LG23		
4.00	30 MINS	SMART CASUAL? A project to identify and respond to the needs to sessional law teachers Hewitt & Heath "High School was Easy": Personal Epistemology and approaches to learning in a problem-based learning medical curriculum. Murray & Peterson	Self-and Peer Assessment: Student views and experiences Wanner & Palmer Teaching the Recovery Model of Mental Health Practice to Students from Diverse Cultural Backgrounds: Learning from the Front Line Maxfield, Moulding & Scicchitano	Addressing Undergraduate Entrepreneurship Student Expectations Balan & Restall Student and tutor consensus as a basis of assessment: Developing undergraduate skills in self-evaluation Thompson, Pointon, Rayner, Pope, Cayetano, Mitchell & Houston		
		Pathways LG28	Course Design LG24	Research Skill Development LG23		
4.30	30 MINS	Professionalizing the higher education sector through a compulsory new qualification pathway Stevenson Be brave: welcome to a whole new world! Using mentor telephone calls to increase attendance at orientation and support transition Leiman & Kontra	Designing with uncertainty, not against it Parkin Using ontological metaphors for embedding information research literacy Harrison	International Masters students' perception of the Research Skill Development framework for their learning and teaching Abdurrhaman, Sabir & Willison Systemization of self-regulated learning in postgraduate courses: enhancing professional capacity in the South Pacific. Morrison		

Writing Workshop

We will be running a series of mentor-facilitated writing groups as part of this year's Research and mentoring activities. The overall goal is to write a series of journal articles that will be published in a special edition of the journal ERGO in 2016. There are 7 themes each facilitated by a HERGA member who is experienced in that area.

Groups will come together on Monday September 21st as part of the HERGA annual conference. A half day afternoon workshop at Flinders city campus in Victoria square will bring groups together, focus on how their project will run and how groups will coordinate interaction. Groups will continue working independently once ideas have been formalized during the workshop.

THE 7 TOPICS ARE:

- 1 Education-focused academics what is their role in higher education? Facilitator: Karen Burke da Silva, Flinders University
- 2 Flipped Learning: Generating research questions and papers. Facilitator: Peter Balan, UniSA
- 3 *The role and effectiveness of technology in education.* Facilitator: Edward Palmer, University of Adelaide
- 4 The development of discipline-specific and interdisciplinary research skills in the curriculum. Facilitator; John Willison, University of Adelaide
- 5 How would assessment programmes truly value the agentic learner? Facilitators Lambert Schuwirth, Lisa Schmidt, Flinders University
- 6 Teaching sensitive subject matters: Strategies for student learning and wellbeing. Facilitator: Mary Heath, Flinders University
- 7 Engaging students and teachers in a culture of blended learning. Facilitators Sophie Karanicolas, Cathy Snelling, University of Adelaide.

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Keynote Addresses

- 15 A Brave New World: The Future of teaching and learning
 Carbone
- Developing and Assessing Graduates who are 'Work ready plus'
 Scott

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A Brave New World: The Future of teaching and learning

Associate Professor Angela Carbone

Associate Director in the Office of the Pro Vice-Chancellor (Learning and Teaching), Monash University.

Associate Professor Angela Carbone is the Director of Education Excellence at Monash University, Australia - heading the new continuing educational excellence development (CEED) initiative of the University. She has received numerous awards for teaching excellence, including the Prime Minister's Award for University Teacher of the Year Australian, a Learning and Teaching Council (ALTC) Citation and a Vice Chancellor's Teaching Award. Angela has led several nationally and internationally funded projects in computing education and higher education. Amongst her current projects is a nationally funded commissioned project which looks at developing graduate employability through partnerships with industry and professional associations. In 2012 she was awarded a National Senior Teaching Fellowship by the Australian Government to trial and implement a Peer Assisted Teaching Scheme across many universities within Australia to improve teaching quality.

ABSTRACT

This presentation will focus on what's scary in the new and changing landscape of learning and teaching in Higher Education, and the need for bravery to manage and steer the massive and ongoing changes occurring the Australian higher education sector, namely:

- The profile of the student body, with growth in the numbers
 of international students, greater diversity and participation of
 students from low socio-economic backgrounds and higher
 expectations from students in terms of satisfaction and
 employability;
- Advances in technology and in learning modes (such as blended, online learning and massive open online courses (MOOCs)):
- Increased casualization of the academic workforce; and
- Globalised markets and the requirement for transnational mobility in students

To remain competitive in the face of these changes, universities and their academics must meet teaching quality standards and think differently about the way they teach. While the debate on what quality teaching is and how it can be effectively measured continues without providing any clear answers, an effective starting point to thinking differently about teaching improvement is strong leadership, clear strategy and mentoring to overcome barriers that prevent it.

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Developing and Assessing Graduates who are 'Work ready plus'

Emiritus Professor Geoff Scott

Emeritus Professor of Higher Education and Sustainability, University of Western Sydney (UWS) Leader, UN endorsed Regional Centre of Expertise in Education for Sustainable Development - Greater Western Sydney.

Geoff Scott is Emeritus Professor of Higher Education and Sustainability at the University of Western Sydney (UWS), Australia. From 2004-12 he was Pro Vice-Chancellor (Quality) and then Executive Director of Sustainability at UWS. He has been co-chair of the Sustainable Futures Leadership Academy and helped establish RCE-Greater Western Sydney. Geoff is author, with Canada's Michael Fullan, of the widely used book Turnaround Leadership for Higher Education. He has recently completed an international project on Turnaround Leadership for Sustainability in Higher Education with Daniella Tilbury, Leith Sharp and Liz Deane, and a project with Kerri-Lee Krause and senior colleagues from 11 Australian universities on Inter-university moderation and the assurance of higher education subject and program achievement standards. In 2008 he led the Australian Learning and Teaching Council study of Learning Leaders in Times of Change with colleagues from the Australian Council for Educational Research. He is a former member of the board of directors of the Australian Council for Educational Research, a Fellow of the Australian College of Education, a member of TEQSA's register of Experts, a higher education auditor in many countries and an adviser to a wide range of higher education institutions within and beyond Australia. In 2007, he was the recipient of the Australian Higher Education Quality Award.

ABSTRACT

There is now a need for graduates not just to be 'work ready' for today (that is, to possess the skills and knowledge necessary for competent performance of set tasks in set ways in their chosen profession or discipline) but to be 'work ready plus' for the future (that is, to be sustainability literate, change implementation savvy, inventive, able to manage in situations of uncertainty and conflict, deft at working productively with diversity, adaptable and resilient, and capable of contingent, diagnostic, strategic and divergent thinking).

Geoff's current OLT Senior Fellowship aims to build the capacity of Australian higher education institutions to ensure that the quality of their graduates keeps pace with the rapidly changing needs of the 21st century. In this presentation, Geoff will explore implications for assessment design, highlighting emergent themes from consulting and working with learning and teaching leaders throughout Australia, Asia and the Pacific, North America, the UK and Europe, including the growing focus on learning and assessing personal and interpersonal capabilities, inventiveness and entrepreneurial capabilities.

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Session Abstracts

- 21 Risks and Dividends: Creative Approaches to Teaching in the Arts and STEM (Science, Technology, Engineering and Mathematics)
 Evans & Deller-Evans
- i Can: empowering students in transition through digital literacyStokes
- 25 Setting up learning analytics for research strengths and limitations.
 Abigail, McCloud & Fitzgerald
- 27 Course analytics for quality design: metadata, interpretation and skills

 Murdoch & McIntyre
- 29 Better Judgement: Assessment in a Complex World
 Schmidt, Schuwirth, King & O'Keefe
- 31 Secure online exam capability: dimensions and trade-offs
 Zutshi
- **MOOCs: The AdelaideX Experience**Ricci, Vivian, Nursey-Bray, de Zwart & Wilkinson
- 35 Badges! Badges? Badges... Lessons learned playing with digital badges
 Garnett & Button
- 37 An Instructor's Reflections on the Use of a Video Assessment Tool for Group Project Work Whitaker & Franceschilli
- 39 MOOCs: Perspectives from Higher Education in South Australia
 Wanner & Palmer
- 41 A new tool to improve educational films in MOOCs
- **43** Revision with PPT games Warland
- 45 Game Based Learning to Frame Knowledges in 'Both Worlds'
 Emery & Habel
- Why do they think that? Using the Genetics Concept Assessment to characterise student misunderstanding.
- 49 Introducing work readiness skills and assessment practices in the curriculum

 Banadraneike & Torres

- 51 A rollercoaster ride: Performance as learning Hamilton
- 53 At the heart of social work: Emotion in the practice-based classroom
 Cowie & Summers
- 55 A class above: Evidence-based action research into teaching that is connected, mobile and accessible in a higher education context

 Taylor
- 57 Increasing Personalisation in a First-Year Language Course: Exploring the possibilities Strambi
- 59 Feedback without grades in an online mathematics course
 Butler & Crouch
- 61 The Challenge of Aligning Assessment and Competency in Health Care Management Using Self Reported Changes in Knowledge and Skills Mackay & Maddern
- 63 Creating independent learners through group research projects Smallhorn, Young-Kirby, Hunter & Burke da Silva
- 65 Implementation of the new Learning Pathway tool in MyUni: Investigations into student uptake and usage.

 McGrice, Chan, Reidsema, Kavanagh & Munguia
- 67 Flipping the laboratory: The value of pre-practical activities for encouraging Agricultural and Viticultural Science students to become independent learners.

 Loveys & Riggs
- 69 Navigating Pathways to University: Key
 Considerations for African Refugee Youth in South
 Australia
 King
- 71 Navigating Rough Terrain: Low SES Student Transitions into Higher Education through Enabling Programs Whitman & Habel
- 73 Role-playing in Reacting to the Past: Online versus Face-to-Face Buchanan & Palmer

75 Blended learning to improve student learning in experimental design and biostatistics

Leterme & Young-Kirby

77 Using Digital Media Presentations in Assessment

Ogilvie

79 Tailoring group project design and assessment to individuals within a team

Bunch & Zeinijahromi

81 SMART CASUAL? A project to identify and respond to the needs to sessional law teachers
Hewitt & Heath

83 "High School was Easy": Personal Epistemology and approaches to learning in a problem-based learning medical curriculum.

Murray & Peterson

85 Self and Peer Assessment: Student views and experiences

Wanner & Palmer

87 Teaching the Recovery Model of Mental Health Practice to Students from Diverse Cultural Backgrounds: Learning from the Front Line Maxfield, Moulding & Scicchitano

89 Addressing Undergraduate Entrepreneurship Student Expectations

Balan & Restall

91 Student and tutor consensus as a basis of assessment: Developing undergraduate skills in self-evaluation

Thompson, Pointon, Rayner, Pope, Cayetano, Mitchell & Houston

93 Professionalizing the higher education sector through a compulsory new qualification pathway

Stevenson

95 Be brave: welcome to a whole new world! Using mentor telephone calls to increase attendance at orientation and support transition

Leiman & Kontra

97 Designing with uncertainty, not against it

99 Using ontological metaphors for embedding information research literacy

Harrison

101 International Masters students' perception of the Research Skill Development framework for their learning and teaching

Abdurrhaman, Sabir & Willison

103 Systemization of self-regulated learning in postgraduate courses: enhancing professional capacity in the South Pacific.

Morrison

Risks and Dividends: Creative Approaches to Teaching in the Arts and STEM (Science, Technology, Engineering and Mathematics)

Steve Evans & Kate Deller-Evans Flinders University

A great deal has been written about the place of creativity in higher education and its potential to better engage students in learning (Burnard, 2006; Cornish, 2007; Gibson, 2010). Maximising the creativity of the environment in which students approach their chosen field is a key driver of learning. Valuing their capacity for critical thinking and innovation is clearly where the hope lies for both their future career prospects and their potential contribution to society.

Much has been written also about disruption in the tertiary education landscape, usually linked to technological interventions that can be enlisted to modify transmission of knowledge. Real subversion and disruption in teaching and learning exists in a process that challenges the roles of the student and teacher rather than in a software program (Gibson, 2007; McWilliam & Dawson, 2008). It is in the 'how' of that complex opportunity where a blend of differentiated learning, action learning (Waldrop, 2015), and learner agency (Gureckis, 2010; Mercer, 2012) offers more flexible and student-centred methodologies (Fasko, 2001).

Humans respond to rewarding hands-on activities, especially with guidance from a mentor. A creative learning scenario does not occur at its optimum without a creative teacher (Ayob, 2013). Devising hands-on and innovative activities for students is also a test of the teacher's understanding of the learning mind.

In the Arts, opportunities for creative methodologies can make learning more engaging for students through incorporating creative activities where previously there have been few. Differentiated assessment tasks stimulate students to acquire greater skills and knowledge and, according to the students, make learning more entertaining and fruitful. Examples include the use of material taken from already published work and employed in a 'cut-up' technique that combines both William Burroughs' famous writing and the cento form of poetry. Providing optional assessment tasks, such as an essay or creative activity, has proved popular, with the result that students who are not enrolled in Creative Arts courses often undertake the creative path (Evans 2015b). In another context. creative writing has also been successfully used to promote MBA students' learning of business principles (Evans & Parker, 2007; Evans, 2015a)

It is unusual for teaching in STEM courses to be associated with narrative, yet in order not to have students overwhelmed it is crucial to make information appropriate to their level (Ing, Smallhorn, Young, Burke da Silva, & Deller-Evans, 2014). Having students conceptualise real-world problems through

story is an effective pedagogical pathway to developing soft skills for students (Deller-Evans, Pope & Tran, 2012). Topics that extend STEM students creatively may not be highly regarded at commencement, but student-written self-evaluations reveal paradigm shifts that take place at completion.

While there are risks to incorporating more creative pedagogical praxis, the dividends prove worthwhile.

Keywords

creativity, pedagogy, differentiated assessment, student engagement, STEM

REFERENCES

Ayob, A., Hussain, A. & Majid, R.A. (2013). A review of research on creative teachers in higher education, *International Education Studies*, 6(6). http://dx.doi.org/10.5539/ies.v6n6p8

Burnard, P. (2006). Reflecting on the creativity agenda in education, *Cambridge Journal of Education*, 36(3), 313-318. http://dx.doi.org/10.1080/03057640600865801

Cornish, L. (2007). Creative teaching: Effective learning in higher education. *32nd international conference on improving university teaching: The creative campus*, July, Jaen, Spain.

Deller-Evans, K., Pope, K. & Tran, A. (2012). Engineering professional skills development: imagined lives and real solutions. *1st Global Conference Storytelling: Global reflections on narrative*, 13-15 May 2012, Prague, 1-11.

Evans, S. & Parker, L. (eds) (2007). *Balancing Act*, Emerald Publishing, London.

Evans, S. (2015a). Creative Accounting: Using Creative Writing to Teach Accounting Principles. *New Writing: The International Journal for the Practice and Theory of Creative Writing*. (forthcoming)

Evans, S. (2015b). 'Learning by Theft: A Practical Approach to Teaching Poetry Without Tears', *Arts and Humanities in Higher Education*. (forthcoming)

Fasko, D. (2001). Education and creativity. *Creativity Research Journal*, 13(3-4), 317-327. http://dx.doi.org/10.1207/S15326934CRJ1334_09

Gibson, R. (2010). The 'art' of creative teaching: implications for higher education. *Teaching in Higher Education*, 15(5), 607-613. http://dx.doi.org/10.1080/13562517.2010.493349

Gureckis, T.M. & Markant, D. (2010). 'Agentic' learning: integrating developmental, educational, and computational perspectives. *EPA Symposium*, New York University. http://smash.psych.nyu.edu/papers/epa2010.pdf

Ing, H., Smallhorn, M., Young, J., Burke da Silva, K., & Deller-Evans, K. (2014). Overwhelming information: using discovery layers to refine for relevance and readability. *The International First Year in Higher Education*. http://fyhe.com.au/past_papers/papers14/10E.pdf

McWilliam, E. & Dawson, S. (2008). Teaching for creativity: towards sustainable and replicable pedagogical practice. *Higher Education*, 56, 633–643. http://link.springer.com/ article/10.1007/s10734-008-9115-7

Mercer, S. (2012). The complexity of learner agency. *Journal of Applied Language Studies*, 6(2), 41-59. https://jyx.jyu.fi/dspace/handle/123456789/40858

Waldrop, M. Mitchell (2015). The science of teaching science. *Nature*, 16 July 272-274. http://www.nature.com/polopoly_fs/1.17963!/menu/main/topColumns/topLeftColumn/pdf/523272a.pdf

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i Can: empowering students in transition through digital literacy

Jennifer Stokes University of South Australia

'If you think about the media environment that an average... teenager lives in, to walk into a classroom that doesn't have any of that media must be... like walking into the desert.' Steven Maher (Dretzin 2010)

'Digital media open up a staggering range of possibilities' (Jones & Hafner 2012 p. 191) for both individuals and educators. While earlier conceptions of millennial students assumed digital competency, this paradigm has been challenged and informed educators have shifted their focus 'from digital natives to digital wisdom' (Prensky 2012). Contemporary students may bring with them a wealth of knowledge about digital forms; however, they also need to extend and hone their own digital literacies. Digital literacies are 'the individual and social skills needed to effectively interpret, manage, share and create meaning in the growing range of digital communication channels' (Dudeney, Hockly & Pegrum 2013, p. 2). To prepare for 21st century employment and effective participation as global citizens, students must understand, negotiate and be able to contribute to this digital world.

Addressing this emergent need, the author designed and implemented a digital literacy course for an Australian university enabling program. The course was designed in a constructivist manner, empowering students by valuing 'funds of knowledge' (Gonzalez, Moll & Amanti 2012) as a starting point for engagement with analysis and production at a university level. The course utilised Universal Design Learning (CAST 2011) in order to increase access and success for a diverse range of students. Teaching practice drew on expert knowledge of web, gaming, and new media; however. a pedagogical reframing was required to teach effectively in this new context. Blended learning and innovative practice were embedded throughout the course, resulting in high levels of student engagement and satisfaction. Through discussion of the integration of new teaching approaches and advanced technology, this paper will outline the benefits and challenges of establishing a digital literacy course for students in transition to university. Through evaluation of the course, student feedback and learning outcomes, this paper will offer insight into empowering student learners through digital learning strategies.

Keywords

Digital Literacy; Enabling Program; Widening Participation

REFERENCES

CAST (2011). Universal Design for Learning Guidelines Version 2.0. Wakefield: Massachusetts.

Dudeney, G., Hockly, N. & Pegrum, M. (2013). *Digital literacies:* research and resources in language teaching. Pearson: England.

Dretzin, R. (2010). Digital Nation. Television program, PBS, 2 February.

Gonzalez, N., Moll, L. & Amanti, C. (2012). Funds of knowledge. Taylor & Francis: Hoboken.

Jones, R.H. & Hafner, C.A. (2012). *Understanding Digital Literacies: A Practical Introduction*. Routledge: London.

Prensky, M. (2012). From digital natives to digital wisdom: hopeful essays for 21st century learning. Corwin: California.

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Setting up learning analytics for research – strengths and limitations.

Wendy Abigail, Chris McCloud & Mitchell Fitzgerald, Flinders University, Adelaide

Background

In 2013, the School of Nursing and Midwifery at Flinders University introduced a new blended learning curriculum (BLC) which provides a mixed learning environment with the intent to enhance student freedom and independence in learning (Swain, 2014). Student engagement in a BLC encourages spontaneous and iterative engagement with learning activities (Gray, McGuinness, Owende, & Carthy, 2014) both during and between traditional classroom activities, and has been considered a 'rich and effective' student learning experience (Duque et al., 2013). Exploration of variations in student engagement with technology-based learning materials has reported a correlation between deep engagement with online materials for the development of knowledge and higher academic achievement. Conversely, Ellis and colleagues found that students who superficially engaged with online activities simply to fulfil course requirements had poorer academic outcomes, a finding concurred by other studies (Ellis, Weyers, & Hughes, 2013; Francis & Shannon, 2013).

Learning analytics is where student online activity data is collected (Gray et al., 2014). This data may allow greater understanding of learning processes and help to identify students at risk of failing earlier so that intervention strategies may be implemented (Gray et al., 2014). Learning analytics may also provide students with insight into their own learning styles, their areas of strength and areas requiring improvement (Johnson et al., 2013).

In semester 1 2105, an ethically approved study commenced which aimed to evaluate undergraduate nursing students' awareness of their engagement in online learning activities and the influence on their academic outcomes. In the undergraduate nursing degree, all students are required to log into Moodle platform Flinders Learning Online (FLO) once per week at a minimum for all topics in the course. All study plans and topic requirements are accessed via FLO in an electronic format. Face-to-face tutorials and/or workshops provide specific topic content that is interlinked with the online content but not always dependant on it. Two second year topics were offered in two availabilities in semester one 2015. Visual progress bars (VPB) were introduced into the second availability of both topics. The VPBs provided students with colourful visual boxes that changed colour once an activity had been accessed and allowed them and their tutors to monitor their engagement with the topic materials and requirements. Learning analytics informed the progress bars.

There were strengths and limitations to integrating such a tool. Guidelines will be presented on what is useful and not useful when setting up of VPBs. These include allocating sufficient time for set up and ensuring information technology support is available. Use of the VPBs by the topic coordinators was cumbersome, with the tool not allowing for individual student reports of their total activities. Additionally, the length of time students spent on each activity was not recorded. However, student feedback was very positive.

Summary

Blended curriculum materials with a large amount of online activities may overwhelm students, and an interim status bar that has the potential to inform students of what is required in small increments may enhance engagement. However, work still needs to be done to improve the functionality of the tool to make it more user friendly for topic coordinators.

Keywords

Learning analytics, Student engagement, Education tools, Blended learning

REFERENCES

Duque, G., Demontiero, O., Whereat, S., Gunawardene, P., Leung, O., Webster, P., . . . Sharma, A. (2013). Evaluation of a blended learning model in geriatric medicine: A successful learning experience for medical students. *Australasian Journal on Ageing*, *32*(2), 103-109. doi: 10.1111/j.1741-6612.2012.00620.x

Ellis, R., Weyers, M., & Hughes, J. (2013). Campus-based student experiences of learning technologies in a first-year science course. *British Journal of Educational Technology*, 44(5), 745-757. doi: 10.1111/j.1467-8535.2012.01354.x

Francis, R., & Shannon, S. J. (2013). Engaging with blended learning to improve students' learning outcomes. *European Journal of Engineering Education*, 38(4), 359-369.

Gray, G., McGuinness, C., Owende, P., & Carthy, A. (2014). A review of psychometric data analysis and applications in modelling of academic achievement in tertiary education. *Journal of Learning Analytics*, 1(1), 75-106.

Johnson, L., Adams Becker, S., Cummins, M., Estrada, V., Freeman, A., & Ludgate, H. (2013). *The NMC Horizon report:* 2013 higher education edition (pp. 1-44). Austin, Texas: The New Media Consortium.

Swain, R. (2014). Creating a culture of learning through blended curriculum *Teacher Learning Network*, *21*(2), 8-9.

NOTES:		

Course analytics for quality design: metadata, interpretation and skills

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Analytics at the course design level can provide the evidence required by the Higher Education Standards and TEQSA that processes exist within institutions to ensure compliance and the provision of quality education to their students (Australian Government, 2014; Oliver, 2011). This paper describes the methodology developed through action research in the Faculty of Business at Charles Sturt University to collect and analyse metadata about courses and subjects. This methodology produces information that feeds into a course review process to enable course managers to make decisions about course design and review that seeks to improve quality and provide evidence of compliance. The underpinning determinations included what data should be collected, what analysis was needed to interpret the data, and what skills the analysts needed. Analyst skills of greatest value have included expertise in language analysis and expertise in the practice of constructive alignment with an ability to analyse assessment practices and policies. In practice, it was found that analysts without discipline-specific knowledge were well-placed to provide this broad overview of courses and subjects. As the methodology continues to be developed, automation of some of the analysis procedures will further streamline the course review and design process and also provide the potential for even greater depth of analysis. As higher education moves into the future and new concepts are developed, action research with course analytics is ideally placed to reveal the type of data, tools and skills needed to undertake data collection and processing to ensure that quality learning environments are developed and maintained into the future.

Keywords

curriculum design, metadata collection, course design, course analytics, analyst skills

REFERENCES

Australian Government. (2014, December). Higher Education Standards Framework: advice to Minister – December 2014. Retrieved July 28, 2015, from Department of Education and Training: https://education.gov.au/final-proposed-highereducation-standards-framework

Biggs, J., & Tang, C. (2011). *Teaching for quality learning at university* (4th ed.). New York, New York: McGraw Hill.

Lawson, R., Taylor, T., Herbert, J., Fallshaw, E., French, E., Hall, C., . . . Summers, J. (2013). *Assuring learning grants program final report.* Retrieved from Assuring Learning: http://assuringlearning.com/resources/GrantsProgramFinalReport.pdf

Lockyer, L., Heathcote, E., & Dawson, S. (2013). Informing pedagogical action: Aligning learning analytics with learning design. (S. Publications, Ed.) *American Behavioral Scientist*, *57*(10), 1439-1459. doi:10.1177/0002764213479367

Office for Learning and Teaching. (2014). *Emeritus Professor Christine Ewan*. Retrieved July 29, 2015, from Office for Learning and Teaching: http://olt.gov.au/christine-ewan

Oliver, B. (2011). Good Practice Report: Assuring Graduate Outcomes. Retrieved from Office of Learning and Teaching: http://www.olt.gov.au/system/files/resources/Assuring%20 graduate%20outcomes.%20ALTC%20Good%20practice%20 report.%20Oliver%2C%20B%202011.pdf

NOTES:		

Better Judgement: Assessment in a Complex World

Lisa Schmidt, Lambert Schuwirth & Svetlana King Flinders University **Maree O'Keefe** The University of Adelaide

Judgement is a necessary component of assessment, both to determine the standard of performance and to inform feedback. There have been attempts to avoid subjective judgement via so-called 'objective' methods but this can come at the risk of validity, especially outside the realm of factual knowledge (Schuwirth & van der Vleuten, 2006). In particular, considering Miller's pyramid (knows, knows how, shows how, does) (Norcini, 2003), in the area of assessing the ability of a student to perform an action, expert judgement by experienced practitioners is required.

In this brave new world of practice-based assessment, human judgement is the necessary method for ensuring valid assessment, but it is subject to judgement biases (Plous, 1993). Biases are not prejudices; instead, they are misrepresentations in the assessor's mind of what occurred during the assessment exercise.

Any bias might impact on an assessor's judgement of a student, causing them to shift grades up or down. This implies that biases are bad and we should try to remove them, but should we and can we? Biases can be useful for alerting a person to an issue and can therefore either enhance or hinder fair judgement in the real-world, complex environment of practice-based assessment. This begs the question, "Should we train assessors about biases?" We take the view that we should, while acknowledging that it is futile to try to train out biases due to their hard-wired nature.

Our training package is called 'Better Judgement' and has been funded by the Australian Government Office for Learning and Teaching. It includes video presentations to explain judgement biases and how they might influence assessors, and vignettes of obvious and subtle cases in which a certain bias occurs. The training package is available at www.flinders.edu.au/better-judgement.

Our aim is to raise assessors' awareness of biases in order for them to recognise where a bias may occur. This awareness then enables them to consciously decide what to do with the information they have. This, in turn, enables them to justify and articulate the decision they have made. As illustrated by the legal profession, it is the articulation of the justification for a decision that provides the reliability.

To date, we have collected 93 assessment scenario scripts from workshop participants. Our approach to analysing these scripts is guided by the work of Braun and Clarke (2006). We have used an inductive approach to thematic analysis to generate 'data-driven' themes. Analysis of the data collected so far indicates that the language that people acquire through the training is what is empowering – both in terms of their judgement and their ability to discuss assessment in teaching teams.

Keywords

assessment; judgement; biases

REFERENCES

Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology, 3*(2), 77-101. Norcini, J.J. (2003). Work based assessment. *British Medical Journal, 326*(7392), 753-755.

Plous, S. (1993). *The psychology of judgment and decision making.* New York: McGraw-Hill.

Schuwirth, L.W.T., & van der Vleuten, C.P.M. (2006). A plea for new psychometric models in educational assessment. *Medical Education*, 40(4), 296-300.

NOTES:		

Secure online exam capability: dimensions and trade-offs

Samar Zutshi Swinburne Online

We present a framework outlining institutional capability needed for secure online exams. We also provide examples from a real world case.

Higher education institutions typically rely on pen-and-paper exams as a form of secure and authenticated assessment. As such, these kinds of exams continue to remain, by and large, offline and non-digital - unlike other assessment and learning materials. For providers of online and blended education, the capability to deliver secure online exams would be a significant enabler in terms of meeting student requirements and expanding geographical reach. However, unproctored online exams may not be an acceptable alternative due to perceived or actual increased likelihood of cheating (Beck, 2014; Harmon & Lambrinos, 2008). In this presentation we present a framework outlining the various components of secure online exam capability. The framework emphasises that while such capability has an important technological component, other aspects are equally important. The framework identifies three key dimensions:

- 1. proctoring capability
- 2. assessment digitisation capability
- 3. student data management capability.

Security is conceptualised as a requirement that cuts across all three components. For a visual representation, see Zutshi (2015).

Various policy, pedagogical and process improvement aspects are discussed with respect to the framework. We also use the framework to articulate a number of key decisions an institution needs to make while developing such capability. The trade-offs that need to be made are discussed, with examples from an institution where the author has been involved in a project trialling and rolling out secure online exams over the last three consecutive trimesters. The dimensions and trade-offs will help to explain why, despite the availability of a number of enterprise grade assessment delivery platforms and remote proctoring solutions being available, secure online exams are not as widely used as might be the case. They will also help attendees identify ways forward for harnessing the potential of secure online exams - we argue that online exams can be designed to be more authentic assessment (Ashford-Rowe, Herrington & Brown 2014) than pen and paper exams. The session will be of interest to higher education IT faculty and administrators who might be asked to deliver secure online exam capability, faculty and administrators considering implications of digital assessment and also vendors of secure digital assessment technology.

Keywords

Online exams; remote proctoring; digital assessment

REFERENCES

Ashford-Rowe, K., Herrington, J., & Brown, C. (2014). Establishing the critical elements that determine authentic assessment. *Assessment & Evaluation in Higher Education*, 39(2), 205–222. http://doi.org/10.1080/02602938.2013.819 566

Beck, V. (2014). Testing a model to predict online cheating — Much ado about nothing. *Active Learning in Higher Education*, 15(1), 65–75. http://doi.org/10.1177/1469787413514646

Harmon, O. R., & Lambrinos, J. (2008). Are online exams an invitation to cheat? *The Journal of Economic Education*, 39(2), 116–125.

Zutshi, S. (2015, April 26). Secure Online Exam Capability [Web log post]. Retrieved from http://www.rawsense. org/2015/04/this-is-visual-that-i-use-when.html

NOTES:		

MOOCs: The AdelaideX Experience

Mario Ricci, Rebecca Vivian, Melissa Nursey-Bray, Melissa de Zwart & Kerry Wilkinson The University of Adelaide

The phenomenon of massive open online courses (MOOCs) began in 2008 with the launch of the *Connectivism and Connective Knowledge* MOOC, via an online learning environment based on various open and distance learning initiatives (Fino 2009). A plethora of MOOCs have since been introduced by higher education intuitions, many of which are offered through MOOC providers such as Coursera, Udacity and edX. MOOCs offer universities unique opportunities for brand enhancement, educational innovation and academic development, while the benefits for students include access to high quality learning materials, flexible learning opportunities and in some cases, collaborative learning (BIS 2013).

In 2015, the University of Adelaide launched a series of MOOCs via the edX platform (www.edx.org), under the name AdelaideX. Five MOOCs were offered, one per Faculty, across disciplines in which the University of Adelaide has a long tradition of both research and educational excellence: Essential Human Biology: Cells and Tissues (HumBio101x); World of Wine: From Grape to Glass (Wine101x); Think, Create, Code (Code101x); Cyberwar, Surveillance and Security (Cyber101x); and Language Revival: Securing the Future of Endangered Languages (Lang101x). Each comprised 5 or 6 weeks of content (videos, interviews, interactives, discussion forums and assessments), delivered fully-online, for free, with no pre-requisites. Decisions concerning content, structure and design were largely the responsibility of the academic team developing each MOOC, but AdelaideX learning designers and technical developers provided advice and support, for example with video production, the development of specialised learning interactives and management of the edX platform, with oversight from the Pro Vice-Chancellor (Student Learning) to ensure quality assurance.

This presentation will summarise the AdelaideX experience designing and delivering MOOCs. Specifically, it will profile: (i) course structure, content and evaluation (including academic involvement and teaching support); (ii) the students enrolled in each MOOC (by age, gender, geographical distribution and level of education), their engagement, performance and evaluations; and (iii) the objectives, motivations and professional development opportunities for academics involved in MOOC development. Completion rates will also be presented, albeit MOOC completion is not considered an adequate measure of success, since students can be engaged with learning despite not completing assessments (Kizilcec et al. 2013).

Keywords

e-learning; MOOCs; online learning

REFERENCES

Business Innovation and Skills Research Paper Number 130. (2013) *The Maturing of the MOOC: Literature review of massive open online courses and other forms of online and distance learning*. Available from https://www.gov.uk/government/publications/massive-open-online-courses-and-online-distance-learning-review Accessed 21/06/2015.

Fino, A. (2009) The technological dimension of a massive open online course: The case of the CCK08 course tools. *International Review of Research in Open and Distance Learning*, 10(5), 1-26.

Kizilcec, R.F., Piech, C. & Schneider, E. (2013) Deconstructing Disengagement: Analyzing Learner Subpopulations in Massive Open Online Courses. *Third International Conference on Learning Analytics and Knowledge*, LAK '13 Leuven, Belgium. Available from http://www.stanford.edu/~cpiech/bio/papers/deconstructingDisengagement.pdf Accessed 21/06/2015.

NOTES:		

Badges! Badges? Badges... Lessons learned playing with digital badges

Timna Garnett & Didy Button Flinders University

Digital badges such as the Fitbit activity monitor systems and the Apple Watch activity app rewards are being integrated into our lives, but their potential for motivating students to become independent and prepared learners by cultivating their inclusion in formal class setting remains relatively unexplored (Glover, 2013). To explore the potential of the digital badge in an educational setting, a study at Flinders University using Moodle™ learning platform was developed to investigate the digital badge as a motivator for being prepared for face-to-face classes (Chittleborough, Mocerino, & Treagust, 2007; Gregory & Trapani, 2012). A first year nursing topic of approximately 400 students was redesigned in 2014 to accommodate several game elements, as per gamification techniques, which included digital badges (Deterding, Sicart, Nacke, O'Hara, & Dixon, 2011). The results obtained by preand post-topic attitudinal and qualitative surveys, capture the overall level of interest experienced by students over two consecutive years (2014 and 2015). The preliminary results of a three year study indicate that digital badges motivated 23% of the student cohort in 2014 and 25% in 2015. The findings of the study provide practical considerations for how digital badges may be positively used to motivate some students to prepare for class, while identifying potential issues for anyone wishing to explore the opportunities of informal, non-graded digital badges.

Keywords

Digital badges; Moodle; eLearning; Gamification

REFERENCES

Chittleborough, G. D., Mocerino, M., & Treagust, D. F. (2007). Achieving greater feedback and flexibility using online prelaboratory exercises with non-major chemistry students. *Journal of Chemical Education*, 84(5), 884-888. doi: 10.1021/ed084p884

Deterding, S., Sicart, M., Nacke, L., O'Hara, K., & Dixon, D. (2011). Gamification. using game-design elements in non-gaming contexts. Paper presented at the PART 2------Proceedings of the 2011 annual conference extended abstracts on Human factors in computing systems.

Glover, I. (2013). Open Badges: A visual method of recognising achievement and increasing learner motivation. *Student Engagement and Experience Journal*, *2*(1). doi: 10.7190/seej. v1i1.66

Gregory, S.-J., & Trapani, G. D. (2012). A blended learning approach to laboratory preparation. *International Journal of Innovation in Science and Mathematics Education*, 20(1), 56-70.

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An Instructor's Reflections on the Use of a Video Assessment Tool for Group Project Work

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Group presentations are commonly used in tertiary education programs to develop numerous skills required in future employment (Elliott & Higgins, 2005). Traditionally students view such assignments as either the most rewarding or the most intimidating components of their degree programs (Biggs & Tang, 2007). This paper describes the use of Information Communication Technologies for summative assessment of a group project with the aims of increasing student engagement and promoting flexibility in time and space.

Experiential learning in the 'Animals and the Law' course has been achieved previously through a group collaborative 'moot' exercise which was presented in a face-to-face format. This required students to each undertake the role of a party in a hypothetical animal law court case, for example playing counsel for the defence and prosecution. Due to the increasing demand from students for increased flexibility, in addition to future plans to offer the course in a distance mode, we made this component into a video assessment in 2014.

Students undertook the same exercise as had been included previously in the face-to-face presentation. The final videoed presentation was then uploaded to the Blackboard course site on a wiki page that had been created for the student group. Due to technological issues with uploading large files to these pages, we subsequently used the Blackboard discussion boards as the repository for the final assessment. This had the added advantage that students could review the work of other groups. Learning outcomes were assessed using a marking rubric with an included peer-review component that students undertook of others in their group. Assessment criteria were content-based rather than technology/presentation-based. An evaluation of student experience was undertaken using a post-assessment survey. This survey was designed to uncover difficulties with the technological aspects of the assessment from a student perspective, in addition to general viewpoints as to the usefulness of the assignment in developing realworld skills and advantages over traditional oral presentation.

This paper will describe issues with practical implementation of the assessment from an instructor's perspective in addition to results of the student feedback survey. Sixteen survey responses were received (response rate = 50%). In the main, students responded positively to the nature of the assessment, perceiving this as a distinct advantage over faceto face assessment strategies. The main reason cited for this was the reduced anxiety felt compared to face-to-face oral presentations. The majority of respondents (62%) used Apple devices to film their submission with the remaining students using hand-held video cameras. The main disadvantage

cited was problems in submitting the assignment through the Blackboard interface used (13% disagreed that submission was problem-free). A further criticism was that the weighting of the assignment in the course (10%) was too low for the time taken in preparing the submission.

In conclusion, we believe that this mode of submission has a number of advantages over traditional face-to-face group presentations and that students appear to find this an engaging method of assessment. In future years we will consider including a self-assessment mark where students peer-review other presentations.

Keywords

Video assessment; Group work; Information Communication Technologies

REFERENCES

Biggs, J.B. & Tang, C. (2007). *Teaching for Quality Learning at University.* (3rd Ed.) Maidenhead: McGraw Hill Education & Open University Press.

Elliott, N., & Higgins, A. (2005). Self and peer assessment – does it make a difference to student group work? *Nurse Education in Practice*, *5*(1), 40-48.

NOTES:		

MOOCs: Perspectives from Higher Education in South Australia

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Massive Open Online Courses (MOOCs) are a very recent phenomenon in online education around the globe including Australia. MOOCs are seen as part of innovating pedagogies in a context of more globalised education which includes more blended and online opportunities for students (Sharples, et al., 2014; Universities UK, 20013). Many Australian universities have started offering MOOCs. In 2013, the University of Melbourne became the first Australian university to join Coursera to offer MOOCs. Since then many other Australian universities have joined the 'MOOCs bandwagon', such as the University of Adelaide Australia through EdX in 2014. It is not clear yet how MOOCs will evolve and what impact they will have, but "the most significant contribution is the MOOC's potential to alter the relationship between learner and instructor and between academia and the wider community by potentially providing a very large and diverse forum and meeting place for ideas" (Educause, 2011: 2). Sir John Daniel (2012: 19) argues in his comprehensive review about MOOCs that they "will have an important impact in two ways: improving teaching and encouraging institutions to develop distinctive missions." One of the main findings of a report about online education in the USA (Allen & Seaman, 2012: 3), was that "academic leaders remain unconvinced that MOOCs represent a sustainable method for offering online courses, but do believe that they provide an important means for institutions to learn about online pedagogy." These quotes show the potential of MOOCs to radically change the higher education landscape in Australia, and the importance of finding out what University leaders in the field think about them.

In this paper, we report the findings of a project in which we interviewed policy makers (e.g. Vice-Chancellors, Pro-Vice Chancellors with academic, teaching and e-learning portfolios), learning technologists, and also academics who developed a MOOC at South Australian universities to investigate their views about the role and impact of MOOCs on higher education. We asked them such questions as: in what ways could MOOCs help to better the student experience and the way online learning and teaching is happening in Australian universities? How do MOOCs fit into each university's e-learning and teaching strategies, and what are reasons for offering MOOCs and in what form? What likely impacts do MOOCs have on the core 'brand' of each university?

REFERENCES

Allen, I.E. & Seaman, J. (2013). 'Changing Course: Ten Years of Tracking Online Education in the United States.' Available at http://sloanconsortium.org/publications/survey/changing_course_2012.

Daniel, J. (2012). 'Making sense of MOOCs: Musings in a maze of myth, paradox and possibility.' Seoul: Korean National Open University.

Educause (2011). 'Seven things you should know about MOOCs.' Available at: http://www.educause.edu/library/resources/7-things-you-should-know-about-moocs

Sharples, M., Adams, A., Ferguson, R., Gaved, M., McAndrew, P., Rienties, B., Weller, M., & Whitelock, D. (2014). *Innovating Pedagogy 2014: Open University Innovation Report* 3. Milton Keynes: The Open University.

Universities UK (2013). Massive open online courses: higher education's digital moment? At http://www.universitiesuk.ac.uk/highereducation/Pages/MOOCsHigherEducationDigitalMoment.aspx#.Us2NDfZtCDk.

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A new tool to improve educational films in MOOCs

Stephen J Hall Torrens University Australia

MOOCs are transforming learning across formal and informal educational settings and are increasingly including educational films as learning content to engage students. While films have the power to engage audiences, they can also be boring, leading students to withdraw from learning. I present a tool designed to capture the emotions that learners self-report when viewing educational films to assist educational filmmakers in producing high-quality films that support learning for their MOOCs.

Audience boredom is a curse for filmmakers, whose objective is to engage audiences by using film techniques that activate different emotions. An understanding of the emotions that learners experience, known as academic emotions (Pekrun, Goetz, Titz & Perry, 2002), is paramount to engaging students through viewing educational films. However, few filmmakers know about the field of academic emotions and how they can be leveraged to produce educational films that emotionally support learning.

Producing educational films that are engaging and convey educational messages is difficult. Sometimes emotions activated by film techniques support learning, such as enjoyment. Conversely, the emotions of disgust, disdain and boredom turn off learners. Understanding what emotions are cued by film techniques is now possible through neurocinema, a method of measuring the activation of different emotions in audiences using brain scans. While these techniques are arguably useful for discovering audience engagement, they only report on basic emotions and lack the ability to report on the level of activation of emotions, which is critical to understand the complex relationship between emotions and learning.

Emotions are influenced by a number of factors, including age, gender, cultural background and learner interest in a topic. This complexity creates problems for educational filmmakers because they have techniques to activate different emotions in audiences, yet are unsure of how these emotions will ultimately effect a viewer's learning. Thus, a tool is needed in a brave new world that assist filmmakers in measuring the extent to which their films activate/do not activate emotions that support learning. This is paramount given the rise and popularity of MOOCs globally.

I have designed a new tool to assist filmmakers in measuring the emotions their film techniques activate in viewers. The Wheel of Academic Emotions (WAE) is designed to capture the emotions that learners self-report when viewing educational films or other digital media. I argue this tool can assist filmmakers in producing films that activate academic emotions that are known to support learning. This can assist filmmakers in significantly enhance their films produced for MOOCs, with the goal of supporting learning. The WAE is an Internet-enabled tool that produces a temporal report showing what academic emotions (Pekrun, Frenzel, Goetz, & Perry, 2007) and filmic emotions (Plantinga & Smith, 1999)

viewers or students self-report. The WAE can be used on short-film 3-6 minute film clips favoured in MOOCs or longer productions. The design of the WAE is based on a circumplex with dimensions of valence (positive/negative), physiological activation (high/low) and Task/Activity or outcome (pleasant/ unpleasant) (Feldman Barrett & Russell, 1998; Hall & Walsh, under review), Plutchick's (1980) Emotional Wheel (Plutchik, 1980) and the C2Learn Creativity Wheel (Craft, Chappell and Walsh 2014). The WAE provides filmmakers with a new assessment tool to produce educational films that better support intended learning outcomes by helping them understand what different emotions viewers report based. I argue that by using the WAE in a production workflow prior to the final edit, producers of educational films can critically assess their productions. This may in turn improve educational films used within MOOCs so that they are engaging and support learning.

Keywords

Academic Emotions; MOOC films, Educational Filmmaking, Reducing MOOC Attrition

REFERENCES

Craft, A., Chappell, K., and Walsh, C.S. (2014). *Deliverable* 2.2.2: C2Learn Learning Design for Creative Emotional Reasoning (CER). O C2Learn: Creative Emotional Computational Tools Fostering Co-Creativity in Learning Processes.

Feldman Barrett, L., & Russell, J. A. (1998). Independence and bipolarity in the structure of current affect. *Journal of Personality & Social Psychology*, 74, 967-984.

Hall, S. J. and Walsh, C.S. (under review). Using digital technologies to activate emotions and foster creativity and innovation. *International Conference of the Australian Association for Research in Education (AARE)*. Freemantle, Australia. November 29-December 3, 2015

Pekrun, R., Frenzel, A. C., Goetz, T., & Perry, R. P. (2007). The Control-Value Theory of Achievement Emotions. An Integrative Approach to Emotions in Education. *Emotion in Education*, 13–36. doi:10.1016/B978-012372545-5/50003-4

Pekrun, R., Goetz, T., Titz, W., & Perry, R. P. (2002). Academic Emotions in Students' Self-Regulated Learning and Achievement: A Program of Qualitative and Quantitative Research. *Educational Psychologist*, 37(2), 91–105. doi:10.1207/S15326985EP3702_4

Plantinga, C., & Smith, G. (1999). *Passionate views*. Baltimore: Johns Hopkins University Press.

Plutchik, R. (1980), EMOTION: *A Psychoevolutionary Synthesis*, Harper & Row

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Revision with PPT games

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For many years question and answer games based on television shows such as "Jeopardy!" have been widely reported in higher education literature as being useful tools for interactive learning [e.g. Azriel, Erthal, & Starr 2005; Benek-Rivera & Mathews 2004; Gast, & Leatham 2005; Grabowski & Price 2003; Revere 2004; Siko, Barbour, & Toker, 2011; Siko, & Barbour 2013). One study examining the effectiveness of "Jeopardy!" type games found that 80% of student participants gave them the highest rating for usefulness in learning and reviewing material as they prepared and revised for examinations (Ritzko & Robinson 2006 p. 46.) Participation in these types of games has been found to be a good way of assisting students to safely identify gaps in their learning prior to examinations.

This presentation will discuss the use of the PowerPoint (PPT) game "Jeopardy!" to assist undergraduate midwifery students in revising for examinations. When playing the game, students are divided into teams and the academic acts as the game show host. The game is played towards the end of a course (unit, subject, topic) and is specifically designed to assist in revision for that course's examination.

Student feedback regarding the use of this game for revision has been ongoing from 2009 to present. When it was first used in 2009 a brief survey consisting of two Likert scale (5 point) questions was administered. The survey met UniSA guidelines for an evaluative activity undertaken without need for formal ethics approval [UniSA 2012]. Thirteen students attended the tutorial and 12 of these chose to respond to the survey. Questions and responses were:

Q 1: The Jeopardy game was a creative way of reviewing my learning

There was 100% broad agreement to this question i.e. all students either agreed (n=6) or strongly agreed (n=6) with this statement

Q2: The jeopardy game assisted me to identify gaps in my learning

12 students agreed (5) or strongly agreed (6) with one having a neutral (1) opinion (92% broad agreement).

Student feedback has since been received via the standard University course evaluation, routinely administered at the completion of each course. Although a specific question about the game is not asked, many students take the opportunity to make comments about how the "Jeopardy" game assists them to identify gaps in their learning e.g.:

- Was interesting to know what else I needed to brush up on
- It was an exciting and interesting game and contributed to areas of my learning I can improve
- It was good to test your knowledge and see what questions may be asked. Good revision
- It was a fun way of checking gaps in my knowledge

In this presentation the pedagogy of using PPT games for revision will be briefly discussed, and a demonstration will be given showing how these games have been used across different year levels and programs (nursing and midwifery) and will include a short video of a "Jeopardy" game in progress.

Keywords

PPT games, revision, Undergraduate education.

REFERENCES

Azriel, J.A., Erthal, M.J., Starr, E. (2005). Answers, questions, and deceptions: What is the role of games in business education? *Journal of Education for Business*, *81*, 1: 9-13.

Benek-Rivera, J., Mathews, V. (2004) Active learning with jeopardy: students ask the questions. *Journal of Management Education* 28:104-118

Gast, J., Leatham, M. (2005). Theory Jeopardy: A fun interactive approach to teaching theory. *American Journal of Health Education*, *36*,1: 54-57.

Grabowski, J.J., Price, M.L. (2003) Simple HTML template for creating science-oriented Jeopardy! Games for active learning, *Journal of Chemical Education*, 80: 967.

Revere, L. (2004) Classroom Jeopardy: A winning approach to improving student assessment performance and satisfaction. *Decision Line* 23, 3: 4-6

Ritzko, J., Robinson, S. (2006). Using games to increase active learning. *Journal of College Teaching and Learning*, 3,6:, 45-50.

Siko, J., Barbour, M. K., Toker, S. (2011). Beyond Jeopardy and lectures: Using Microsoft PowerPoint as a game design tool to teach science. *Journal of Computers in Mathematics and Science Teaching*, 30, 3: 303-320.

Siko, J. Barbour, M. (2013). Game design and homemade PowerPoint games: An examination of the justifications and a review of the research. *Journal of Educational Multimedia and Hypermedia*, 22,1: 81-108.

UniSA (2012) Guidelines for evaluation activities involving UniSA students and staff. University of South Australia: Adelaide available online http://w3.unisa.edu.au/policies/codes/academic/evaluation.asp

NOTES:	

Game Based Learning to Frame Knowledges in 'Both Worlds'

Susannah Emery Curtin University **Chad Habel** The University of Adelaide

When Marc Prensky (2001) coined the term 'digital natives', he probably had little idea of the role of technology in facilitating epistemological dialogues between Indigenous and non-Indigenous Australians. The vast majority of Australians are literally (not just digitally) immigrants in a country whose European occupation is merely a speck in a much longer cultural tradition characterised by complex and deeply-rooted social and ecological relationships with the land. Prensky's over-generalisations thus completely fail to account for the potential of game-based learning to encourage dialogue between Indigenous knowledge systems and more positivist, Western approaches to knowledge and learning.

Prensky's original formulation is now best seen as a manifesto, and has been supplemented by other ways of understanding the potential for learning in video games. For example, James Paul Gee's theory of 'situated cognition' (2007) helps us to understand how games facilitate a highly contextualised experience of learning which is then translatable to other contexts. More importantly, Shaffer (2006a) suggests a way to enable 'children to learn in ways that are deeply authentic and fulfilling and powerful and motivating and, most of all, relevant' (p. 10). He proposes the notion of epistemic frames as a way of describing the organising principles for practicing within particular epistemologies, or ways of knowing (Shaffer 2006b). Therefore, epistemic games have the potential to empower students/players to 'learn through participation in authentic recreations of valued work in the world' (Shaffer 2006b). However, this is all 'blue-sky thinking' and needs more solid grounding in specific, local contexts.

Lester et al (2013) have called for a 'Red Dirt Curriculum' to take the place of the current neoliberal educational paradigm that provides more challenges than opportunities for rural and remote education. The authors discuss the specific context of Anangu communities right across the north-western part of South Australia and the 'tri-state region', and particularly those who speak Pitjantjatjara or Yankunytjatjara. For these communities and cultures, education must take account of 'essential elements of relationship to the land, intergenerational social relationships, language, ecological knowledge and Anangu histories as important in a dynamic curriculum' (Lester et al 2013, p. 19). Video games have the potential to close the gap not just in educational attainment but in epistemologies, by creating dialogues between vastly different knowledge structures that largely exist in different worlds. As the most popular medium of our generation, video games provide a

point of connection and dialogue that can bring 'both worlds' together, especially through the platform of near-ubiquitous mobile gaming.

This paper not only proposes the development of projects and research approaches to help bridge this gap; it also presents a trailer for a game in development that can fulfil this potential. Stronger Together is a game which allows player to explore the 'problem' of drought in a local community from two different perspectives. The characters, Boyd and Kungka, demonstrate their skills as a representation of the values of Western and Anangu education respectively. As the two children commence their journey they are required to collaborate, learn about each other and utilise each other's knowledge and skills. An essential aspect of the development process of this game is close collaboration with the Anangu community in order to eschew the paternalistic approaches that have sometimes been applied. This paper will briefly outline the theoretical framework for the project and encourage discussion on further steps to develop it.

REFERENCES

Gee, J.P. (2007). What video games have to teach us about learning and literacy (2nd ed.). New York: Palgrave Macmillan.

Lester K, Minutjukur M, Osborne S, Tjitayi K 2013, Red Dirt Curriculum: Re-imagining Remote Education, Sydney Myer Rural Lecture 3, accessed 4/7.15, available: https://www.flinders.edu.au/ehl/fms/education_files/coreacom/SM%20 Rural%20Lectures/Sidney%20Myer%20Rural%20Lecture%20 3%20-%20Karina%20Lester%20Makinti%20Minutjukur%20 Sam%20Osborne%20Katrina%20Tjitayi-%20for%20Web.pdf

Prensky M 2001, 'Digital natives, digital immigrants', From *On the Horizon*, Vol. 9 No. 5, October, MCB University Press, accessed: 4/7/15, available: http://www.marcprensky.com/writing/Prensky%20-%20Digital%20Natives,%20Digital%20Immigrants%20-%20Part1.pdf

Shaffer DW 2006a, *How computer games help children learn*, Palgrave Macmillan, New York.

Shaffer DW 2006b, 'Epistemic frames for epistemic games', *Computers and Education*, vol. 46 no. 3, accessed: 4/7/15, available: http://www.sciencedirect.com/science/article/pii/S0360131505001582

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Why do they think that? Using the Genetics Concept Assessment to characterise student misunderstanding.

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Learning genetics is challenging – the learner must reconcile concrete observations with abstract concepts, face cognitive overload, master a fundamental biological foundation, and deal with randomness and complexity. As a teacher, I strive to guide students towards deep understanding by giving clear explanations, highlighting connections, and scaffolding problem-solving strategies. Why then, do they still give such strangely incorrect answers to exam questions? The missing link is what the students are actually thinking. Approaches that reveal what students are thinking and how they think within a context should lead to more effective teaching and learning strategies (Smith & Tanner, 2010). Concept assessments (or inventories) are sets of multiple choice questions that indicate students' understanding of core concepts and principles. The Genetics Concept Assessment (Smith, Wood & Knight) was completed by students of a second year genetics course this year, and student responses were compared with previously published patterns (Smith & Knight, 2012). Of particular interest would be to identify concepts that are commonly misunderstood, especially those for which a high proportion of students give a common, incorrect answer. Such misconceptions have the potential to reveal much about how students think about genetics. It is hypothesised that some concepts are commonly misunderstood together. I aim to identify these connections, and hypothesise that such connections between misconceptions can be aligned with specific cognitive principles (Coley & Tanner, 2015). By working to explain the underlying causes of misconceptions, aim to suggest strategies to minimise the establishment of misconceptions and maximise their replacement with deep understanding. Thus, students' potential to learn and understand more advanced topics in genetics would be maximised. This work involves concepts in genetics, but the underlying misconceptions could have consequences for learning other areas of science. The challenge in understanding what students actually think and understand is on-going.

Keywords

misconceptions; concept assessment; concept inventory

REFERENCES

Smith, J. I. & Tanner, K. (2010). The problem of revealing how students think: Concept inventories and beyond. *CBE-Life Sciences Education* 9, 1-5.

Smith, M. K., Wood, W. B. & Knight, J. K. (2008). The Genetics Concept Assessment: a new concept inventory for gauging student understanding of genetics. *CBE Life Sciences Education*, 7, 422-430.

Smith, M. K. & Knight, J. K. (2012). Using the Genetics Concept Assessment to document persistent conceptual difficulties in undergraduate genetics courses. *Genetics*, 191, 21-32.

Coley, J. D. & Tanner, K. (2015). Relations between intuitive biological thinking and biological misconceptions in biology majors and nonmajors. *CBE-Life Sciences Education, 14*, 1-19.

NOTES:		

Introducing work readiness skills and assessment practices in the curriculum

Suniti Bandaranaike James Cook University **Lynette Torres** Monash University

A major goal of teaching and learning in higher education is work-readiness and sustainable employability. Work readiness is the extent to which graduates possess the attributes that prepare them for success in the workplace (Caballero & Walker, 2010). This research describes an inter-university professional collaboration to improve teaching and learning practices in higher education. The study focuses on how to achieve work- readiness using the Work Skills Development (WSD) framework (Bandaranaike & Willison, 2009) successfully trialled at James Cook University since 2009. The WSD is a practical multidisciplinary framework and has been applied to monitor the growth and application of work skills in a placement environment (Bandaranaike & Willison, 2015). This presentation focuses on reflective practice as guided by the WSD framework, highlighting the ability of the WSD to identify cognitive and affective skills in preparing students for employability. Reflection enables deeper learning, gives meaning to experience, and is a process through which personal experience informs practice (Wald, Davis, Reis, Monroe & Borkan, 2009). The study provides the contextual background to elicit cognitive and affective reflection in the workplace through leading questions. This research has subsequently been extended to inform employability learnings for a Masters unit on professional practice in the Faculty of Business and Economics at Monash University. The unit has been redesigned from the ground up as a collaboration with academics, librarians, and careers staff. The result is a purposefully designed unit where research and employability skills are embedded within the content through the application of the WSD and the Research Skill Development (RSD) framework (Willison & O'Regan, 2006/2013), Reflection on learning, identifying personal values and emotions associated with work readiness are guided through affective domain activities. An example includes an online reflective skills survey and associated activities informed by the WSD undertaken by students at the commencement of the unit. From the reflective WSD process, and authentic assessment programme, students create employability artefacts, including a résumé, cover letter, and social media employment profile. During the collaborative project design phases a formative design research method incorporating a cyclical evaluation process including expert review from educational designers was used. Underpinning the unit with the WSD and RSD frameworks has informed the practical outputs desired by students from previous unit evaluations as well as demonstrating graduate and employer demands to engage students explicitly with employability learning. Today's curriculum demands innovative

design, with activities and pedagogies that enhance higherorder skills including cognitive and affective skills together with reflection. This presentation will interest those exploring methods to integrate cognitive and affective skills in the context of employability through reflective pedagogies to produce work ready students for a brave new world.

Keywords

Employability learning, employability skills, emotional work-readiness, collaboration, curriculum design, reflective pedagogies, experiential learning

REFERENCES

Bandaranaike, S., & Willison, J. (2009). *Work skills development framework*. Retrieved from http://www.adelaide.edu.au/rsd/framework/frameworks/WSD-2009 2014.pdf

Bandaranaike, S., & Willison J. (in print). Boosting Graduate Employability: Bridging the Cognitive and Affective Domains. *Asia-Pacific Journal of Cooperative Education*, Special Edition, Volume 16, issue 3, August, 2015.

Caballero, C., & Walker, A. (2010). Work readiness in graduate recruitment and selection: a review of current assessment methods. *Journal of Teaching and Learning for Graduate Employability*, 1 (1), 13–25

Torres, L., Banderanaike, S., & Yates, S. (2014). 'What skills do I have? What skills will I need?'- Building an employability skills profile through an online reflective practice tool. Paper presented at the 10th International Symposium on Cooperative & Work-Integrated Education, University West, Trollhattan, Sweden. June 2-4, 2014. http://www.waceinc.org/uwest2014/proceedings/Australia/Lyn%20Torres%20-%20 Australia.pdf

Wald, H.S., Davis, W.S., Reis, S.P., Monroe, A.D., & Borkan, J.M. (2009). Reflecting on Reflections: Enhancement of Medical Education Curriculum with Structured Field Notes and Guided Feedback. *Academic medicine*, 84(7), 830-837.

Willison, J., & O'Regan, J. (2006). Research skills development framework. Retrieved from http://www.adelaide.edu.au/rsd/framework/

NOTES:		

A rollercoaster ride: Performance as learning

Amy Hamilton Flinders University

This paper outlines the changing perceptions of generalist pre-service teachers as they undertake a compulsory Arts topic that requires them to plan and participate in a public performance as part of their assessment. Boud's (1993) concept of 'experiential learning' underpins this approach to preparing pre-service teachers. Research about the value of 'Experience Based Learning' (EBL) shows that learners' personal engagement with an idea becomes a focus and makes what is being studied a reality. EBL involves the whole person, their feelings, senses and cognition, which evokes awareness and perception and values (Andresen et al 2000).

Dewey argues (1916/1980) that educational aims must be translated into pedagogy that fits the activities of the students in a learning environment that liberates and organizes the capacities of students where students are participants rather than spectators. From Dewey's perspective, student learning should be a process of forming dispositions, intellectual and emotional, and that students as participants are inclined to act to assure best possible outcomes (rather than just good enough). Whitehead (1929) argues that there is only one subject matter for education and that is life. Asking pre-service teachers to become artists by performing in an authentic context (in a theatre with school children as audience) and then performing as teachers with an authentic message or 'big idea' allows pre-service teachers to develop valuable expertise and a professional identity as they develop a feel for the 'game' (Bourdieu 1971).

The act of performing to an audience involves reflexivity in that it is not just doing actions without thought; it is consciously considering the audience. Performance is both a process and a product. As the pre-service teachers plan and prepare for their performance they are developing new ways of seeing and understanding themselves and their world.

Pre-service teachers bring their perceptions about the arts and about the role and practices of teachers to the task, and this forms the structure of the way they become a player in the field. According to Dinham (2007) most teachers instinctively believe that arts education is important but in reality many 'players' (Bourdieu 1977) in the education field, including parents and teachers, don't really know why. Many perceive the arts as fun, or a way to support other (more important) subjects, or even think that arts are a waste of time (Dinham 2011). At the beginning of the topic the pre-service teachers write about their apprehension towards performing and question the value of participating in such arts based activities. As the semester progresses their anxiety increases as pressures intensify, and in the final few weeks (around SET time) the pre-service teachers are feeling pretty negative towards the topic, the topic coordinator, the arts and each other.

The pre-service teachers are asked to reflect on their experiences before and at the end of the topic. Their final reflections indicate what they have learned about the arts, arts-based pedagogies and themselves as future teachers.

Keywords

Pre-service teachers, performance as learning, experience based learning, reflection.

REFERENCES

Andresen, L. Boud, D. & Cohen, R. (2000). In Foley, G. (Ed.), *Understanding Adult Education and Training*. (2nd ed., 225-239). Sydney: Allen & Unwin

Bourdieu, P. (1971). Systems of education and systems of thought, in: M.F.D. Young (Ed.) *Knowledge and Control: New Directions in the Sociology of Education*, London, Collier-Macmillan.

Bourdieu, P. (1977). *Outline of a Theory of Practice*, Cambridge: Cambridge University Press.

Boud, D. (1993). 'Experience as the base for learning'. *Higher Education Research and Development*, 12(1), 33-44.

Dinham, J. (2007). Delivering Primary Visual Arts Education: Where Rhetoric Meets Reality Australian Art Education, 30, (1)

Dinham, J. (2011). *Delivering authentic arts education: Visual arts, drama, music, dance, media.*, South Melbourne, Cengage Learning.

Dewey, John. (1916/1980). *Democracy and Education*. In J. A. Boydston (ed.), *John Dewey: The Middle Works* (Vol. 9). Carbondale, IL: Southern Illinois University Press.

Whitehead, A. (1929). *The Aims of Education and Other Essays*. New York: Macmillan.

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At the heart of social work: Emotion in the practice-based classroom

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There has been an increase in the use of experiential learning in social work education in recent years (Cartney, 2006). Experiential learning requires the use of self and has both affective and cognitive components (Barlow & Hall, 2007, p. 399). It therefore challenges students in ways that traditional methods of teaching and learning might not have.

In the higher education context, teaching has predominantly focused on cognitive learning (Barlow & Hall, 2007, p. 399). However, when using experiential learning, teachers need to acknowledge the use of self and also attend to the affective or emotional aspects of teaching and learning (Taxer & Frenzel, 2015, p. 79). This is particularly relevant in social work education as social work practice is complex and relational and requires empathy and the use of self, making it inherently emotional (Prosser, Tuckey & Wendt, 2013, p. 319).

In this presentation, we will reflect on our experiences of teaching a second year course on interviewing skills for social work and human service students. In this course, students engage in peer and self-assisted learning by conducting a 20 minute interview with another student, focusing on a low-key, real life issue.

There is a level of discomfort that comes with this method of teaching and learning (Askeland, 2003). Students experience a range of emotions, including feeling overwhelmed and anxious about demonstrating their skills, which is heightened by the artificial environment and use of recording equipment (Cartney, 2006, p. 837). Although students are strictly instructed to discuss low key topics only, being genuinely listened to can lead to further self-disclosure than originally intended and can bring up current or previous personal experiences of trauma and pain.

Teachers are not exempt from the emotional aspects of experiential learning. This can make teachers feel tired or frustrated, as well as inspired, energised and connected with students (Taxer & Frenzel, 2015). While attending to the emotional components of learning has not been traditionally recognised as part of a teacher's role, we argue that teachers have a responsibility to manage emotions in the classroom.

The use of experiential learning in teaching interviewing skills can be confronting and anxiety provoking (Cartney, 2006, p. 837; Askeland, 2003). However, it is necessary, as emotion is at the heart of social work and we have a responsibility to prepare students for professional practice (Gair, 2011). Therefore, we also have a responsibility to attend to the affective or emotional aspects of this learning (Bowen, 2014). Drawing on our experiences, as well as relevant literature, this presentation will explore strategies for best practice in managing emotion in the classroom. These include using a student-centred approach, acknowledging emotion,

establishing group norms, managing group dynamics, supporting critical reflection, encouraging self-care and providing support to students. Such strategies can enable students to develop the skills in emotional management which are necessary for professional practice.

Keywords

Experiential Learning; emotion; practice-based learning; affect; social work education

REFERENCES

Askeland, G. (2003). Reality play: Experiential learning in social work training. *Social Work Education*, 22(4), 363-373.

Barlow, C. & Hall, B. (2007). "What about Feelings?": A Study of Emotion and Tension in Social Work Field Education. *Social Work Education*, 26(4), 399-413.

Bowen, J. (2014). Emotion in the classroom: An update. *To improve the academy*, 33(2), 196-219.

Cartney, P. (2006). Using Video Interviewing in the Assessment of Social Work Communication Skills. *The British Journal of Social Work*, 36(5), 827-844.

Gair, S. (2011). Creating spaces for critical reflection in social work education: Learning from a classroom-based empathy project. *Reflective Practice*, 12(6), 791-802.

Prosser, B. Tuckey, M. & Wendt, S. (2013). Affect and the lifeworld: Conceptualising surviving and thriving in the human service professions. *Health Sociology Review: The Journal of the Health Section of the Australian Sociological Association*, 22(3), 318-327.

Taxer, J. & Frenzel, A. (2015). Facets of teachers' emotional lives: A quantitative investigation of teachers' genuine, faked, and hidden emotions. *Teaching and teacher education*, 49(1), 78-88.

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A class above: Evidence-based action research into teaching that is connected, mobile and accessible in a higher education context

Steve Taylor Flinders University

The Brave New World of higher education faces a number of inherent conflicts. Standardised frameworks encourage a one-size fits all approach to teaching and learning, while the makeup of the student body shows an increased diversity. This has implications for teaching and learning in higher education contexts.

This paper will outline a pedagogical innovation in teaching, undertaken as part of a 2014 Flinders University Faculty of Education, Humanities and Law Community of Practice. The aim was to teach in ways that were mobile, accessible and connective. The strategies implemented, and the consequent feedback by participants will be described, then discussed in relation to an understanding of e-learning as a social act that enhances learner agency.

As part of the Community of Practice, e-learning technologies including video conferencing and Moodle were introduced into a core Theology topic. Bloom's taxonomy was deployed as a theoretical frame to negotiate the change with students, including a shift in contact time from lecturer-driven content to student-centred small group activities. Changes were made to assessment, shifting participation from face to face to digital, in order to enable connectivity. Indigenous voices were introduced into the curriculum to enhance access. Garrison's community of inquiry model becomes a useful model in summarising these changes (2007).

McInnis (2005) has argued that education can be analysed using a three-fold framework that includes curriculum, learning community and organizational infrastructure. This research project engaged all three, with an infrastructure innovation making possible the curriculum change, with the results tested by researching the experience of the learning community.

Students completed a written survey at three points during the course. The results indicated that a significant shift had occcured in the class. Students had moved from an initial appreciation of content, to a consideration of how they learn from the diversity inherent among their peers. Students percieved that the changes had enhanced their ability to communicate effectively and expressed a preference for choice, collaboration and diversity.

The research data can be helpfully theorised in conversation with Haythornthwaite and Andrews (2011) who explore e-learning as a social act that enhances learner agency. They draw on Preston (2008) who observed that students fill different roles in an on-line learning community. Some act as

e-facilitators, others as braiders or accomplished fellows. A mechanism for this process, drawing on Haythornthwaite and Andrews, is proposed. This involves understanding how digital texts change notions of authorship and thus contribute to learning processes that are more democratic and less hieararchical.

It will thus be argued that the use of teaching that is mobile, accessible and connective reshapes the student learning experience. Flipped learning enhances student agency and increases appreciation for diversity among the student cohort. It turned the student cohort into a class above, in which students find themselves learning as they inhabit teaching roles among their peers.

Keywords

flipped learning, e-learning, higher education

References

Garrison, D. R. (2007). Online community of inquiry review: Social, cognitive, and teaching presence issues. *Journal of Asynchronous Learning Networks*, 11(1), 61-72

Haythornthwaite, C. & Andrews, R. (2011). *E-learning Theory and Practice*. Sage: London.

McInnis, C. (2005). "The Governance and Management of Student Learning in Universities." In *Governing Knowledge: A Study of Continuity and Change in Higher Education*. Edited by Ivar Bleiklie and Mary Henkel. The Netherlands: Springer. file:///C:/Users/jong0009/AppData/Local/Downloads/0deec520376135d76b000000.pdf.

Preston, C. J. (2008). Braided Learning: An emerging process observed in e-communities of practice. *International Journal of Web Based Communities*, *4* (2): 220-43).

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Increasing Personalisation in a First-Year Language Course: Exploring the possibilities

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Over the past few years, a consistent pressure towards rationalising teaching by creating larger classes has resulted in considerable variation in skill levels and motivation among language students within the same groups. Not surprisingly, a recent project identified "mixed proficiency classes ... and [a] possible mismatch of student motivations and course design" (Nettlebeck et al., 2009:5) as among the most powerful factors influencing learners' decision to abandon the study of a second language at tertiary level.

A possible solution to these issues has been identified in the adoption of a negotiated curriculum (Nunan 1988) or process syllabus (Breen and Littlejohn 2000), which increases the level of personalisation provided in language classes. However, the complex practicalities surrounding the management of individualised learning paths have been a deterrent to their uptake, especially for students at beginning levels of competence in the target language. Recent developments in technology, and the availability of project-management tools that facilitate collaboration and shared ownership, call for a reassessment of the feasibility of such approaches.

This paper reports on the preliminary phases of a project aimed at trialing the implementation of a student-centred approach to curriculum design, with a group of beginning-level students of Italian. The project involves working toward the development of Personal Learning Environments (PLEs) which allow students to customise their own learning pathways, by selecting and sequencing activities that present appropriate levels of challenge and respond to their needs, interests, and learning styles. Over two academic semesters, students were gently introduced to the idea of taking more responsibility for their own learning, by slowly moving from a more traditional teacher-lead curriculum, to an environment providing increasing levels of choice and personal agency. PLEs were introduced in Semester 2, through an integration of LMSbased elements and Trello boards (http://www.trello.com) for organisation and management: additionally, personalisation was increased through the use of learners' artifacts. Finally, in order to sustain students' motivation, an element of gamification was also introduced, through virtual badges.

In this presentation, I illustrate some of the practical issues that underpin the project, as well as the design rationale and implementation plan. Input and feedback received from students on the preliminary phase will also be discussed. Such feedback was essential in shaping some of the design decisions that were taken in Semester 2, and provides some valuable information on the features of this learning environement that students appreciate.

Keywords

personalized learning; personal learning environments (PLE); language learning; second language acquisition

REFERENCES

Breen, M. P., & Littlejohn, A. (2000). *Classroom Decision-Making: Negotiation and Process Syllabuses in Practice*. Cambridge University Press.

Nettelbeck, C., Byron, J., Clyne, M., Dunne, K., Hajek, J., Levy, M., Lo Bianco, J., McLaren, A., Möllering, M., and Wigglesworth, G. (2009) *An Analysis of Retention Strategies and Technology Enhanced Learning in Beginners' Languages Other Than English (LOTE) at Australian Universities.* Canberra: Australian Academy of the Humanities.

Nunan, D. (1988). *The learner-centred curriculum: A study in second language teaching.* Cambridge University Press.

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Feedback without grades in an online mathematics course

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Assessment drives learning, but it is not always the learning you expect. Gibbs and Simpson (2004), Nicol and Macfarlane-Dick (2006), and Jonsson (2013) all list a number of conditions of assessment and the feedback students receive on it that dictate whether students will learn what we hope they learn. These can be summarised in two main ideas. The first is that feedback needs to be practically useable. It has to refer to things students can achieve, in a way they can act on, and with opportunities to act on it. The second is that students need support to use assessment and feedback for learning. They often don't know what assessment is for, or what we are looking for, or how to interpret the feedback we give.

We teach a self-paced mathematics bridging course fully online, where students engage with resources online at their own pace, with very little interaction with the teachers outside of their assessment. It is vitally important that we set up conditions where assessment will drive the appropriate learning.

We have chosen to design our assessment process around a submit-feedback-resubmit cycle. For each separate topic in the course, students are given a list of problems to solve, and they are expected to submit written solutions to these problems that include their reasoning process. Students do not receive grades, but instead receive comprehensive feedback via email which may ask them to clarify their thoughts or resubmit parts of the assignment or do a follow-up task.

In this presentation, we will describe our own experiences of using this assessment and feedback process, and the impact it can have students' learning and future success in mathematics learning. We will do this through a number of case studies of particular students' journeys through our course and beyond. Possibilities for using this approach in larger-scale contexts will be discussed.

Keywords

feedback, distance education

REFERENCES

Gibbs, G. & Simpson, C. (2004). The conditions under which assessment supports student learning, *Learning and teaching in higher education*, 1, 3-31

Jonsson, A. (2013). Facilitating productive use of feedback in higher education, *Active Learning in Higher Education*, *14*, 63-76

Nicol, D.J. & Macfarlane-Dick, D. (2006). Formative assessment and self-regulated learning: a model and seven principles of good feedback practice, *Studies in Higher Education*, *31*, 199-218

NOTES:		

The Challenge of Aligning Assessment and Competency in Health Care Management Using Self Reported Changes in Knowledge and Skills

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Background

Health care management is taught at numerous Australian universities. Most programs seek accreditation or recognition from the Australasian College of Health Service Managers (ACHSM) or the Royal Australasian College of Medical Administrators (RACMA). Recognition from these bodies ensures that programs provide coverage of a range of health management capabilities required by potential health care leaders.

The development of capabilities or competencies in individual students, however, is only reflected in the awarding of a qualification. At the individual subject level students receive a grade as an overall indication of performance in the subject. This is not unique to health care management, but is a feature of most, if not all, university qualifications.

Grades are generally well understood by students and employers (i.e., have face validity), but do not provide a measure of how student skill and knowledge levels have changed following the completion of their studies at either the subject or qualification level. From an employer's perspective, the awarding of a grade or qualification does not readily indicate the level of mastery of a particular subject in terms of knowledge or skill acquisition.

The need for health managers to develop competencies has received attention internationally and also within Australia within recent years. For example, studies to determine health care management competencies have been undertaken by those involved in teaching health care management (Liang et al. 2013a and 2013b).

In the USA accreditation of health management courses now requires universities to measure student competencies (Calhoun et al. 2008; Friedman and Frogner, 2010). The introduction of competency measurement in USA health care management education has not been straightforward (Bradley et al., 2008). Courses are required to use competencies as the basis of learning objectives and teaching and assessment methods (CAHME, 2011). One method of measuring change in student competency has been the implementation of preand post- self-reported surveys (Lomperis et al. (2012).

Research

A self-reported online survey was introduced in a health care management subject for students enrolled in health care financial management. The survey was used to assess changes in student knowledge and skill levels across a range of areas based upon the intended learning outcomes for the subject. The learning outcomes relate to knowledge and skill competencies that managers should possess following the completion of the subject.

Findings

While current assessment is aligned with learning outcomes, changes in student competency are not easily reported on the basis of a single subject grade. It was possible to demonstrate changes in student learning that aligned to competencies. For some students exposure to the subject material appears to have resulted in them questioning their original level of competency.

While the introduction of online survey mechanisms to measure are easily implemented, there are a number of challenges yet to be addressed, including the additional burden on staff time and the fact that not all students are prepared to participate in such surveys.

Implications

The measurement of competency has a number of potential benefits including:

- The provision of additional evidence that students may be able to use in the workplace when seeking promotion
- The potential to provide employers with a more tangible understanding of how participation in education has changed the worker's competencies in specific areas
- An alternative method for the identification of learning gaps
- An engagement tool in the classroom and an opportunity for students to provide feedback about subject development.

Wider Applicability

The method should have general applicability across all disciplines and subjects.

Keywords

Competency and assessment, Self-reported student competency

REFERENCES

Bradley, E. H., Cherlin, E., Busch, S. H., Epstein, A., Helfand, B., & White, W. D. (2008). Adopting a competency-based model: Mapping curricula and assessing student progress. *Journal of Health Administration Education*, 25(1), 37-51.

Commission on Accreditation of Healthcare Management Education (CAHME) (2011). *Criteria for Accreditation Effective for Site Visits Fall 2013 and Beyond*. Accessed at http://www.cahme.org/CAHME/CAHME_Resources/CAHME_Resources/CAHME_Resources.aspx?hkey=d8c683ac-055d-454d-8b51-c6a2d08063e8 Aug 2015.

Calhoun, J. G., Vincent, E. T., Calhoun, G. L., & Brandsen, L. E. (2008). Why competencies in graduate health management and policy education?. *Journal of Health Administration Education*, *25*(1), 17-35.

Friedman, L. H., & Frogner, B. K. (2010). Are our graduates being provided with the right competencies? Findings from an early careerist skills survey. *Journal of Health Administration Education*, *27*(4), 269-296.

Liang, Z, Leggat, SG, Howard, PF, & Koh, L (2013a). What makes a hospital manager competent at the middle and senior levels? *Australian Health Review, 37*(5), 566-573.

Liang, Z., Howard, P. F., Koh, L. C., & Leggat, S. (2013b). Competency requirements for middle and senior managers in community health services. *Australian journal of primary health*, 19(3), 256-263.

Lomperis, A. M. T., Gillespie, K. N., Evashwick, C., & Turner, J. (2012). A New Approach to Assessing Student Competency Achievement: The SLU MHA Competency-Based Oral Comprehensive Examination. *Journal of Health Administration Education*, 29(4), 277-301.

NOTES:

Creating independent learners through group research projects

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There is compelling evidence to support the inclusion of independent research as part of the undergraduate experience. Research experiences encourage the development of problem-solving and critical-thinking skills (Bangera & Brownell, 2014; Randall, Wilbur, & Burkholder, 2004; Yaffe, Bender, & Sechrest, 2014). They have been shown to enhance the understanding of topic material and improve retention (Bangera & Brownell, 2014; Randall et al., 2004; Yaffe et al., 2014). Furthermore, research projects may be able to address some of the challenges facing students when they transition to university, including establishing friendships, as they often include group work (Larmar & Ingamells, 2010; Nelson, Quinn, Marrington, & Clarke, 2012). This provides students an opportunity to build friendships with peers which contributes to better learning outcomes (Larmar & Ingamells, 2010; Wilcox, Winn, & Fyvie-Gauld, 2005). A group research project also fosters independence in students by providing a research experience where problem solving is completed in a group, making a smoother transition to independent research in subsequent years.

The challenges of group projects are well documented in the literature. Group work can become a vehicle for 'free-riders', students who make minimal contribute to the project, yet who are rewarded equally with their peers (Boud, Cohen, & Sampson, 2001; Willey & Gardner, 2009). As the group work is often carried out independently, outside of formal teaching hours, it is difficult for the academic assessor to determine individual contributions to the group project (Thompson & McGregor, 2009). These challenges must be considered and addressed when designing an assessment task which requires group work.

The first year semester 1 biology topic Molecular Basis of Life includes a group research component. Students in small groups research a cutting edge molecular topic, construct a hypothesis and outline an experiment to test that hypothesis. Their research is presented in the form of a poster and a short oral presentation to teaching staff and their peers at the end of the semester. The majority of the project is carried out independently, outside of formal teaching hours. This gives students the opportunity to develop their research skills as a group, enabling a supported journey to independent research and learning in second year. The research project is assessed by two peer groups and an academic. The mark is moderated by both self and peer-assessment of the group work experience encouraging reflection and evaluation.

To evaluate the student experience of the group research project, a survey was carried out at the end of the semester. Students surveyed (n = 234) enjoyed the research project (69%) and felt that it helped them to learn about the scientific method (72%). Students agreed that the research project helped them to develop communication skills required for group work (83%) and to better understand what is required to undertake scientific research (80%). An open response question highlighted that some students felt that they needed more guidance throughout the semester. Problems encountered in group work. such as limited contribution of some group members. were also highlighted. Interestingly, there were no comments about the assessment process, perhaps demonstrating the value of using both self and peer-assessment in a group research project. The results of the survey have provided support for the inclusion of a group research project at the first year level. The research and communication skills developed through this project provide a strong foundation for independent individual research in future years. Overall, the evaluation has provided valuable feedback which can be used to improve the research project for subsequent student cohorts.

Key Words

Independent learner; Group work; Biology; First year; Research project

REFERENCES

Bangera, G., & Brownell, S. (2014). Course-Based Undergraduate Research Experiences Can Make Scientific Research More Inclusive. *CBE - Life Sciences Education*, *13*(4), 602-606.

Boud, D., Cohen, R., & Sampson, J. (2001). *Peer Learning in Higher Education: Learning from & with Each Other:* Stylus Publishing Inc., 22883 Quicksilver Drive, Sterling, VA

Larmar, S., & Ingamells, A. (2010). Enhancing the First-Year University Experience: Linking University Orientation and Engagement Strategies to Student Connectivity and Capability. *Research in Comparative and International Education, 5*(2), 210-223. doi: 10.2304/rcie.2010.5.2.210

Nelson, K., Quinn, C., Marrington, A., & Clarke, J. (2012). Good practice for enhancing the engagement and success of commencing students. *Higher Education*, *63*(1), 83-96. doi: http://dx.doi.org/10.1007/s10734-011-9426-y

Randall, D. C., Wilbur, F. H., & Burkholder, T. J. (2004). Two Models for an Effective Undergraduate Research Experience in Physiology and Other Natural Sciences. *Advances in physiology education*, 28(2), 68-72.

Thompson, D., & McGregor, I. (2009). Online self- and peer assessment for groupwork. *Education & Training, 51*(5/6), 434-447. doi: 10.1108/00400910910987237

Wilcox, P., Winn, S., & Fyvie-Gauld, M. (2005). 'It was nothing to do with the university, it was just the people': the role of social support in the first-year experience of higher education. *Studies in higher education*, *30*(6), 707-722. doi: 10.1080/03075070500340036

Willey, K., & Gardner, A. (2009). Developing Team Skills with Self- and Peer Assessment: Are Benefits Inversely Related to Team Function? *Campus-Wide Information Systems*, *26*(5), 365-378.

Yaffe, K., Bender, C., & Sechrest, L. (2014). How Does Undergraduate Research Experience Impact Career Trajectories and Level of Career Satisfaction: A Comparative Survey. *Journal of College Science Teaching*, 44(1), 25-33.

NOTES:

Implementation of the new Learning Pathway tool in MyUni: Investigations into student uptake and usage.

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The higher education classroom is rapidly expanding beyond the limitations posed by brick and mortar settings into the wide world of cyberspace. Three critical factors that will need to be addressed with respect to e-learning technology are (a) ease of access and navigation, (b) interface design and (c) level of interaction (Volery & Lord, 2000). Qualitative studies report that e-learners regard the learner interface as the most important dimension as this is where a high level of interaction takes place (Van Dam, 2001; Kumar, Smith, & Bannerjee, 2004). Therefore, a well-designed, user-friendly learner interface is an essential part of the learner experience of a web-based e-learning system (Shee & Wang, 2008). Positive relationships between web-based learning technology use, student engagement and desirable learning outcomes have been previously reported, with students who engage in internet educational technologies tending to score higher in traditional student engagement measures and being more likely to engage in higher order thinking, reflective learning, and integrative learning in their study (Chen, Lambert, & Guidry, 2010).

In 2014, the University of Adelaide learning technologies team conducted a survey into overall student satisfaction with their learning management system, MyUni. While 92% of the 2450 respondents found MyUni easy or very easy to use, only 82% rated their MyUni experience as satisfying or very satisfying. When asked 'How can the university improve your experience with MyUni?', 23% made suggestions relating to a need for improvements in consistency and structure. Comments included "Have some consistency in how information is put up on MyUni" and "More logical and fixed hierarchy with less ability for the coordinator to create an overload of links".

The Learning Pathway is a navigational tool for blackboard (MyUni) courses, developed by The University of Queensland. The JavaScript presents course materials and activities in the form of a clickable pathway that quickly and easily guides users to relevant course content to help learners "see" the pathway for achieving learning objectives. The tool clearly identifies to student users what is expected of them each week, with the relevant lecture, tutorial and/or assessment components, all accessible with one click. The pathway was implemented into the MyUni course of a second year biochemistry course (n=121) with the aim of improving the users MyUni experience. Student usage of the traditional left hand menu in Blackboard was compared with their use of the Learning Pathway. Mixed models considered each student as a random effect and treated 'day of week' (the day the student clicked on the item) and 'menu type' (the new Learning Pathway vs. traditional side menu in blackboard) as fixed factors.

Results

'Menu type' and 'day of week' had strong effects on the number of clicks made in Blackboard and combined explained 94.54% of the variance. The face-to-face teaching of this course occurred on Wednesdays, and interestingly, the traditional side menu received the most clicks on Tuesdays (mean = 4.16 per student), while the greatest number of clicks in the Learning Pathway was on Mondays (3.49 per student). Overall, students made significantly fewer clicks using the learning pathway to obtain course information (F = 50.67, P < 0.0001), and the number of clicks significantly differed between days of the week (F= 16.44, P < 0.0001).

It can be inferred that those students that found the relevant course material in fewerclicks had an overall better MyUni experience, improving the user experience and potentially encouraging future engagement with the e-learning interface. Future investigations into the effectiveness of the Learning Pathway are already underway, with it being implemented into multiple MyUni courses across several faculties of the Universities of Adelaide and Queensland. Qualitative data from both students and academics involved in these implementations will be combined with quantitative data on student usage to analyse the tool further.

Keywords

Learning Pathway, Learning Analytics, E-learning interface, Blackboard, Student experience

REFERENCES

Chen, P.-S. D., Lambert, A. D., & Guidry, K. R. (2010). Engaging online learners: The impact of Web-based learning technology on college student engagement. *Computers & Education*, *54*(4), 1222-1232.

Kumar, R. L., Smith, M. A., & Bannerjee, S. (2004). User interface features influencing overall ease of use and personalization. *Information & Management*, 41(3), 289-302.

Shee, D. Y., & Wang, Y. S. (2008). Multi-criteria evaluation of the web-based e-learning system: A methodology based on learner satisfaction and its applications. *Computers & Education*, 50(3), 894-905.

Van Dam, A. (2001). User interfaces: Disappearing, dissolving, and evolving. *Communications of the Acm*, 44(3), 50-52.

Volery, T., & Lord, D. (2000). Critical success factors in online education. *International Journal of Educational Management*, 14(5), 216-223.

NOTES:		

Flipping the laboratory: The value of prepractical activities for encouraging Agricultural and Viticultural Science students to become independent learners.

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The notion of a "flipped classroom" (Bergmann & Sams, 2012) is becoming a mainstream pedagogy used in a diverse range of subject areas. Giving students access to resources which allow them to learn independently before attending class has been shown to improve engagement and learning outcomes (Bransford *et al.*, 2000; Bergmann & Sams, 2012).

In 2011 a "flipped classroom" model was developed and integrated into practical classes for multiple Level II science courses in the Bachelor of Agriculture Science, Viticultural Science and Food and Nutrition Science. The general student attitude regarding practical classes was that because practicals were compulsory and attendance mandatory to meet course requirements, there was no need to prepare for the class or be enthusiastic about learning. The value of devoting time to instruction in the science laboratory is well supported and has been an important part of science curriculum since the 1900s. There are reports as early as 1892 of the importance and success of the laboratory in the science classroom (Rosen, 1954). The laboratory is a place where students can experience science first hand (Hofstein & Lunetta, 1982 and 2004).

The aim of this study was to reinvigorate the practical class and make better use of the valuable face-to-face time with the students. To address the lack of engagement and preparation prior to practical classes, we developed interactive online pre-practical activities using Articulate® Storyline 2 software that could be accessed through the Blackboard Learning Management System (LMS). The pre-practical activities included videos of teaching staff performing key techniques and short quizzes with feedback to allow students to test their knowledge on the concepts addressed in the practical such as calculations and safety information. Providing interactive online activities for students allowed them to take control of their own learning by engaging with course material at anytime, anywhere and at a rate suitable to their needs. Guiding the students through a process of "learning to learn" places the responsibility for learning on the student, allowing the student to take ownership of their preparedness for learning in class (Smith, 1990; Lujan & DiCarlo, 2006).

Our aims were: (1) to investigate the effectiveness of online formative and summative activities for preparing and engaging students in practical classes; and (2) to determine if teaching pedagogies such as flipping the classroom, coupled with blended learning, improved student performance and fostered independent learning.

Survey results indicated that 70% of students enjoyed the pre-practical activities and felt the activities encouraged their independent learning. In addition, 60% of students felt better prepared for practicals and 72% felt the online pre-practical activities increased their engagement in class. A sustained improvement in practical grades has been observed over the last 4 years, with the average practical grade increasing from 69% to 74% in two of the core courses, biochemistry and microbiology. Both students and teachers have seen a positive impact on learning since the introduction of online pre-practical activities. Students asked thoughtful questions in class indicating higher level thinking and metacognition because they were pre-prepared for the class. Flipping the laboratory has improved student engagement and the quality of interactions during face-to-face time with teachers.

Keywords

Flippped classroom, practicals, online, engagement, independent learners

REFERENCES

Bergmann, J. & Sams, A. (2012). Flip your classroom: Reach Every Student in Every Class Every day. International Society for Technology in Education. United States of America.

Bransford, J.D. Brown, A.L. & Cocking, R.P. (2000). *How People Learn: Brain, Mind, Experience and School*. Committee on Developments in the Science of Learning. Washington DC: National Academic Press.

Lujan, H.L. & DiCarlo, S.E. (2006). Too much teaching, not enough learning: what is the solution? *Advances in Physiology Education*, 30: 17-22.

Hofstein A. & Lunetta V. (2004). The laboratory in science education: foundations for the twenty-first century. *Science Education* 88, 28-54.

Hofstein A. & Lunetta V. (1982). The role of laboratory in science teaching: neglected aspects of research. *Review of Educational Research* 52, 20-217.

Rosen, S.A. (1954). History of the physics laboratory in the American public schools (to 1910). *American Journal of Physics*, 22: 194-204.

Smith, R.M. (1990). The promise of learning to learn. In Smith R.M. (Ed) *Learning to learn across the lifespan* (pp.3-29) San Francisco: Jossey-Bass.

NOTES:		

Navigating Pathways to University: Key Considerations for African Refugee Youth in South Australia

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The transition from high school constitutes a significant period in a person's life. For African youth from refugee backgrounds, this transition is complicated by the unique set of challenges they face. In particular, many of these young people have had minimal or disrupted formal schooling experiences as a result of civil conflict, with some spending the majority of their childhoods in refugee camps (Brown, Miller & Mitchell, 2006). These issues not only impact upon African students' engagement in the school system (Grant & Francis, 2011), but can also influence their pathways into higher education (Harris & Marlowe, 2011; Zufferey & Wache, 2012).

This presentation draws upon the findings of a recent qualitative study which examined the education and career pathways of African youth from refugee backgrounds in South Australia in the context of the transition from secondary school. This study involved a Reference Group, comprised of individuals with personal and professional experience in working with African youth from refugee backgrounds. A group of African Community Mentors, who are respected leaders and elders from South Australia's new and emerging African communities, also supported and guided the study. Case study methodology was used and data were primarily collected from multiple semi-structured interviews. The participants were: African youth from refugee backgrounds (n = 14); high school teachers (n = 7); Technical and Further Education (TAFE) educators (n = 4); university educators (n = 5); social service providers (n = 3); and African community leaders and elders (n = 5).

This study found that African students' English language skills, previous schooling experience, career aspirations and expectations, and the influences of family, kin and community, were key factors in shaping their pathways to higher education. Although these influences were identified, it must be noted that African youth from refugee backgrounds constitute a heterogeneous group and their individual circumstances must be recognised and acknowledged. This will be illustrated by presenting qualitative data from university educators, and African youth who made the transition to university. This research invites universities to evaluate the support they provide to ensure that all students have opportunities to succeed – irrespective of their cultural background.

Keywords

African refugee youth; transition; higher education; considerations

REFERENCES

Brown, J., Miller, J., & Mitchell, J. (2006). Interrupted schooling and the acquisition of literacy: Experiences of Sudanese refugees in Victorian secondary schools. *Australian Journal of Language and Literacy*, 29(2), 150-162.

Grant, J., & Francis, S. (2011). School's in for refugees: A whole-school approach to supporting students of refugee background. In S. Murphy (Ed.), (2nd ed.). Brunswick: Victorian Foundation for Survivors of Torture Inc.

Harris, V., & Marlowe, J. (2011). Hard yards and high hopes: The educational challenges of African refugee university students in Australia. *International Journal of Teaching and Learning in Higher Education*, 23(2), 186-196.

Zufferey, C., & Wache, D. (2012). Connecting with the Africanstudent diaspora in Australian higher education. *Research and Development in Higher Education*, *35*, 363-373.

NOTES:		

Navigating Rough Terrain: Low SES Student Transitions into Higher Education through Enabling Programs

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For students from low-SES, or working-class backgrounds, access to university has traditionally been restricted, despite efforts to increase participation by non-traditional students. Class here is conceived of in a Bourdieusian sense, in terms of an academic 'habitus' or sociocultural mode of operation that appears natural but is actually socially constructed (Bourdieu 1988). Thus working-class and middle-class individuals are distinguished by how they (socially) operate in a 'field' rather than in terms of inherent traits.

The Bradley review of Higher Education (Bradley et al) has recommended a target of 20% enrolments by low-SES students by 2020. One method of addressing such targets are Enabling Programs such as Preparatory or Foundation courses. These programs provide a focused pedagogical approach to helping students adjust to university life, both in terms of practical knowledge relating to learning, and in addressing the overall culture of the University. However, moving into the middle-class environment of University is rarely an entirely unproblematic transition (Lawler 2000, Reay 2002). For working-class students, this transition involves navigating shifting terrains in terms of class as they negotiate the spaces between the working-class habitus of their 'cohesive self' (Reay 2002) and the middle-class habitus of the University. Despite the best efforts of many Enabling Programs, workingclass students still often struggle to come to terms with this shifting classed terrain. For students who must also navigate gender, ethnicity, or ability, this struggle is exacerbated.

Utilizing class, gender, and intersectionality theory and taking a post-structural perspective, this paper seeks to explore how working-class students successfully navigate this shifting terrain of class that exist somewhere between the transition through Enabling Programs to university studies. This theoretical approach will be applied to research undertaken in 2013 that explored student experience in the University Preparatory Program at the University of Adelaide, a G08 university that traditionally recruits school-leavers from a relatively narrow social milieu. This research is being followed up with new research considering such transitions as students move into their Bachelor degrees.

This research is finding that, as Crenshaw (1991) argues in relation to race and gender, different sites of marginalization create unique spaces that must be navigated. This paper will discuss these spaces, and explore ways that such Enabling Programs can address classed navigations in order to facilitate a smoother and less fraught transition into University for working-class students in general, and multiply marginalized

working-class students in particular.

REFERENCES

Bourdieu, Pierre (1988). *Homo Academicus* (Trans. Peter Collier), Cambridge: Blackwell.

Bradley, Denise, Peter Noonan, Helen Nungent and Bill Scales (2002) *Review of Australian Higher Education: Final Report*. Department of Education, Employment and Workplace Relations, Commonwealth of Australia.

Crenshaw, Kimberle (1991) 'Mapping the Margins: Intersectionality, Identity Politics, and Violence Against Women of Color' *Stanford Law Review 43*(6) pp. 1241-1299.

Reay, Diane (2002) 'Class, Authenticity and the Transition to Higher Education for Mature Students.' *The Sociological Review 50*(3) pp.398-418.

NOTES:		

Role-playing in **Reacting to the Past**: Online versus Face-to-Face

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Reacting to the Past is a history pedagogy involving student-led games that are played over a semester. It has been one of the most important new pedagogical approaches to teaching and learning in the humanities at the university level. Its founder, historian Marc C. Carnes, argues that it revitalizes face-to-face teaching with its interactive, immersive format. Previous studies have shown enhanced rhetorical skills, elevated self-esteem, and greater empathy among students completing a Reacting to the Past course compared to control. (Carnes, 2014) But this work has not evaluated whether online versions of these games can be as effective as face-to-face iterations. Is there something in innovative, engaging face-to-face learning experiences that can't be effectively reproduced online?

This paper assesses two Reacting to the Past role-playing games, the Trial of Anne Hutchinson and New York City in Revolution. Four different sections of students, ranging in size from 19 to 28 students per section, first played the Anne Hutchinson game face-to-face, with minimal MyUni support, before then playing the New York City game entirely online, with no required face-to-face component. This meant that students who in the first game had three face-to-face contact hours per week with each other now had zero, with all class sessions taking place in structured learning environments created within MyUni. Students posted videos and draft papers to the MyUni site, then debated in threaded discussions, mirroring the sorts of engagement that we had experienced face-to-face in the first six weeks of the semester.

The paper will discuss how the learning outcomes compared across the two different game formats. There will also be a comparison with previous, entirely face-to-face versions of the class, focusing in particular on failure rates and marking outcomes. In addition, the presentation will also engage the student experience with learning, as documented by an anonymous student survey gathered at the end of the term and in several focus groups conducted by Dr. Edward Palmer. We wish to understand how students perceived their learning experience in both pedagogical contexts. This will also be supplemented with SELT feedback.

Reacting to the Past is one of the best examples of interactive learning to emerge in recent years and is a far cry from the standard lecture and tutorial format. But does this mean it can't be effectively run online? The answers will be presented in this paper.

REFERENCES

Marc C. Carnes, *Minds on Fire: How Role-Immersion Games Transform College* (Cambridge: Harvard University Press, 2014)

Steven J. Stroessner, Laurie Susser Beckerman, and Alexis Whittaker, "All the World's A Stage? Consequences of a Role-Playing Pedagogy on Psychological Factors and Writing and Rhetorical Skill in College Undergraduates," *Journal of Educational Psychology*, Vol. 101, No. 3 (2009), 605-620.

NOTES:		

Blended learning to improve student learning in experimental design and biostatistics

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Experimental design is an essential skill, crucial for succeeding in science and developing critical thinking (Coil, Winderoth, Cunninham and Dirks,. 2010; Brewer and Smith 2011). Most topics covering experimental design and/or biostatistics are taught in a classical way, with the delivery of lectures, practicals and computer laboratories which do not always trigger student interest. Over the past decade, higher education has been actively encouraged to find effective and flexible delivery models to provide all students with high quality and engaging learning experiences (De George-Walker and Keeffe 2010). Blended learning has been proposed as one solution for enhancing student learning and engagement (Bonk, Kim and Zeng, 2006; De George-Walker, Hafeez-Baig, Gururajan, and Danaher, 2010).

It has been shown that blended learning (i.e. replacing some lectures with workshops) might encourage students that are 'surface learners' to engage more in their learning as the interaction with others might inspire them to become curious and interested in the content of a topic. In addition, blended learning incorporates aspects of collaborative and active learning which emphasise learning through doing rather than through listening. This is particularly relevant for STEM education as students require analysing and synthesising skills, while also being engaged in higher levels of evaluation and critical thinking.

We incorporated blended learning into a second year experimental design and biostatistics subject aimed at the completion of a research project using the knowledge and skills developed within the topic. Two one-hour traditional face-to-face lectures were replaced with a blended learning approach involving a one-hour face to face lecture, online lecture material, and a one-hour weekly face to face active learning workshop that targeted topic content and research project development.

Workshop activities included brainstorming, debate, drills, lecturettes (5 min lecture) and mind mapping. Students worked in small groups or individually depending on the activity, and had access to a computer and the internet to assist with researching information and problem solving. Activities encouraged group interactions and independent learning, as well as facilitating each student being responsible for doing their share of the work. Finally, some workshops sessions were run as coaching clinics to discuss ideas individually or in a group when feedback was required on research project progress.

The pedagogy behind this approach is: (i) to create a cooperative learning environment that encourages students to collaborate with their peers; (ii) to use active-based learning as much as possible; and (iii) to coach the students during activities and let them present their results to the class for review by instructors and peers as opposed to just telling students the answers (Beichner et al., 2007). The outcomes expected from this innovative way of teaching were expected to be (1) an increase in student engagement, (2) the attraction and retention of more students in STEM areas of research, and (3) the effective reinforcement of skills needed for industry and research through active-based learning practice. The impact of the experiment on students' learning was measured by (i) assessing their interaction with topic material, (ii) comparing students' performances with previous years and (iii) assessing their experience in the topic through a survey.

Preliminary analysis of the data showed that: (i) workshop sessions have helped to develop student understanding of the topic requirements and of statistics for research in Biology; (ii) workshop sessions have helped develop student's understanding of experimental design; and (iii) the combination of practical laboratories, Computer Mediated Laboratories (CML) and workshops have assisted in developing critical skills required to complete a research project.

Keywords

blended learning, research experience, student engagement, biostatistics, collaborative learning

REFERENCES

Beichner R.J., Saul J.M., Abbott D.S., Morse J.J., Deardoff D.L., Allain R.J., Bonham S.W., Dancy M.H., Risley J.S. (2007). The Student-Centered Activities for Large Enrollment Undergraduate Programs (SCALE-UP) Project. *Research-Based Reform of University Physics*. DOI:10.1002/tl.405.

Bonk C.J., Kim K., Zeng, T. (2006). Future directions of blended learning in higher education and workplace learning settings. In C.J. Bonk & C.R. Graham (Eds.), *Handbook of blended learning: Global perspectives, local designs.* San Francisco, CA: Pfeiffer. http://www.editlib.org/p/20646.

Brewer C.A., Smith D. eds. (2011). Vision and Change in Undergraduate Biology Education: A Call to Action. American Association for the Advancement of Science. http://oreos.dbs.umt.edu/workshop/sharedfiles/Final_VandC_Draft_Dec1.pdf

Coil D., Wenderoth M.P., Cunningham M., Dirks C. (2010). Teaching the process of science: Faculty perceptions and an effective methodology. *CBE Life Sciences Education 9:* 524–535. Doi:10.1187/cbe.10-01-0005

De George-Walker L., Keeffe M. (2010). Self-determined blended learning: a case study of blended learning design. *Higher Education Research and Development*, 29 (1): 1-13. DOI:10.1080/07294360903277380 De George-Walker L., Hafeez-Baig A., Gururajan R., Danaher P.A. (2010). Experiences and perceptions of learner engagement in blended learning environments: The case of an Australian university. In Y. Inoue (Ed.), Cases on online and blended learning technologies in higher education: Concepts and practices (pp. 23–43). Hershey, PA: IGI Global. DOI:10.4018/978-1-60566-880-2.ch002

NOTES:

Using Digital Media Presentations in Assessment

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Background and Aim

In the Medical Radiations medical imaging program, class size increased by 50% (40 to 60 students) in one year. Therefore, a novel approach for the delivery of a group assignment presentation was required to meet the increased workload (Lachs 2005). This paper will report on the development and initial evaluation of digital media presentations, created by students, for the delivery of a group case study assessment item

Method

The group case study assessment done by 2nd year Bachelor of Medical Radiation Science students was adapted from the previous assessment method of an in-class presentation, to a digital media presentation, using the framework developed by Hoban (Hoban & Nielsen 2010) that the author had seen presented in the workshop 'Learning and Communicating Science with Student-created Digital Media'. Assignments incorporated five forms of narrated student-created digital media: ie digital story, podcast, slowmation, video and blended media. The students were able to choose which digital method their group preferred but were instructed to utilise a four step process (Hoban, Nielsen & Shepherd 2013):

- Initial planning of the assignment
- Storyboard writing to demonstrate the thoughts on how the students were going to tell the story
- Construction of the media presentation
- Individual review of the group process

Evaluation of the new assessment process was conducted through analysis of the reflective writing done by each individual student. The effect of the new assignment upon workload was assessed by measuring the time it took to mark a group's work and the individual's work and compared it to the previous marking system.

Results

The following benefits were identified:

- students were able to share their work easily with their group, peers and teaching staff
- students felt they were able to identify their roles within the group easily
- the process encouraged autonomy and ownership of the work
- students had less fear of the presentation process

When compared to the previous year, the total marking time for the cohort of 60 students was equivalent to the previous cohort of 40 students.

Discussion

There were a number of intended as well as unintended outcomes from the assessment task.

The presentations were of a remarkable quality and feedback from students was very positive.

Conclusion

This new assessment allowed the students to research and present their newly acquired knowledge in a timely and interesting manner that also encouraged the use of initiative and creativity as well as preserve the sanity of the academic when it came to marking, so much so that this method of assessment has been used again this year.

REFERENCES

Hoban G & Nielsen W 2010, The 5Rs: A new teaching approach to encourage slowmation (student generated animations) of science concepts, *Teaching Science*, Vol 56:3, pp 33 -38

Hoban G, Nielsen W 7 Shepherd A, 2013, Explaining and communicating science using student-created blended media, *Teaching Science*, Vol 59:1 pp 32 - 35

Lachs, V 2005, *Making Multimedia in the classroom*, RoutledgeFalmer, New York

NOTES:		

Tailoring group project design and assessment to individuals within a team

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Equitable division of responsibilities is a key challenge in designing, running and assessing group projects. Individual team members each have their own behavioural mode, and each brings their own blend of drives and experiences. An efficient team comprises individuals with specific roles of responsibility for particular areas of activity that combine to complete a course of work. Group projects at university level are therefore best undertaken when students are organised so that the expertise and passions of individuals are matched to the team roles available. The difficulty in doing this is that each student then undertakes a unique learning activity, assessment of which must be standardised before grading is possible. The aim behind this study is to establish an approach for objectively assessing individual performance within teams that satisfies all parties and conforms to a general template applicable across different group projects.

Three key principles have been adopted in order to formulate our approach:

- Performance criteria must be established and agreed by the project supervisor (maybe also the project assessor) and team members in advance. An objective retrospective evaluation of activities and achievements is not thought realistic, whereas a group exercise in setting criteria a priori sets expectations for individuals and the group. Conducting this step early produces an agreed team work plan tailored to individuals.
- 2) Team roles of responsibility must be unique but bear some interdependence so that generic soft skills relating to team collaboration can be assessed. Formulating unique roles allows individuals to complete their own core activities in parallel and is thought to be important in fostering engagement across the team. The idea here is to prevent the polarisation of activity that often occurs when roles are generic – imbalanced workloads develop between passive and proactive personalities or individuals with different motivations.
- 3) The project-specific rubric must be directly mappable to a universally adopted standard that can measure project against project and be applied from year group to year group.

Our test case is a small group of Masters-level Petroleum Geoscientists undertaking a group research project constituting one quarter of their assessable load. Projects are designed so each role within the team bears responsibility for a unique element of the group task. Each role aligns to a sub discipline, yet natural cross-overs exist between roles.

Such projects satisfy our key principles. Roles of responsibility are unique within the team, are interrelated and can be matched to students' interests and capabilities. When roles are allocated teams spend time defining a sequence of role interdependencies that help map a work plan featuring clear hurdles or performance criteria. In terms of defining degrees of role performance success, we have adopted the Research Skill Development Framework as a template (Willison & O'Regan, 2008). Role-specific keywords are mapped by the project team to represent levels of attainment for each research facet. This process is something akin to a readiness assurance exercise (Michaelsen & Sweet, 2011) and the outcome represents an ideal work plan the team can adopt to undertake peer evaluation following their application activities.

REFERENCES

Michaelsen, L.K. & Sweet, M. (2011). Team-based Learning. *New Directions for Teaching & Learning*, 128, pp. 41-51.

Willison, J. & O'Regan, K. (2008). The Researcher Skill Development Framework. Accessed from http://www.adelaide.edu.au/rsd2/framework/rsd7/

NOTES:		

SMART CASUAL? A project to identify and respond to the needs to sessional law teachers

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The higher education system is one of the most casualised industries in the Australian economy (Percy et al, 2008, 1; Cowley, 2010, 28; Coates et al, 2009, 48), with academic staff employed on a sessional basis undertaking up to half of all teaching in Australia (Junor, 2004, 276). This is the case across universities as a whole (Bradley et al, 2008, 4) and in law schools in particular (Larkins, 2011).

While some sessional teachers are skilled and experienced educators, others have little in the way of teaching qualifications or experience. However, they often also have limited access to teaching development or support (Knight, 2007). This means the teachers at the coalface of interaction with tertiary students are often the least well supported to deliver a quality learning experience. These problems are not unique to Australia, nor to the discipline of law; they have been recognised around the world in a wide variety of tertiary institutions and across disciplines (Tompkinson, 2013, 30).

Finding a solution is complicated by the fact that different disciplines have varying expectations of sessional staff. There are limits to what the constructive generic teacher training programmes on offer at many universities can do to meet discipline specific expectations and needs. The professional development of sessional teachers is 'not one size fits all' (Bevan Smith et al, 2013, 36). In addition, discipline areas in particular institutions often lack the resources and expertise to create appropriate development opportunities.

At the University of Adelaide and Flinders University the authors had implemented localised teacher development programs for sessional law teachers. However, we recognised our grass roots efforts were often dependent on individual enthusiasm, and were only a partial response to the larger issues. In 2013 we joined with academics from UWA and initiated the Smart Casual project (with the support of the Office for Learning and Teaching) which undertook qualitative and quantitative research to explore the real needs of sessional law teachers. We then created and rigorously evaluated three freely available self-directed professional development modules, which can be viewed at http://www.lawteachnetwork.org/smartcasual.html. Our team is now developing five new modules: wellness in law for both students and sessional teachers; communication and collaboration in law; critical legal thinking; reading law; and legal ethics and professional responsibility. We will also integrate strategic themes of Indigenous inclusion, diversity, digital literacy, gender and internationalisation across all eight modules.

While our project is specific to the discipline of law, it models a methodology for scaling localised initiatives up so they can be adopted on a much broader scale. We will discuss the process by which we adapted our grass-roots initiatives to facilitate nation-wide leadership in the professional development of legal educators, and demonstrate the resources we created.

Keywords

sessional teacher development, teacher training, Smart Casual, law teaching

REFERENCES

Bevan-Smith, B., Keogh, J. and D'Arcy, B. 'Determining the Support Needs of Casual Academic Staff at the Frontline' in Beaton, F. and Gilbert, A. (eds) (2013) *Developing Effective Part-time Teachers in Higher Education*, Routledge.

Bradley, D. (2008) *Review of Australian Higher Education Final Report* Australian Government.

Coates H. 'Australia's Casual Approach to Its Academic Teaching Workforce' (2009) 17(4) People and Place 47.

Cowley, J. 'Confronting the Reality of Casualisation in Australia: Valuing Sessional Staff in Law Schools' (2010) 10 (1) Queensland University of Technology Law and Justice Journal

Junor, A. 'Casual University Work: Choice, Risk, Inequity and the Case for Regulation' (2004) 14 (2) *The Economic and Labour Relations Review* 276.'

Knight, P. (2007) 'Enhancing part-time teaching in higher education: A challenge for institutional policy and practice' 61 *Higher Education Quarterly* 420.

Larkins, F. (2011) Student and Teaching Staff Trends in Selected Australian Universities L H Martin Institute.

Larkins, F. (2012) Student and Teaching Staff Trends in Selected Australian Universities Part 2 L H Martin Institute.

Percy, A. (2008) The RED Report -Recognition, Enhancement, Development -The Contribution of Sessional Teachers to Higher Education. Australian Learning and Teaching Council.

Tompkinson, B. 'Supporting Part-time and Other Teaching Staff: Who are they and why are they important' in Beaton, F. and Gilbert, A. (eds) (2013) *Developing Effective Part-time Teachers in Higher Education*. Routledge.

NOTES:		

"High School was Easy": Personal Epistemology and approaches to learning in a problem-based learning medical curriculum.

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Introduction

This PhD explores the relationship between medical students' personal epistemological beliefs, their academic ranking and approach to learning in a problem-based learning (PBL) curriculum. Personal epistemology addresses the theories and beliefs that individuals hold about knowledge and knowing and comprise four constructs: Certainty of Knowledge, Simplicity of Knowledge, Source of Knowledge and Justification of Knowledge. These range on a continuum from naïve to sophisticated epistemological beliefs (Hofer & Pintrich, 1997).

Methods

A qualitative research design framed this study. Using the maximum variation purposive sampling technique, twelve second-year students (representing the lowest and highest academically ranked) were interviewed twice, three months apart. The first interview focused on their approach to learning in medical school more generally and the second on how they worked through a PBL case using the 'think out loud' protocol (Patton, 2002). After a succession of inductive approaches, the interviews were analysed and reported according to the framework of personal epistemological theories.

Results

There was a pattern between student academic ranking, their personal epistemological beliefs and their approach to learning. The lower ranked students portrayed naive epistemological beliefs after two years and continued to struggle, and their approach to learning within PBL was not enabling. In contrast, higher ranked students demonstrated sophisticated epistemological beliefs, struggled initially but turned these struggles into opportunities for epistemological development, and viewed assessment in a different light.

Conclusions

This study identified a relationship between the cognitive constructivist approach to PBL proposed by Schmidt et al (2011), and the theoretical constructs of personal epistemology by Hofer and Pintrich (1997). The 'voices' of the second year students clearly articulated the differences between students who did extremely well in assessments and those who performed the least well.

Take-home message

A constructivist PBL medical program can accelerate students' epistemological development; however, some students are not able to adapt and consequently attempt to replicate their high school methods of 'rote' learning in PBL, which is disabling. Students entering PBL curricula should be provided with a greater understanding of learning expectations of the program, and how this may not coincide with an individual's epistemological beliefs. More emphasis during the transition year should be placed on the move from traditional classroom methods to a constructivist educational program. This applies not only to medical students but to any other discipline that requires the integration of basic sciences and clinical knowledge in a team based learning environment requiring a self-regulated learning approach.

Keywords

Personal Epistemology, Problem-Based Learning, Medical Students

REFERENCES

Hofer, BK & Pintrich, PR 1997, 'The development of epistemological theories: Beliefs about knowledge and knowing and their relation to learning', *Review of Educational Research*, vol. 67, no. 1, pp. 88-140.

Patton, MQ 2002, *Qualitative research & evaluation methods*, 3rd edn, Sage Publications, Thousand Oaks, California.

Schmidt, HG, Rotgans, JI & Yew, EH 2011, 'The process of problem-based learning: What works and why', *Medical Education*, vol. 45, no. 8, pp. 792-806.

NOTES:		

Self- and Peer- Assessment: Student views and experiences

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In the current time of flexible learning, 'flipped classrooms', collaborative learning and student-driven learning in Australia's higher education, there is increasing interest and implementation of self- and peer-assessment in University courses. Assessment remains an integral part of the learning experience for students but has shifted from assessment processes designed and solely implemented by the teacher to more student engagement and empowerment in flexible assessment practices (Boud & Falchikov, 2007; Wanner and Palmer, forthcoming).

There is strong evidence in the literature that self- and peerassessment can enhance student learning and can help develop key capabilities in students, such as taking more responsibility for their own learning (moving from a passive to a more active learner), developing a better understanding of the subject matter, assessment criteria and their own values and judgements, and also developing a critical reflection skills (Boud, 2005; Falchikov, 2003; Thomas et al., 2011). There is increasingly strong advocacy for its use (Boud & Falchikov, 2007; Nulty, 2011). However, the literature also highlights that the implementation of self-and peer-assessment is not easy and engaging students in those types of activities is challenging. A recent study about flexible learning and assessment by Wanner and Palmer (forthcoming) has shown that issues of bias, trust and capability play on students' minds during self and peer assessment activities.

In this paper, we report back from a study of a geography course in Semester 1, 2015, where self- and peer-assessment were built into the assessment process. The literature suggests that the way in which the assessment tasks are constructed can play a role in their acceptance and usefulness. In this study we examined a structure where students worked together to create the assessment criteria and rubrics (Rust et al., 2003), and used the designed rubrics for self- and peer- assessment of their work. The overall objective of the study was to determine student views and experiences about self- and peer- assessment and whether this leads to improved learning outcomes for students as indicated by their marks for assessments. Students were surveyed at the beginning and at the end of the course.

At the beginning of the semester, the survey (n= 24) showed that 42% of students had not experienced self-assessment and 44% had not experienced peer assessment. Students were mainly positive about the potential of self-assessment to support their learning but many (27%) were undecided. A similar pattern was observed for peer assessment with 31% undecided. Overall, students were not concerned about either facets being included in this specific course.

In the post-course survey (n= 23), after experiencing self and peer assessment in the course, students felt self-assessment was valuable (95%), helped improve their work (100%), was good use of their time (70%) and they felt it should be part of most courses (61%). The figures were similar for peer assessment (91%, 95%, 77% and 64% respectively). The peer assessment was acknowledged to be a driver in active participation in that activity.

In conclusion, we suggest that despite a great deal of uncertainty regarding self- and peer- assessment, it can be a useful driver in some courses for learning and potentially improving student engagement and outcomes.

REFERENCES

Boud, D. (2005). *Enhancing learning through self assessment*. London: Routledge. Digital Edition.

Boud, D. & Falchikov, N. (2007). Rethinking assessment in higher education. London: Kogan Page.

Boud, D., Cohen, R. & Sampson, J. (1999). Peer learning and assessment. Assessment and evaluation in higher education, 24 (4), 413-426.

Falchikov N. (2013). *Improving Assessment through Student Involvement: Practical Solutions for Aiding Learning in Higher and Further Education*. 2nd edition. New York: Routledge Falmer.

Nulty, D.D. (2011). Peer and self-assessment in the first year of university. *Assessment & Evaluation in Higher Education* 36(5): 493-507.

Rust, C., Price, M., & O'Donovan, B. (2003). Improving students' learning by developing their understanding of assessment criteria and processes. *Assessment & Evaluation in Higher Education*, 28(2), 147-164

Thomas, G., Martin, D. and Pleasants, K. (2011). Using selfand peer-assessment to enhance students' future-learning in higher education. *Journal of University Teaching & Learning Practice* 8(1), Article 5. Available at: http://ro.uow.edu.au/jutlp/ vol8/iss1/5

Wanner, T. and Palmer, E. (forthcoming). Personalising learning: exploring student and teacher perceptions about flexible learning and assessment in a flipped university course. *Computers & Education*.

NOTES:	

Teaching the Recovery Model of Mental Health Practice to Students from Diverse Cultural Backgrounds: Learning from the Front Line.

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The aim of this paper is to explore the learning experiences of students from diverse cultural backgrounds in the development of practice skills for mental health social work.

Background and Significance

There has been little research into international students' experiences of active learning including in social work education. Active learning is widely regarded as a core teaching and learning approach in contemporary higher education (Biggs, 1999; Ramsden, 2003). It is based on the understanding that students learn in deeper, more effective ways when they are actively engaged (Biggs, 1999). Social work education involves skill development, and active participatory styles of learning are particularly important to these learning processes. Skill development is a significant focus of the mental health component in our Masters of Social Work program at the University of South Australia. The course centres the recovery model of mental health, which embraces a highly relational approach to mental health practice and places emphasis on hope, trust building with clients and a partnership approach (Bland, Renouf and Tullgren, 2015; Ho and Solomon, 2013) as well as the development of emotional competencies such as empathy (Hen and Goroshit, 2011). This is an innovative approach to mental health that is distinctive from traditional expert-driven medical approaches. Well over sixty percent of students in our program are international students, most from the Asia-Pacific region. Our course therefore asks these students to engage with an approach to mental health that is likely to be new to them, and with a participatory, active learning approach in the classroom that is also likely to be unfamiliar. Moreover, developing practice skills is a language-heavy learning task and English is not the first language of most of our international students. There has been little research within social work education that explores approaches to teaching the recovery model (Ho and Solomon, 2013). While there has been some research that explores active learning among international students (Maire, 2014), none has specifically looked at experiences of active learning among international students in social work programs. This paper specifically reports on student experiences of the social work studio sessions in our course, which is an innovative teaching strategy where students practise client engagement, interviewing skills and mental health assessment via case scenarios in social worker-client pairs in front of their peers and teachers, and receive constructive feedback.

Method

We developed an online survey instrument for students who completed the mental health course in early 2015. We asked them about their learning experiences in the studio sessions and any barriers to learning they might have experienced. We also draw on our observations of classroom processes and dynamics, as well as other sources of student feedback such as teacher evaluations and teacher-student consultations outside of the classroom.

Results

Analysis of these sources of data reveals that both domestic and international students are largely positive about their practice learning experiences, reporting that studio sessions provided them with increased confidence. However, students from international backgrounds also drew attention to some specific barriers, including the need for additional time to prepare practice interviews and more detailed step-by-step guidance about teacher expectations.

Conclusion

The finding that international students report largely positive experiences in relation to studio-based learning in social work is important because it demonstrates that active learning styles can be effective for diverse student populations. The paper considers further the implications of the findings for enhancing practice-based teaching and learning, such as providing clearer expectations and guidance.

Keywords

Social Work; Mental Health; recovery model; active learning; international students

REFERENCES

Biggs, J. (1999) What the student does: teaching for enhanced learning. *Higher Education Research and Development.* 18 (1): pp. 57 – 75.

Bland, R., Renouf, N. & Tullgren, A. (2015) *Social work* practice in mental health: An introduction. Allen and Unwin. Crows Nest, NSW

Hen, M., & Goroshit, M. (2010). Emotional Competencies in the Education of Mental Health Professionals. *Social Work Education: The International Journal.* Routledge: London. Maire, Q. (2014). International students' cultural representations and their representations and their implications for intercultural learning in Australia. *Ergo.* Vol 3, No 3. Adelaide, SA

Oh, H., & Solomon, P. (2012). Teaching and Providing Recovery-oriented Care Through Problem-posing Dialogue. *Social Work Education: The International Journal*. Routledge: London.

Ramsden, P. (2003) *Learning to Teach in Higher Education*. RoutledgeFalmer: Abingdon.

NOTES:

Addressing Undergraduate Entrepreneurship Student Expectations

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Student attraction and retention of students is increasingly important as universities face competitive environments. Students are seen as customers, and the principles of service management and service quality are applied to universities (Finney & Finney 2010; Jain, Sinha & Sahney 2011). Consequently, there is increased attention to measuring student satisfaction for reasons such as identifying gaps between expectations and perceptions of outcomes so that potential problems may be anticipated and addressed (Fisk, Grove & John 2013). Institutional-level measures of satisfaction including the Course Experience Questionnaire are widely used. It is recognised, however, that the results of national or university-level surveys are difficult to translate to expectations at the course level (Balan & Metcalfe 2012).

The research questions in this study were: (1) what are the learning expectations of undergraduate entrepreneurship students at the class level; (2) are the learning expectations the same for different deliveries of the same or similar course; (3) how can the results be used to address student expectations; and (4) does this process influence student satisfaction?

Participants were students from a range of study programs in a university in Australia, taking an undergraduate elective entrepreneurship foundation course. Within a few minutes of the start of the first class in a course delivery, data was collected using a "minute paper" method (Angelo & Cross, 1993; Stead, 2005). Each student was given a blank sheet of paper and asked: "Please describe one or two things that you expect from this course". Statements provided by the students for each class were analysed separately with an inductive grounded theory approach (Charmaz, 2006; Glaser & Strauss, 1967), using the concept mapping method (Balan, Balan-Vnuk, Metcalfe, & Lindsay, 2016; Borgatti, Everett, & Johnson, 2013). This identified themes representing the different student expectations in the particular class. Results for the separate classes were analysed to identify the underlying structure of student expectations in these courses.

The findings for each class generally included expectations such as "learn about entrepreneurship", "learn how to start and run a business", "learn useful things for my career", "learn about teamwork and networking", "pass the course", and "help to get a good job". Importantly, there were differences between each class.

The educator adopted an "assimilation-contrast" approach (Anderson 1973) in using the results during course delivery to adjust student expectations as well as to make minor changes to course design and delivery. Importantly, in the final session of each course, the class was presented with the findings and were given an explanation of the ways in which their expectations had been met. This was an important closing

step in expectations management. Qualitative evaluations at the end of each course show that students found these courses to largely meet their expectations.

This research contributes to the literature by revealing differences, as well as similarities, of expectations in different groups of students, although there was general alignment with course objectives. This research also contributes to education practice by demonstrating a practical approach that can be used to quickly identify the characteristics of student expectations in their particular class, and that the educator can then use to address expectations with a view to improving student satisfaction.

Keywords

undergraduate students, expectations, entrepreneurship

REFERENCES

Anderson, RE. (1973). Consumer dissatisfaction: The effect of disconfirmed expectancy on perceived product performance. *Journal of Marketing Research*, 10(1), 38-44

Angelo, TA, & Cross, PK. (1993). *Classroom assessment techniques: a handbook for college teachers* (2nd ed.). San Francisco: Jossey-Bass.

Balan, P, & Metcalfe, M. (2012). Identifying teaching methods that engage entrepreneurship students. *Education + Training*, *54*(5), 368-84

Balan, P, Balan-Vnuk, E, Metcalfe, M, & Lindsay, NJ. (2016). Concept mapping as a methodical and transparent data analysis process. In KD Elsbach & RM Kramer (Eds.), *Handbook of Qualitative Organizational Research*. New York (In Press): Taylor & Francis/Routledge.

Borgatti, SP, Everett, MG, & Johnson, JC. (2013). *Analyzing Social Networks*. London, UK: SAGE Publications Ltd.

Charmaz, K. (2006). *Constructing Grounded Theory*. London: Sage Publications Ltd.

Finney, TG, & Finney, RZ. (2010). Are students their universities' customers? An exploratory study. *Education+Training*, 52(4), 276-91

Fisk, R, Grove, S, & John, J. (2013). Services Marketing Interactive Approach: Cengage Learning.

Glaser, BG, & Strauss, AL. (1967). *The Discovery of Grounded Theory: Strategies for Qualitative Research*. New York: Aldine de Gruyter.

Jain, R, Sinha, G, & Sahney, S. (2011). Conceptualizing service quality in higher education. *Asian Journal on Quality, 12*(3), 296-314 Stead, DR. (2005). A review of the one-minute paper. *Active Learning in Higher Education, 6*(2), 118-31

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Student and tutor consensus as a basis of assessment: Developing undergraduate skills in self-evaluation.

James Thompson, Timothy Pointon, Timothy Rayner, Simon Pope, Anthea Cayetano, Brad Mitchell & Don Houston $x \times x$

Scenario-based simulation represents a core learning practice for final year paramedic undergraduate. It offers the student opportunity to apply the holistic set of skills and knowledge developed from their earlier degree experiences. Scenarios are often based upon authentic events, and as student responses determine the simulation case outcomes, they represent a successful active learning method.

Traditionally, student practices in simulations are judged in accordance with successful case outcomes and proficiency of skills, which echo the practices of local industry. Robust discussions and feedback are led by tutors; however, student results generally fail to acknowledge the learning gained from all scenario events, including those where student judgement was wrong. Once graduated these students will be operational paramedic, working largely unsupervised. The gravity of mistakes made within emergency situations is significant. Considering the autonomous nature of their future roles, the ability to self-evaluate and effectively critique all areas of their practice is essential (Zimmerman 1990).

The "Student – Tutor Consensus" approach to assessment has been introduced as a learning component of the capstone paramedic science topic. The method employs a criteriareferenced self-assessment formula (Andrade and Valtcheva 2009) that involves student performance in simulation activities being immediately followed by structured reflection. As there are few limits to the nature of events that the paramedic may encounter, or the variables they must consider, frameworks for critiquing practice must also be adaptable. In alignment with principles underpinning current industry practice, students are asked to consider their performance over 5 key areas; 1. Knowledge and Understanding, 2. Application of Clinical Skills, 3. Communication, 4. Teamwork and Leadership, 5. Scene Management. Simple satisfactory or unsatisfactory ratings of each are applied to each or the 5 areas. The tutor performs the same assessment independently and final grades are awarded based upon the areas where students' perceptions aligned with their tutors'. Student reflections which fail to recognise the same key points as their tutors', or are considered by the tutor to be excessively critical, are not awarded points. This approach seeks to develop student skills in effective self-reflection. Final marks include an aggregate of the consensus score and marks awarded by the paramedic tutor for the scenario outcomes.

This process is rich in feedback, helping the student to understand expectations and standards of practice (Nicol and Macfarlane-Dick 2006), (Carless, Salter et al. 2011), (Boud, Lawson et al. 2013, Boud and Molloy 2013). By introducing assessments which consider effectiveness of self-evaluation, skills are developed that can translate to the students future professional practices. A pilot of this model is currently being trialled and initial results are encouraging.

Keywords

Consensus Marking, Self-Reflection, Self-Assessment, Self-Regulated Learning

REFERENCES

Andrade, H. & Valtcheva, A. (2009). "Promoting learning and achievement through self-assessment." *Theory into practice* 48(1): 12-19.

Boud, D., Lawson, R. & Thompson, D. G. (2013). "Does student engagement in self-assessment calibrate their judgement over time?" Assessment & Evaluation in Higher Education 38(8): 941-956.

Boud, D. & Molloy, E. (2013). "Rethinking models of feedback for learning: the challenge of design." *Assessment & Evaluation in Higher Education 38*(6): 698-712.

Carless, D., Salter, D., Yang, M. & Lam, J. (2011). "Developing sustainable feedback practices." *Studies in Higher Education* 36(4): 395-407.

Nicol, D. J. & Macfarlane-Dick, D. (2006). "Formative assessment and self-regulated learning: A model and seven principles of good feedback practice." *Studies in higher education 31*(2): 199-218.

Zimmerman, B. J. (1990). "Self-regulated learning and academic achievement: An overview." *Educational psychologist* 25(1): 3-17.

NOTES:		

Professionalizing the higher education sector through a compulsory new qualification pathway

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Higher education globally is currently experiencing critique as economic dialogues encroach into what were once the hallowed halls of academe. Business related monologues about productivity and continuous improvement dominate leadership meetings (Grove, 2015). Faculty resistance to engaging in teaching and learning scholarship is frequently justified by the "continuing issues associated with its definition and are a primary factor contributing to it being a hard sell to tertiary educators" (Boshier, 2009, p. 8). Boyer (1990), however, states that "the time has come to move beyond the tired old teaching versus research debate and give the familiar and honourable term scholarship a broader and more capacious meaning, one that brings legitimacy to the full scope of academic work" (p.16). A minority of faculty engage deeply with the new qualitative self-assessment and evaluation methodologies; few reflect on and critique academe and themselves and work to change (NZQA, 2009, (Patton, 2014; Schon, 1983). Reflection and self-critique by faculty on teaching and learning practices highlight the dominance of traditional content- and research- focussed teaching and the virtual disappearance of the individual learner and their needs in academe. The latter circumstance prompts analysis of the capabilities of those who facilitate learning in higher education (Shon, 1983). Shulman (2002) proposed three grounds for engagement in the scholarship of teaching and learning by faculty, and the first ground he notes is professionalism. Shulman viewed engagement in the scholarship of teaching as a professional role and responsibility, noting each of us in higher education is a member of at least two professions: that of our discipline, interdisciplinary or professional field as well as our profession as educator. In both professions higher education staff bear the responsibilities of scholars—to discover, to connect, to apply and to teach. Added to Shulman's concerns are those of the learner or client in our higher education institutions, 'our students' and their concerns about the quality of the teaching they experience and whether it represents 'value for money'. Grounded theory-based research in New Zealand examining the latter two areas has led to the development of education, sociology and psychology based advanced professional Educational Facilitation programmes for higher-tertiary education sector faculty. The programme at a commencement level prepares the higher educator to a) understand how learning occurs, optimises and accelerates learner achievements by responding to complex individual learner needs, b) understand planning, teaching learning, assessment and moderation quality evaluation methods, and c) elevate communication understandings and capabilities plus how to progressively develop key higher-tertiary education

capabilities such as critical, higher and associative thinking. At the next programme level the interconnected higher education systems for supporting learning are examined along with the value of extensive and diverse consultation to enhance learning through quality curriculum are analysed. At the highest programme level the capacity to mentor and coach colleagues to enhance their teaching, facilitation and learning effectiveness are researched and practiced. In New Zealand one institution has commenced investigating the impact of compulsory professional Educational Facilitation programme completion on learning achievements across five institutions and a range of programmes. This paper focusses on the challenges emerging from advocating for and trialling compulsory higher-tertiary Educational Facilitation programme in higher-tertiary education sector in New Zealand.

Key Words

higher education, teaching quality, educational facilitation, professionalisation

REFERENCES

Boshier, R. (2009). Why is the scholarship of teaching and learning such a hard sell? *Higher Education and Research*, 28(1), 1–15.

Boyer, E. L. (1990). Scholarship reconsidered: priorities of the professoriate. Princeton, NJ: Carnegie Foundation for the Advancement of Teaching.

Grove, J. (2015). How might a teaching excellence framework be built? *Times Higher Education*, July 23, 1-3.

New Zealand Qualifications Authority (2009). *Policy and guidelines for the conduct of external evaluation and review*. Retrieved from http://www.nzqa.govt.nz/for-providers/docs/eerpolicy-conduct.pdf

Quinn Patton, M. (2014) *Qualitative Research and Evaluation Methods*. New York: Sage. (4th ed)

Schon, D.A. (1983). *The reflective practitioner*. New York, NY: Basic Books Inc.

Shulman, L. S. (2000). From Minsk to Pinsk: Why a scholarship of teaching and learning? *Journal of Scholarship of Teaching and Learning*, 1, 48–52.

NOTES:		

Be brave: welcome to a whole new world! Using mentor telephone calls to increase attendance at orientation and support transition

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Transition to university starts well before students set on foot on campus. This process of transition is birthed by submitting an application for university, and grows when offers are accepted. This period can be a 'pendulum... between excitement and terror' (College Parents of America, 2015). For the vast majority of commencing students, tertiary study is new and university life is an unknown.

There is considerable literature addressing the importance of embedding transition pedagogy across topics, courses, co-curricular activities and institutions (Kift, 2009). Many institutions now invest significant effort and resources in supporting the successful transition of their commencing students with carefully designed orientation sessions, peer mentoring programs and the like.

Invitations to orientation events can be both exciting and intimidating. Some students may see no need to attend because they believe they are already experienced and expert learners, despite having no higher education exposure. At the other end of spectrum, some students may be too scared to come - perhaps because they don't know what to expect, have no experience of university, don't know anyone, or are too shy. Increasingly too, students seek to maximise paid work outside formal semester periods, and/or have caring responsibilities, and so regard attendance at orientation events as an optional luxury they simply cannot afford. When students choose not to or can't attend these events, they can miss crucial opportunities to connect early with their cohort and peer mentors, so important in building the senses of connectedness, capability and resourcefulness identified by Lizzio (2006) as critical for successful transition.

This presentation will report on an innovative project in 2015 at Flinders Law School to increase a sense of personal connection in prospective students as early as possible, injecting support into their process of transition prior to actually coming to campus. It will discuss the process of development and implementation of the project, and how the project has benefitted commencing students.

Informal review of students identified as 'at risk' at Flinders Law School since 2011 showed a high correlation with students who did not attend the New in Law orientation program or access the student peer mentor provided. This suggested it was vital to invest resources early in ensuring students actually attend and participate in orientation activities before semester commences. We saw potential in an institution-wide Student Success Program piloted at Flinders in 2014 that used phone calls to contact students identified as being 'at risk' in weeks 2, 4, and 8 (Kutieleh, Seidel & Hutchinson, 2014). We designed a similar intervention that was pro-active rather than reactive and that took place

even earlier - immediately after students received an offer, which they might still be considering accepting, and when they were likely to nervous, anxious, or unsure about their capacity to succeed. Recognising the role of our student peer mentors as a 'guide through the early stages of studying law' (Rodrigo, Khamis, Lead, Sahukar, McDonagh and Nguyen, 2014, p. 113), we considered them to be those best placed to make this initial contact with prospective students, ensuring that prospective students received a telephone call from the mentor who would be allocated to them for the entirety of Academic Semester One (part of our annual Mentoring Program for commencing students). As part of the project, we developed telephone protocols and scripts, frequently answered questions, and detailed referral information. We also provided extensive training for mentors. Initial feedback from new students and mentors has been overwhelmingly positive, and improved attendance at orientation.

Key Words

Orientation & Transition, Peer Mentoring, Legal Education, Telephone Calls, Student Engagement

REFERENCES

Kutieleh, S., Seidel, E. and Hutchinson, L. (2014). *Student Success Program (SSP) Report on the Pilot Stage December 2014*. Flinders University: Adelaide. On file with the authors.

College Parents of America (n.d.). Why Doesn't My College Student Want to Attend Orientation. Retrieved 31 July, 2015, from http://www.collegeparents.org/members/resources/articles/why-doesn't-my-college-student-want-attend-orientation accessed 31 July 2015.

Rodrigo, D., Khamis, C., Lead, P., Sahukar, Z., McDonagh, N. and M Nguyen. (2014). Same-same but Different: Integrating Central University Support and Faculty-Specific Knowledge for Mentor Training. A Practice Report 5(2) *The International Journal of the First Year in Higher Education* 111.

Kift, S. (2009). Articulating a Transition Pedagogy to Scaffold and Enhance the First Year Student Learning Experience in Australian Higher Education. Final Report for ALTC Senior Fellowship Program. *Australian Learning & Teaching Council* 1. Retrieved 31 July, 2015, from http://transitionpedagogy.com/wp-content/uploads/2014/05/Kift-Sally-ALTC-Senior-Fellowship-Report-Sep-091.pdf.

Lizzio, A. (2006). Designing an Orientation and Transition Strategy for Commencing Students. A Conceptual Summary of Research and Practice. First Year Experience Project. Griffith University: Brisbane

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Designing with uncertainty, not against it

Nicola Parkin Finders University

We know that the web has changed the way that thinking, doing and being occur in educative practices (Gerstein, 2014). It is different, and it is also more: there are 'virtually limitless' design possibilities (Garrison & Kanuka, 2004). Added to which, we are not sure where we are going (Barnett, 2004). For the academic educator, designing for learning in this complex and uncertain education landscape is not straightforward. Design support services in the university, typically based on standardised models and step-bystep procedures (Gibbons, 2014; Rowland, 1993), aim to ameliorate the uncertainty by providing straightforwardness. Yet it is hit and miss.

There may be another way to think about how everyday learning design work in the university is supported, suggested by the nature of design itself. Since ambiguity and uncertainty are thought to be the very conditions of design (Aoki & Woodruff, 2005; Cucuzzella, 2011; Gaver, Beaver, & Benford, 2003; McWhinnie, O'Neill, & Valentine, 2009), the practices and processes of learning design might be more realistically and usefully conceived as a way of intentionally entering into uncertainty that renders it less as a problem to be solved, and more as an adventure in seeing afresh.

To enter into the spirit of design on its own terms in this way. and to design with uncertainty, we need new ways of thinking about and doing design (Fuad-Luke, 2013), and new ways of supporting design work in the university. An alternative design approach locates designing not as something special, but as an everyday and ordinary human process (Lawson & Dorst, 2009; Love, 2000; Manzini, 2015; Papanek & Fuller, 1972; Stolterman, 2008) concerned with what is and what could be (Nelson & Stolterman, 2003). Since we are already 'in' design (Dorst & Dijkhuis, 1995), designing with uncertainty becomes a way of exercising a different kind of awareness, a 'heightened sensibility' about what to pay attention to, what to dismiss, and how to explore, choose, and act (Stolterman, 2008) in the systems they inhabit. In this way educators-as-designers act from within the system, as part of it, rather than upon it (Findeli, 2001). This makes particular sense for educators designing learning activities and environments, for they are designing the 'product' that they will themselves be using, working in it and with it, alongside students and administrators.

But what does this mean for everyday practice? This presentation will look at how the idea of designing with uncertainty might translate in real terms through on-the-ground institutional design support services to academics. Exploratory work at Flinders University is beginning to show promise that an approach that puts uncertainty at the centre of the design process supports academic educators to see and do design in new ways that make sense to them. In keeping

with its own philosophy, a designing with uncertainty approach is allowed to emerge from its own place (Jenner, 2013), and is always unfixed and uncertain, always transforming itself.

Keywords

learning design, uncertainty, design support services

REFERENCES

Aoki, P. M., & Woodruff, A. (2005). *Making space for stories: ambiguity in the design of personal communication systems*. Paper presented at the Proceedings of the SIGCHI conference on Human factors in computing systems.

Barnett, R. (2004). Learning for an unknown future. *Higher Education Research & Development*, 31(1), 65-77.

Cucuzzella, C. (2011). Collaborative design in a context of sustainability: the epistemological an practical implications of the precautionary principle for design. Paper presented at the Knowledge Collaboration & Learning for Sustainable Innovation: 14th European Roundtable on Sustainable Consumption and Production (ERSCP) conference and the 6th Environmental Management for Sustainable Universities (EMSU) conference, Delft, The Netherlands, October 25-29, 2010

Dorst, K., & Dijkhuis, J. (1995). Comparing paradigms for describing design activity. *Design Studies*, 16(2), 261-274.

Findeli, A. (2001). Rethinking design education for the 21st century: Theoretical, methodological, and ethical discussion. *Design Issues*, *17*(1), 5-17.

Fuad-Luke, A. (2013). *Design activism: beautiful strangeness for a sustainable world:* Routledge.

Garrison, D. R., & Kanuka, H. (2004). Blended learning: Uncovering its transformative potential in higher education. *The Internet and higher education*, 7(2), 95-105.

Gaver, W. W., Beaver, J., & Benford, S. (2003). *Ambiguity as a resource for design.* Paper presented at the Proceedings of the SIGCHI conference on Human factors in computing systems.

Gerstein, J. (2014). Moving from Education 1.0 Through Education 2.0 Towards Education 3.0 *Experiences in Self-Determined Learning* (pp. 83-98).

Gibbons, A. S. (2014). Eight views of instructional design and what they should mean to instructional designers. *Design in Educational Technology*, 15-36.

Jenner, R. (2013). Thought out of Bounds *Of other thoughts: Non-traditional ways to the doctorate* (pp. 203-220): Springer.

Lawson, B., & Dorst, K. (2009). Design expertise: Routledge.

Love, T. (2000). New roles for design education in university settings. *Re-inventing Design Education in the University* (C. Swann, and E. Young, Eds.), School of Design, Curtin University of Technology, Perth, 249-255.

Manzini, E. (2015). Design, *When Everybody Designs: An Introduction to Design for Social Innovation* (R. Coad, Trans.): MIT Press.

McWhinnie, S., O'Neill, S. J., & Valentine, L. (2009). Random thinking, ordered doing: understanding group creative practice through repertory grid technique. Paper presented at the Proceedings of the seventh ACM conference on Creativity and cognition.

Nelson, H. G., & Stolterman, E. (2003). *The design way: Intentional change in an unpredictable world: Foundations and fundamentals of design competence.* Englewood Cliffs, NJ: Educational Technology Publications.

Papanek, V., & Fuller, R. B. (1972). Design for the real world: Human ecology and social change: Thames and Hudson London. Rowland, G. (1993). Designing and instructional design. Educational Technology Research and Development, 41(1),

Stolterman, E. (2008). The nature of design practice and implications for interaction design research. *International Journal of Design*, *2*(1), 55-65.

NOTES:

Using ontological metaphors for embedding information research literacy

Karey Harrison University of Southern Queensland

In this paper I draw on over twenty years of tertiary teaching experience, during which I have been exploring ways of embedding critical thinking and Information Research Skills in both undergraduate and graduate courses. I argue that introducing students to the analysis of the ontological metaphors that structure academic discourses plays a critical role in developing students' Information Research Skills. Ontological metaphors involve conceiving of 'things' that are not objects, such as activities, abstractions, and unbounded entities, as if they were discrete container-like objects (Lakoff, 1987, pp. 271–273).

The conceptual metaphor LANGUAGE AS OBJECT provides the experiential grounding for the objectivist epistemology that Phillips (2005, p. 3) attributes to content oriented academic staff, whilst the conceptual metaphor LANGUAGE AS ACTION is more consistent with the process oriented constructivist epistemology of Learning and Teaching (L/T) staff. Contrary to Phillips' claim that identifying a continuum between objectivist and constructivist epistemologies will bridge the apparent divide between process oriented L/T staff and content focussed academic staff (Beasley & Cao, 2013, p. 43), I show that an examination of these conceptual metaphors exposes the incommensurable ontological assumptions that Packer and Goicoechea (2000, p. 229 ff.) suggest are obstructing attempts to overcome or reconcile constructivist and objectivist approaches to learning and teaching research and practice. Rather than attempting to obscure this incommensurability, I show how examining these competing ontological metaphors can produce the sort of gestalt shift that enables the development of a shared understanding between students and teacher, of the sort that Salisbury et al. (2012, p. 3) says fosters collaborative approaches to learning.

By challenging the idea of categories as "objective" or taken for granted, I provide students with a rationale for adopting a series of "snowball search strategies" designed to help them figure out: within which categories (or key concepts) the information or ideas they are looking for have been grouped; what search strategies will locate them; and how to organise ideas and identify patterns of concepts and ideas in key texts in order to apply and test them against information they uncover. This approach is applied to the design of a Research literacy assignment that assesses students' reflection on processes and strategic use of clues they find, as much as on their reported search results.

This assignment is an integral part of my overall course designs, which build on this assignment with a series of formative e-tivities and final assignments that broadly map onto the Research Skills Development (RSD) Framework (Willison & O'Regan, 2007, pp. 402–403) but are inconsistent with language that might suggest that "information" and "data" are independently existing "things" waiting to be found or "collected," in favour of an interpretation of the RSD that is consistent with concepts and ideas being seen as the product of social beings acting in the world (Packer & Goicoechea, 2000, p. 231).

Keywords

information research literacy; ontological metaphor; constructivism; objectivism; embedding skills;

REFERENCES

Beasley, C., & Cao, B. (2013). Transforming first-year university Politics students into critical thinkers. *Ergo, 2*(3). Retrieved from http://www.ojs.unisa.edu.au/index.php/ergo/article/view/861

Lakoff, G. (1987). Women, fire, and dangerous things: what categories reveal about the mind. University of Chicago Press.

Packer, M. J., & Goicoechea, J. (2000). Sociocultural and Constructivist Theories of Learning: Ontology, Not Just Epistemology. *Educational Psychologist*, 35(4), 227–241. http://doi.org/10.1207/S15326985EP3504_02

Phillips, R. (2005). Challenging The Primacy Of Lectures: The Dissonance Between Theory And Practice In University Teaching. *Journal of University Teaching & Learning Practice*, 2(1). Retrieved from http://ro.uow.edu.au/jutlp/vol2/iss1/2

Salisbury, F., Karasmanis, S., Robertson, T., Corbin, J., Hulett, H., & Peseta, T. (2012). Transforming information literacy conversations to enhance student learning: new curriculum dialogues. *Journal of University Teaching & Learning Practice*, 9(3). Retrieved from http://ro.uow.edu.au/jutlp/vol9/iss3/4

Willison, J., & O'Regan, K. (2007). Commonly known, commonly not known, totally unknown: a framework for students becoming researchers. *Higher Education Research & Development*, *26*(4), 393–409. http://doi.org/10.1080/07294360701658609

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International Masters students' perception of the Research Skill Development framework for their learning and teaching

Dayan Abdurrahman, Fizza Sabir & John Willison The University of Adelaide

Coursework Masters programs in Australia are now obliged to be compliant with the substantial research requirements of Australian Qualifications Framework Level 9 (AQF, n.d.). However, if Masters students commence with a low interest in research, or poorly developed research skills, there exists a possibility of students either failing or being overloaded with work in an attempt to understand research and attain the research skills required by AQF Level 9. This is of particular concern to international students, who may not be equipped and familiar with the required research skills. Educators too will appreciate the difficulty of providing Masters-level education with rich research requirements, and the consequences for current university funding if significant numbers of students are not successful.

Explicitly teaching Masters students the processes involved in academic research is a way to engage and motivate students to richly utilise the learning opportunities in their courses (Arends & Kilcher, 2010). One conceptual framework currently being piloted to help international Masters students and deepen their learning experience in the context of these research requirements is the Research Skill Development framework (Willison & O'Regan, 2006/2013; 2007). Due to the high stakes of enrolling in Masters, there is a need to ensure that the framework is effective for promoting student learning in research mode, especially for international students. This study explored experiences of the RSD framework for five international Masters Students in the School of Education, at the University of Adelaide. This project intended to understand the research learning experience as a result of exposure to the RSD framework in an Introductory Academic Program for international students. and in core and optional courses of the degree. Since the RSD framework was new to these international students on enrolling in Masters, a number of learning issues related to RSD framework application and understanding were explored, such as students' prior work and study experiences and the influence of these on perceptions of the RSD framework. Masters students who had completed the elective course Research Based Learning and Teaching were invited to attend individual semi-structured interviews that were voicerecorded. The researchers interviewed Masters students to address the following question: What were the international Masters students' perceptions of the RSD framework as experienced in the degree? As the data were based on student experiences these interviews were analysed using

a phenomenological approach (Smith, 2011),. The findings illustrate that the RSD framework is conceptually challenging, even daunting, yet also an important research based learning framework for post graduate level. The RSD framework can be a useful mechanism for communicating research based learning approach between international students and their academic research supervisor. Repeated exposure to the RSD framework as a conceptual research framework seemed to enhance student understanding, and also led to deepening perceptions of usefulness for future careers upon completion of their degree. However, additional support when introducing the RSD framework to new postgraduate students is recommended. The findings may have relevance to domestic students and for international Masters graduates when they return to home countries as teachers, lecturers and other trainers to enrich curriculum content.

Keywords:

Research Skill Development, international Master Students' perceptions, research based learning, learning experiences

REFERENCES

Arends, D., & Kilcher, A. (2010). *Teaching for student learning: Becoming an accomplished teacher*. New York, NY: Routledge.

AQF (n.d.). Australian Qualifications Framework. Accessed on 25/6/15 from http://www.aqf.edu.au/.

Smith, J. A. (2011). Evaluating the contribution of interpretative phenomenological analysis. *Health Psychology Review*, *5*(1), 9-27.

Willison, J., & O'Regan, K. (2006/2013). Research skill development framework, Retrieved 14 November, 2014, from http://www.adelaide.edu.au/rsd

Willison, J., & O'Regan, K. (2007). Commonly known, commonly not known, totally unknown: A framework for students becoming researchers. *Higher Education Research & Development*, 26(4), 393-409.

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Systemization of self-regulated learning in postgraduate courses: enhancing professional capacity in the South Pacific.

Keith Morrison The University of the South Pacific

The University of the South Pacific (USP) has unique challenges through having to serve multiple disparate countries where there is a prominent vacuum of professional capacity, but traditional cultures of depth and diversity. Internet-based online courses provide part of the solution, but raise other issues. In an attempt to embrace the challenge, a systemization of research skill development (RSD) (Willison, 2012) to also nurture USP's seven key graduate attributes has been modelled as a way to facilitate self-regulated learning (SRL).

The systematization of SRL is possible because SRL is a recursive process, where feedforward from the learner changes the context in which learning occurs (Winne, 2010b). Key to its success is recognition of, and reliance on, tacit knowledge of meta-cognitive processes (Murtagh & Baker, 2009; Sadler, 2010; Zimmerman, 2002), which create feedforward from reflection on feedback (Quinton & Smallbone, 2010). However, SRL is insufficient unless the role of guidance is also included (Kirschner, Sweller, & Clark, 2010). Nevertheless, SRL can be successfully bootstrapped through the mutually supporting roles of teachers, peers and the community cultural context (Nicol & Macfarlane-Dick, 2006; Winne, 2010a).

A recursive model of SRL has been developed to determine both; the means by which teacher and peer initiatives support SRL, and how SRL assists teacher and peer initiated learning. The model provides effective leverage points to ensure both graduate attributes and RSD are achieved. The feedforward process has been modelled according to triple-loop theory (Tosey, Visser, & Saunders, 2011), which has already been found to be pertinent in the culturally rich contexts of the South Pacific (Morrison & Singhe, 2009).

This paper reviews lessons learnt from three cycles of community-based action research to implement and develop the conceptual model within two postgraduate courses where approximately 50% of the students are already working in government, NGOs or regional agencies.

Keywords

self-regulated learning; feedforward, triple-loop learning, professional capacity, South Pacific.

REFERENCES

Kirschner, P. A., Sweller, J. & Clark, R. E. (2010) Why minimal guidance during instruction does not work: An analysis of the failure of constructivist, discovery, problem-based, experiential, and inquiry-based teaching. *Educational Psychologist*, 41(2), 75-86.

Quinton, S. & Smallbone, T. (2010) Feeding Forward: using feedback to promote student reflection and learning – a teaching model. *Innovations in Education and Teaching International*, 47(1), 125-135.

Morrison, K. D. and Singh, S. J. (2009) Adaptation and indigenous knowledge as a bridge to sustainability. In P. Lopes and A. Begossi. *Current Trends in Human Ecology* (pp. 125-155). Newcastle upon Tyne: Cambridge Scholars Publishing.

Murtagh, L. & Baker, N. (2004) Feedback to Feed Forward: student response to tutors' written comments on assignments. *Practitioner Research in Higher Education*, 3(1), 20-28.

Nicol, D. J. & Macfarlane-Dick, D. (2006) Formative assessment and self-regulated learning; A model and seven principles of good feedback practice. *Studies in Higher Education*, 31(2), 199-218.

Sadler, D. R. (2010) Beyond feedback: Developing student capability in complex appraisal. *Assessment & Evaluation in Higher Education*, 35, 535-550.

Tosey, P., Visser, M. & Saunders, M. N. K. (2011) The origins and conceptualizations of triple-loop learning: A critical review. *Management Learning*, 43(3), 291-307.

Willison, J. W. (2012). When academics integrate research skill development in the curriculum. *Higher Education Research & Development*, 31(6), 905-919.

Winne, P. H. (2010a). Bootstrapping learner's self-regulated learning. *Psychological Test and Assessment Modeling*, 52, 472–490.

Winne, P. H. (2010b). Improving measurements of self-regulated learning. *Educational Psychologist*, 45, 267–276.

Zimmerman, B. J. (2002) Becoming a Self-regulated Learner: An overview. *Theory into Practice*, 41 (2), 64-70.

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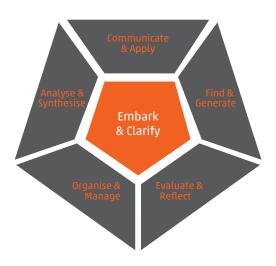
Masterly RSD National Symposium

The symposium will use the Research Skill Development framework (RSD) as a conceptual model to frame conversations around developing professionally relevant research skills for coursework Masters.

- www.rsd.edu.au
- #masterlyRSD

Research Skill Development (RSD) pentagon

When in doubt, return to the centre



wso	Work Skill Dev	velopment Frame	ework	Pinks are	The State of the S
FACET OF WORK SKILL	Prescribed Direction Level 1 Highly structured directions & guidance from supervisor.	Bounded Direction Level 2 Roundains set by I limited direction from supervisor.	Scatfolded Direction Level 3 Works independently and within provided guidelines.	Self-Actuated Direction Level 4 Descript oan abilities & works innovatively with limited guidance.	Open Direction Level 5 Works within self-determined guidelines appropriate to decipine / context
Initiative & Enterprise Goal directed and motivated to embank & clarify	Uses a highly structured approach and guidance to identify role.	Identifies with role and clarifies requirements with some degree of guidance.	Establishes role independently and adapts with minimal guidance to achieve desired outcomes.	Adapts to role confidently and fulfills original and new requirements.	Identifies future goals and projects while fulfilling original requirements.
 Technology & Resource Use Finds & generates data/knowledge using appropriate skills & technology. 	Uses technology and resources with high degree of guidance to find and generate information /data.	Uses technology and resources with some degree of guidance to find generate information (data.	Uses technology and resources independently to find and generate a range of information / data.	Shows a high degree of sensitivity and proficiency in the application of technology and resources to generate information/data.	Shows a complete understanding and appropriate mastery in choice of technology and resources to generate information idata.
c. Learning & Reflecting Critically evaluates role and reflects on lifeting learning skills and career management.	Evaluates information Idata using simple prescribed criteria to understand and reflect on role.	Evaluates information idata with some degree of guidance to understand and reflect on role.	Critically evaluates the match between theoretical and practical applications to generate knowledge.	Uses self-determined offeria to critically evaluate role and fill in gaps to generate Ifelong learning skills.	Ortically evaluates information using self-generated orteria based on experience and expertise to reflect on lifetong learning skills.
d. Planning & Management Organises & manages self while being perceptive to managing the needs of others.	Uses reflective practice to organise information and establish role using a highly structured format.	Uses reflective practice to master methods and practices using existing structures.	Uses reflective practice to evaluate and monitor own performance with confidence.	Organises information using self-determined structures and applies reflective practice to deliver clear projects and goals.	Uses reflective practice to atticulate visions, goals and innovative strategies and effectively manage teams.
e. Problem Solving & Critical Thinking Synthesises and analyses data to create solutions.	Applies a simple structure to understand existing data and knowledge.	Applies a structured format to synthesise and analyse existing data and knowledge.	Works independently to synthesises and analyse a range of resources to generate new knowledge.	Applies critical thinking and works collaboratively to synthesise, analyse and produce innovative and creative solutions.	Applies sophisticated critical thinking and analysis to initiate change and extrapolate outcomes.
Communication & Teamwork Writes, presents & performs with sensitivity to interpersonal communication and accounts for ethical, cultural and social/beam issues (ECS).	Uses lay language and requires highly structured guidance to communicate within teams. Shows minimal understanding of EOS.	Uses some discipline specific language and requires limited guidence to exchange information and understand ECS.	Uses discipline specific language and shows assertiveness in communicating information and applying ECS.	Communicates professionally using discipline specific language and shows a high degree of understanding and application of ECS.	Communicates professionally to negotiate and assert own values while respecting the contribution of others and in applying ECS.

PROGRAM

10.00

10.00	Welcome to Country Hevor-Himpa Hitchie
10.10	Introducing professionally relevant research skills to Masters students
10.40	State of play of RSD use in Masters and more broadly John Willison
11.00	Five minute presentations and subsequent hour-long breakout session
	RSD as a tool for collaborative conversations. Barbara Yazbeck, Monash Uni (for Vic/Tas Cluster of Universities)
	RSD for assessment Deborah Murdoch, Charles Sturt Uni and Michelle Harrison, University of Sydney (for NSW/ACT Cluster of Universities)
	The Work Skill Development framework in Masters Sue Bandaranaike James Cook Uni (for Queensland Cluster of Universities) and Lyn Torres, Monash University
	Whole-of-program conversations using the RSD: The Core group of the SA Cluster of Universities
12.45	LUNCH
1.30	Initial impressions of the RSD by an incoming DVC(R) Professor Derrick Armstrong, DVC(R) University of the South Pacific
	Use of the RSD across an institution
	Heena Lal, University of the South Pacific
	Culturally appropriate use of the RSD Sotiana Mele & Keith Morrison, University of the South Pacific
3.00	Facilitated networking based around emerging questions and themes
4.00	Launch of Masters RSD website
	and Symposium closing remarks Professor Phil Levy, PVC(SL) Uni of Adelaide
4.15	

Welcome to Country Trevor-Tirritpa Ritchie