

TERNZ 2017

Proceedings of the 13th Tertiary Education Research in New Zealand Conference

Conference organisation by the Massey University Research on Teaching and Learning Group, Massey University, Palmerston North, 30 November – 1 December 2017

Editors

Eva Heinrich, Clare Mariskind, Ian Fuller

ISBN: 978-0-473-41907-3

Publisher: Research on Teaching and Learning Group, Massey University

Copyright

Copyright for the proceedings as a whole belongs to Research on Teaching and Learning Group, Massey University. Copyright for individual abstracts contained in the proceedings is vested in each of the authors in respect of his or her contributions.

Table of Contents

ACKNOWLEDGEMENTS	5
REVIEW POLICY	6
FOREWORD	6
PRE-CONFERENCE WORKSHOP ABSTRACTS	7
Non-traditional students and employability outcomes.....	8
ePortfolios in a changing landscape of learning	9
POSTER ABSTRACTS	10
Smartphones for education - are we ready to leverage their potential?.....	11
Work Integrated Learning (WIL) practitioners' perceptions of the value of Communities of Practice.....	12
Self-paced, on-demand consultation times: A novel approach to providing assessment advice through instructor-made videos	14
SESSION ABSTRACTS	16
Professional recognition for educators in higher education: Pathways to <i>mauri</i> , self-efficacy and reflective practice	17
Supporting students' transitions	20
Academics as Privileged Actors: Challenge and opportunity in teaching civic engagement ..	22
Embedding academic numeracy support	25
Using predictive modelling to identify factors associated with non-participation and underachievement in tertiary education at qualification Level 4 and above	27
Migration and cultural contexts: What are the lived experiences of overseas tertiary teaching staff who have moved to New Zealand?	29
Project-based learning: Enhancing students' learning experience	32
Creative thinking skills as a learning outcome for tertiary STEM students: Researching the impact of the regular use of non-routine problem solving as a pedagogical strategy	34
Collaborating with mature-aged students to facilitate participation in an academic discourse	36
Group work: Developing core competencies that prepare students for 21st century challenges	38
Supporting academics', students' and employers' identification of invisible attributes	41
Comparing problem-based learning with didactic lecture-based learning using the teaching of "equine diarrhoea" to veterinary students as a case study	43
Curriculum, teaching and powerful knowledge	45
Should HERDSA New Zealand publish a journal on teaching and learning in higher and tertiary education?	46

Modified problem-based learning in a large stage one competitive course	48
“E-quality” of synchronous tutorials online in supporting distance students’ learning journeys	50
Teaching the European Middle Ages in Aotearoa New Zealand: Issues and opportunities ...	52
Experiences of undergraduate and postgraduate Business students using online writing tools to support their writing	54
Does successful teamwork negate the benefit of competition?	56
Strategies for teaching international students in New Zealand	58
Support through virtual spaces: A model for embedding academic support into online courses	60
Making sense of the adoption of learning and teaching innovations in higher education: Implications from a systematic literature review	62
Towards mitigating cheating in multiple-choice examinations.....	64
Teaching sensitive topics	66
Examining the alignment of self-, peer-, and teacher-assessment in Initial Teacher Education	68
Ingesting or digesting the course readings in Initial Teacher Education	70
Supporting ourselves, each other (and our supervisors!) when learning and using an uncommon research strategy for PhD.....	72
Increased flexibility in summative assessments – incorporating student choice in assessment style	74
I scratch your back and you scratch mine: Using dialogic feedback to enhance students’ feedback experiences in higher education	77
Social inclusion and international students.....	80
Reflecting on student agency	82
Use of learning management system: Pedagogical or technological?	84
Dissolving the walls: Learning across the boundaries of tertiary institutions and work.....	86
Building students’ enterprise skills through inductive teaching	89
Attention-enhancing pedagogies for focus, connection, and critical thinking	92
Examining the roles of students as sessional teachers in Higher Education.....	94
Integration of the graduate profiles and academic literacy capabilities into the academic curricula: An undergraduate Year 1 case-study	96
ESOL tertiary teachers’ perception of the effect of self-driven professional learning and development on their collective efficacy	99

ACKNOWLEDGEMENTS

Conference Convenor:	Eva Heinrich, Massey University
Organising Committee:	Roseanna Bourke, Ian Fuller, Clare Mariskind, Ying Jin, Michael Philipp, Linda Rowan, Gillian Skyrme (all Massey University)
Reviewers:	Roseanna Bourke, Ian Fuller, Eva Heinrich, Clare Mariskind, John Milne, Ying Jin, Michael Philipp, Linda Rowan, Gillian Skyrme (all Massey University) Susan Carter, University of Auckland
Sponsors:	Ako Aotearoa Massey University
Umbrella Organisation:	HERDSA New Zealand

REVIEW POLICY

All abstracts have been reviewed by at least two reviewers using a blind review process. Reviewer recommendations were discussed by members of the organising committee before acceptance decisions were made.

FOREWORD

We are very pleased to be able to welcome the delegates of the 2017 TERNZ Conference to Massey University in Palmerston North. Since 2002, TERNZ has been an important event for New Zealand's tertiary education research community.

The conference has a special format that truly facilitates discussion and exchange. Both presenters and participants gain new insights from the sessions. The host groups facilitate understandings across the parallel streams and ensure that everyone's voice is heard.

All members of our organising committee belong to the Research on Teaching and Learning Group that has been operating at Massey University for three years. This group is a grassroots initiative, which brings together researchers from across the university. The group aims to provide a home away from home for researchers, make research on teaching and learning visible to the wider university community and contribute to university decision making in this area.

As in previous years, the TERNZ conference programme offers a wide variety of interesting topics. We are looking forward to the discussions to be held over the three conference days and the long-lasting connections that will be forged.

Finally, a word on the organisation of these proceedings to help you find your way around: abstracts are arranged alphabetically by (first) author surname. The proceedings are probably best read in conjunction with the conference programme, which is available at <http://www.herdsa.org.nz/ternz/2017/programme.html> and at the end of this volume.

We hope you enjoy the Massey TERNZ 2017 experience!

Eva Heinrich, Clare Mariskind, Ian Fuller (on behalf of the organising committee)

PRE-CONFERENCE WORKSHOP ABSTRACTS

Non-traditional students and employability outcomes

Susan Geertshuis & Narissa Lewis, University of Auckland

s.geertshuis@auckland.ac.nz, narissa.lewis@auckland.ac.nz

Intended audience

Academic and professional staff who teach or support non-traditional students.

Learning outcomes

By the end of the workshop participants will be able to:

Identify potential equity issues in educational and support services relating to employability

Adapt existing and design new services and approaches to teaching and supporting non-traditional students

Workshop description

Non-traditional students despite equivalent academic transcripts have less favourable employment and career outcomes than their peers. Universities have devoted substantial resources to supporting transition into universities for students from a range of target groups but they have devoted far fewer resources and attention to target groups as they prepare for employment and transition out of the university.

This workshop explores employability capabilities and circumstances from the perspective of students from diverse backgrounds to identify and then plan improvements in the fit between them and university provision.

ePortfolios in a changing landscape of learning

Mendia Mentis, Massey University, m.mentis@massey.ac.nz

The landscape of learning in higher and tertiary education is changing. Learning has shifted from a focus on gaining skills and knowledge to a process of becoming a particular kind of person through belonging to a professional community (Wenger, 1998). This process of '*becoming* and *belonging*' involves life-long, life-wide and life-deep learning. The challenge for teaching and learning lies in ways to represent and credit this type of learning and identity development. ePortfolios provide valuable affordances to map life-long learning beyond formal study, life-wide learning across different contexts, and life-deep learning of embedding values and identity within practice.

This hands-on workshop explores the affordances and opportunities of using an ePortfolios (Mahara) to map life-long, life-wide and life-deep learning. It will focus on the what, why and how of ePortfolios using examples from a variety of professional programmes. Participants will have the opportunity to create their own ePortfolio using Mahara, curate artefacts as evidence of learning, make links to social media and assess the relevance for their own teaching context. Please bring a laptop.

POSTER ABSTRACTS

Smartphones for education - are we ready to leverage their potential?

Roxanne Hawi, Eva Heinrich & Sunil Lal, Massey University, r.hawi@massey.ac.nz

Abstract

This research explores technological and pedagogical requirements and changes needed to effectively use smartphones in education. The project attempts to examine how flexible communication options and strong computing capabilities of smartphones can be leveraged to make these devices tools for supporting learning. The study explores simple techniques that can enable instructors and students to use smartphones during learning activities. For instance, to improve the performance of tasks typically considered tedious on smartphones, one can use existing software technologies such as data conversion apps. Handwritten assignments can be uploaded as images and converted into text/speech. Also discussed are methods for effectively adjusting material for delivery specifically on smartphones, for example, content chunking.

The research further suggests ways to mitigate smartphone limitations through hardware add-ons. Homemade projectors/smart glasses can be used to augment the small screen size of smartphones. Furthermore, the project examines how far off existing course requirements (such as data usage volumes) are from the smartphone's capabilities. This allows students/teachers to evaluate whether existing teaching methods would work on smartphones, or how they can be adjusted to make studying using smartphones feasible.

The expected research outcome is twofold. First, it will contribute knowledge towards uptake of higher education particularly in regions where students are excluded from tertiary education because they lack traditional computing platforms (such as laptops/desktops). Second, it aims to enhance learning in wider contexts. For example, using smartphones to physically connect learners in same locations to establish learning communities would be applicable in many educational settings.

How the poster will encourage interactive engagement

To draw people in, a smartphone will be available to demonstrate various techniques of delivering material on smartphones. Participants can use it to a) watch short videos from an existing course to see if it is feasible; b) convert videos-to-audio or image-to-text files using conversion apps; and c) compare memory and data usage/requirements for each file format. Additionally, to demonstrate ways to mitigate smartphone limitations, homemade hardware add-ons such as projectors/smart glasses will be on site. Participants will be able to see how images look on the add-ons versus on the smartphone.

Work Integrated Learning (WIL) practitioners' perceptions of the value of Communities of Practice

Leanne Nicholas, Wellington Institute of Technology, Leanne.Nicholas@weltec.ac.nz

The research

The call from New Zealand businesses for 'work ready' graduates from tertiary institutes has placed an additional and sometimes unsupported burden on tertiary educators, and yet these teachers have, and do, go to considerable effort to ensure that their students get real work experience.

WIL practitioners design, deliver and administer situated, experiential learning for a growing number of programmes. Due to limited availability of formal professional development opportunities, their own learning is mainly informal, incidental and on-the-job. Greater collaborative learning opportunities have been advocated as beneficial by the WIL community. Additionally, in-house professional development initiatives are increasingly focusing on Communities of Practice (CoP) to support situated learning for educators. The demands to deliver effective industry-related student learning experiences raises issues of how best to develop and support practitioners in fulfilling their roles.

This poster presents the findings from a qualitative study, utilising semi-structured interviews. It explores WIL practitioners' perceptions of the value of communities of practice to support their teaching practice. An adaption of the Wenger, Trayner and de Laat's (2011) five cycles of value creation framework was used to understand the data.

Findings indicate there is a lack of common understanding of WIL terminology, and that practitioners want greater access to collaborative learning opportunities and sharing of best practice resources. The many and varied relationships of WIL practitioners provide inherent values upon which to benchmark and develop their practices. However, the invisible nature of many WIL activities makes it difficult for practitioners to identify each other, connect in networks and develop relationships. Practitioners are however seeking out expertise that assists them to be more knowledgeable and competent.

Reference

Wenger, E., Trayner, B., & de Laat, M. (2011). *Promoting and assessing value creation in communities and networks: A conceptual framework*. Netherlands: Ruud de Moor Centrum.

Encouraging poster and researcher engagement

As educators, it remains a high priority that learning experiences enhance the employability of our students; this should be irrespective of whether these experiences are formalised as work-integrated learning. Designing 'best practice' industry related learning, and what we can learn from each other to do this, will touch most of the conference delegates. The poster will focus on this aspect of the study, and in addition, present the idea that sharing stories, leading to the development of shared meaning and practices, are significant aspects

of communities of practice. The poster will encourage the delegates to share their stories with me, and include a section to leave their own ideas.

Self-paced, on-demand consultation times: A novel approach to providing assessment advice through instructor-made videos

Giriraj Singh Shekhawat, University of Auckland, g.shekhawat@auckland.ac.nz

Lukasz Swiatek, Massey University

The research

This poster presents the results of an innovative effort at presenting assessment advice: namely, through staged, filmed consultation sessions made available in the form of short video clips on YouTube. These clips were developed in order to provide a large group of students in a third-year capstone Health Systems course at the University of Auckland with meaningful, personable advice delivered in an engaging way. The four videos produced for the four assignments in the course feature the instructor and student role-playing and answering questions. The videos were deliberately prepared and filmed in a way that would help students feel comfortable to undertake the assignment successfully.

The research builds on existing scholarship about 'instructor-made videos' (IMVs) in higher education teaching and learning. The use of these videos continues to grow as educators search for novel ways of engaging 'Net-Geners' (Hajhashemi, Caltabiano & Anderson, 2017) who are increasingly consuming, and comfortable with, audio-visual materials available on demand. Authors such as Pan et. al. (2012) have found that IMVs are particularly valuable in scaffolding student learning, while Ranga (2017) has found that they are especially valuable for enabling self-paced learning.

However, to the best of the authors' knowledge (based on an extensive literature review), no researchers to date have developed IMVs that feature staged student-instructor consultation sessions. Aragon and Wickramasinghe's (2016) pluri-disciplinary review of existing IMV formats makes no mention of this approach. Our research highlights the benefits of, and offers reflections on, this novel way of developing IMVs to enhance student engagement.

How the poster will encourage conference delegates to interact with the display

The poster will be formatted and designed in a way that will encourage delegates to actively reflect on the crux of the research: namely, how best to obtain assignment advice from an instructor in today's digital world. In addition to presenting visual content from the videos and data showing their effectiveness, the delegates will need to place themselves in the shoes of today's audio-visual-savvy students. Devices such as rhetorical questions will also be used to help engage delegates.

Links to the videos:

1. <https://www.youtube.com/watch?v=5AB5keGeLoA>
2. <https://www.youtube.com/watch?v=gd2UsVkVa3Y>
3. <https://www.youtube.com/watch?v=2c4K-svCBog>
4. <https://www.youtube.com/watch?v=7l6Ruq63o3U>

References

- Aragon, R., & I.P., Wickramasinghe. (2016). What has an impact on grades? Instructor-made videos, communication, and timing in an online statistics course. *Journal of Humanistic Mathematics*, 6(2), 84-95. doi: 10.5642/jhummath.201602.07
- Hajhashemi, K., Caltabiano, N., & Anderson, N. (2017). Net-Geners' perceptions of engagement through online videos. *Journal of Computers in Education*, 4(3), 321-337. doi: 10.1007/s40692-017-0084-7
- Pan, G., Sen, S., Starrett, D. A., Bonk, C. J., Rodgers, M. L., Tikoo, M., & Powell, D. V. (2012). Instructor-made videos as a learner scaffolding tool. *MERLOT Journal of Online Learning and Teaching*, 8(4), 298-311.
- Ranga, J. S. (2017). Customized videos on a YouTube Channel: A beyond the classroom teaching and learning platform for general chemistry courses. *Journal of Chemical Education*, 94(7), 867-872. doi: 10.1021/acs.jchemed.6b00774

SESSION ABSTRACTS

Professional recognition for educators in higher education: Pathways to *mauri*, self-efficacy and reflective practice

Elizabeth A Beckmann, Australian National University, elizabeth.beckmann@anu.edu.au

Piki Diamond & Nell Buissink, Auckland University of Technology

The research

In 2014, Beth Beckmann was awarded an Australian National Teaching Fellowship to research the concept of professional recognition for university educators, especially in the context of teaching self-efficacy. This set in train a journey across Australia and New Zealand that captured the appetite among universities and individual educators for an inclusive approach to the professional recognition of all those involved in teaching and supporting learners, whether they are positional leaders and teaching award winners or the unsung heroes who impact on the everyday student experience— lecturers, sessional staff, tutors, demonstrators, librarians, technologists and academic/learning advisers, among others.

Using the model of the first Australian scheme internationally accredited by the Higher Education Academy (HEA)—the Australian National University Educational Fellowship Scheme (Beckmann 2015, 2017)—Beth engaged directly with more than a dozen Australasian universities and hundreds of university staff, and enthused them to embark on their own institutional or personal journeys to recognition of expertise and experience in teaching and learning through HEA fellowships.

One such relationship was with the Auckland University of Technology (AUT), where Piki Diamond and Dr. Acushla Dee Sciascia had developed Ako Aronui to provide a very inspiring Māori contextualisation for the UK Professional Standards Framework, which underpins the HEA fellowships.

Research is already showing how this kind of professional recognition—involving structured reflection on one's personal philosophy and practice as a university educator—provides diverse benefits to self-esteem and self-efficacy in teaching, and, for many, reinforces their values-driven motivations to be the best educators they can be.

Why this topic is important

Universal education underpins the development of democratic human societies. Universities extend this education to the human endeavour of research. Higher education staff have the privilege of teaching new generations to apply this research to human societies and their many problems. However, commodification has seen economic and accountability pressures brought to bear on many aspects of tertiary teaching, with poorly envisioned metrics accepted as proxies for teaching quality. Individuals' own teaching self-efficacy, as conceived by Bandura (1977), may be subsumed by these external measures, leading to doubt and loss of confidence.

The Professional Standards Framework, Ako Aronui and indigenous perspectives of teaching have been explored internationally with participants at the first and second Australian Symposia on Professional Recognition of University Educators (Canberra, 2016, 2017). This exploration suggests that, when neoliberal ideals and behaviours are contextualised

multiculturally, challenges arise that cannot be resolved through rational logic but instead require ethically-informed spaces where values and beliefs can be reflected upon and negotiated, both within the self and the collective. The concept of mauri centres our thinking:

"How carefully do we feel for and consider the mauri of each [person] in our care? ... If a [person] feels that she or he is respected and accepted, then her or his mauri waxes". (Pere, 1997, p.12)

Research on the experiences of individual HEA fellows demonstrate the impact of a professional recognition process driven not by checklists of achievements but by an honouring of personal experiences informed by professional and cultural values. Such professional recognition re-builds individual and collegial teaching self-efficacy.

How the session will be run

This fully interactive session will empower participants through personal engagement with the ideas of values-informed professional recognition. First, a short introduction to the UK Professional Standards Framework and AUT Ako Aronui will provide a discussion-based opportunity to reach a common understanding of professional standards in teaching and learning and the nature of the recognition process offered by HEA.

Then, guided by Palmer's quote—"How can educational institutions sustain and deepen the selfhood from which good teaching comes?" (2007, p. 4)—and the concept of mauri, groups will discuss how the expertise and experience of individual educators can demonstrate good practice and 'teaching excellence' – tikanga and tohungatanga. How might these be supported, assessed and recognised at the level of the institution, while maintaining a focus on mauri and self-efficacy—tino rangatiratanga— and values and ethics —ngā ūara and pūmanawa?

Using a combination of World Café and Ketso processes to invite, share and record every participant's input, we aim to make the experience of this session a powerful one that not only contributes to a research paradigm but, more importantly, values each person and lets them leave with mauri strengthened.

References

- Bandura, A. (1997). *Self-efficacy: The exercise of control*. New York, NY: W. H. Freeman.
- Beckmann, E.A. (2016). Teaching excellence: Recognising the many as well as the few. In Davis, M. & Goody, A. (Eds.) *Research and Development in Higher Education: The shape of higher education*. 39. Proceedings HERDSA Conference Fremantle, July 2016. <http://www.herdsa.org.au/publications/conference-proceedings/research-and-development-higher-education-shape-higher-1>
- Beckmann, E.A. (2017). Leadership through fellowship: Modelling distributed leadership in a professional recognition scheme for university educators. *Journal of Higher Education Policy and Management*, 39(2),155-168.

Palmer, P. (2007). *The Courage to teach: Exploring the inner landscape of a teacher's life*. New York: Wiley.

Pere, R. (1997). *Ako: Concepts and learning in the Māori tradition*. Wellington: Te Kohanga Reo National Trust.

Supporting students' transitions

Erik Brogt, University of Canterbury, erik.brogt@canterbury.ac.nz

The research

Over the course of their university careers, students go through a number of transitions: From high school to university, within the university curricula as they master the discipline, and finally transitioning into the workforce as graduates. These transitions are not always easy. Here, we showcase a number of small educational research projects from a variety of disciplines that are investigating in some way what we as academics, professional staff, and university management can do to help facilitate these transitions, improve the student experience, and increase student retention. The projects were: 1) student issues with assessment in first year, looking at the transition in assessment regimes from high school to university; 2) student assessment anxiety, looking at how students cope with the transition mentioned above; 3) the law student profile, looking at what interventions can be put in place to improve the student experience, in particular related to mental health; 4) mathematical maturity, looking at implicit assumptions we make about our students' skill and knowledge; 5) complex cases in accounting and law, looking at how we can provide authentic assessment to facilitate the transition to the workforce.

Why this topic is important

Successful student transitions influence both the students' life and experience, and a number of important performance metrics for universities. For example, student retention is an important metric for universities for a number of reasons: 1) Budgets are strongly dependent on student fees and SAC funding; 2) It is cheaper to retain a student than to recruit one; and 3) Retention is part of the Educational Performance Indicators that universities are ranked on in league tables by the government. Likewise, employability of graduates has become more and more important, driven by the governments' wish for accountability. However, it is not always clear who should take, and who actually takes, responsibility for facilitating successful student transitions. In this research, we use a bottom-up approach, looking at what individual staff members or units / departments can do to help students transition to university, succeed in their studies, and be ready for life after graduation. At the same time, the research seeks to inform university strategy and policy, so that data and research driven decisions on matters teaching and learning, and the associated resource allocations, can be made.

How the session will be run

In the first ten to 15 minutes, we will share the strategies, rationales and (preliminary) results from the projects. We will then invite participants, either in small groups or in a round-table discussion (depending on the number of participants), to provide feedback and brainstorm with us what we (academics, professional staff, university administrators) can do in our institutions to set up mechanisms at any scale to facilitate successful student transitions. The emphasis will be on coming up with 'small wins' for teaching staff, low resource-intensive interventions and support we can set up ourselves as individuals, teaching teams, or departments, that don't require major systemic overhauls at larger levels

of the organisation. Time permitting, we will also discuss what we see as our obligations in terms of support to our students' post-graduation (e.g. mentoring of beginning in-service teachers).

Academics as Privileged Actors: Challenge and opportunity in teaching civic engagement

Janine Cook, Massey University, j.cook1@massey.ac.nz

The research

This paper is a preliminary exploration of my observations as a senior tutor within Massey University's new BA Core paper, *Tū Tira Mai: Practising Engagement* (TTM). The Core consists of three courses that address citizenship in Aotearoa, New Zealand, and TTM is a single-semester course offered internally and extramurally, with the primary aim of developing practical skills and ethical reflexivity within civic action. Students undertake a group project based around a social justice topic of their choice. While students have readings, there is minimal theory; the course is vocationally-orientated to enhance the economic relevance of the BA. As the Core's primary advocate, Professor Richard Shaw, highlighted in his recent 2017 address, the Core is not merely a means of generating revenue; he insists that we have, as teachers, a moral imperative. Current global politics demonstrates the consequences of democratic breakdown, and we, as the academic elite, need to attend to the needs of our indebted students, especially to those not from the homes of the top 10 percent (Shaw, 2017).

However, delivering this course in an academic context, especially within the hollowed-out, neoliberal university, poses challenges. Not least amongst these is the skillset required. Academic staff need to model the interpersonal (aka 'soft') skills of public engagement and activism, and concrete skills such as popular communication. But the skillset of *Homo academicus* is, in many respects, the antithesis to that required for activism. I have observed this tension within our first iteration of the course, so seek to 1) closely examine the skills we need to model, and teach, more effectively, and 2) highlight how valuing this skillset provides positive opportunities to strengthen academic and pedagogical culture.

Why this topic is important

As a new innovation, Massey's citizenship core is of interest to academics within other tertiary institutions, especially within the context of declining Humanities enrolments globally, and interest in BSc programmes integrating elements of civic awareness and communication into their core or other offerings (Emerson, n.d.; Science in Society, n.d.; Turner & Brass, 2014). Civics programmes within secondary schools traditionally emphasise debating skills. However, TTM's leading course designer, Emily Beausoleil, places greater emphasis on the fact that:

... having a voice is only possible because someone, somewhere, is able to listen. If marginalised peoples have a right to speak, then the rest of society – the wealthy, the powerful – have a responsibility to listen. How do we realise this ideal, when we speak different languages ... When some voices are more familiar or louder than others? When it's easy to discount what we don't recognise as nonsense or worthless? And when actually listening to some of those voices can leave us feeling exposed, undermined, even implicated? (Beausoleil, 2016).

So, how good are we at this? Within the hierarchical university, our students have the least cultural (and, usually, economic) capital, so if we are to truly practise what we preach, we will model skills that align with good practice within both social work and teaching: conscious use of self and an embedded client/student-centredness (Heydt & Sherman, 2005). We will challenge ourselves to 'unsettle entrenched patterns of thought and behaviour, and provide the conditions for revisability' (Beausoleil, 2013), vis-a-vis our own culture of privilege and penalty.

Our course then, besides affirming our legitimate academic role as the conscience and critic of society (Education Act, 1989), generates impetus for a shift in academic habits and ways of being.

How the session will be run

After introducing our approach within the core and TTM, I will then assign participants to groups and invite them to engage in tasks that we give distance students within the course.

Groups will be encouraged to model civic discourse and speak to their assigned topic (on an aspect of social justice) from their own personal experience, views, and disciplinary knowledge. Group members will have restricted visual access to each other through seating arrangements and blindfolds to emulate the asynchronous or audio communication experience of distance students, and to encourage listening.

I will then guide teams through a series of reflexive questions to examine the skills required, the degree of emphasis on listening or debate, and conditions that enhance or undermine receptiveness. Utilising this experience of personal encounter, we will reflect on student encounter, the skillset needed to support student learning, and opportunities and challenges for us in transforming the cultural space of academia.

References

- Beausoleil, E.J. (2016, November). Breaking sound barriers: How the arts help us listen in diverse societies (Keynote address). Presented at Spring Uprising Festival, Wellington, NZ.
- Beausoleil, E.J. (2013, October). The neuroscience, politics and art of listening. In *EScoSci Network* (multi-campus national research group).
- Beausoleil, E.J. (2017, August). Hearing the difference: Listening and inequality in Aotearoa New Zealand. Presented at *American Political Science Association Annual Conference*. San Francisco, California, USA.
- Bourdieu, P. (1988). *Homo academicus*. Stanford, CA: Stanford University Press
- Education Act. (1989). Retrieved from <http://www.legislation.govt.nz/act/public/1989/0080/latest/DLM183668.html>
- Emerson, L.E. (n.d.). Scientists as writers: Implications for the classroom. Retrieved from <https://www.massey.ac.nz/massey/expertise/profile.cfm?stref=031130>

- Heydt, M., & Sherman, N. (2005). Conscious use of self: Tuning the instrument of social work practice with cultural competence. *The Journal of Baccalaureate Social Work*, 10(2), 25-40.
- Science in Society. (n.d.). Retrieved from <https://www.victoria.ac.nz/science/research/science-in-society>
- Shaw, Richard (2017, October). *Hell or high water: Doing political science in an age of populism*. College of Humanities and Social Sciences Professorial Lecture Series.
- Turner, Emeritus Professor Graeme & Brass, K. (2014). *Mapping the humanities, arts and social sciences in Australia*. Australian Academy of the Humanities, Canberra.

Embedding academic numeracy support

Julia Crawford, University of Auckland, julia.crawford@auckland.ac.nz

The research

Students enter university with different experience and levels of knowledge in numeracy. Changes in senior school qualifications (NCEA) have resulted in increased numbers entering university without having studied the traditional mathematics courses in Year 12 and 13. This means that some students are not adequately prepared for courses where mathematics underpin core concepts.

My role as Numeracy Skills Specialist in the Business School at the University of Auckland has two broad aims: to understand how to facilitate impactful numeracy support for students, while also helping to inform teaching innovation in numeracy rich courses. To make a real difference to student success, a support process needs to go beyond providing one-to-one tutoring and small group workshops. It is also necessary to engage with lecturers to find ways to embed student numeracy learning in the actual courses.

The focus of this research is the development of a process of course based numeracy support that can be used throughout the Business School with the potential to inform numeracy support in other disciplines, such as in primary teacher education and health sciences.

In this session, I propose to investigate definitions of numeracy and how well these definitions suit the university setting. Participants will be given an opportunity to share their experiences of numeracy support in tertiary contexts.

Why the topic is important

University aspirations for its graduates that have been captured in discussions regarding employability and the graduate profile, recognise the need for development in capabilities relating to a broader view of literacy. This view of literacy includes numerical and statistical literacy. Numeracy is a critical element of student success in many tertiary courses, yet many institutions offer only limited numeracy support.

Galligan (2013) defines academic numeracy to include three features: competence, confidence and critical awareness of the context and the students' own relationship with maths.

Galligan's definition of academic numeracy suggests the need to embed support in the course context. Any process of support therefore needs to find ways to engage teaching/lecturing staff to analyse the numeracy demands of their course and support them to adapt their teaching. Further, the definition suggests that effective support will work with students' individual needs in a personalised and timely way.

How we define numeracy informs the nature of support we offer.

How the session will be run

The goal of this session is to explore definitions of numeracy and share experiences of numeracy support at tertiary level.

The session will run roughly as follows:

Welcome and introduction, followed by small group work (brainstorm) to develop a working definition of numeracy for tertiary settings. Collate ideas on post-it posters for the walls. Circulate and review.

Presenting definitions of Numeracy, Academic Numeracy, and Mathematics from research. Consider overlaps with our working definition. A discussion that considers Which definition(s) best link to our context... is it different for universities, polytechnics, schools? Is it different for different disciplines eg Business, Construction, Nursing, Teacher Education?

Sharing of our experience of numeracy support. How is numeracy support is offered in your organisation? What are the barriers to successful support? (Share within groups and then each group to report back briefly about the range of support offered)

Close and thanks

Using predictive modelling to identify factors associated with non-participation and underachievement in tertiary education at qualification Level 4 and above

David Earle & Marny Dickson, Ministry of Education, Wellington

Marny.Dickson@education.govt.nz, David.Earle@education.govt.nz

The research

There is a growing interest in using administrative data from across the public sector to better understand the experiences of different population groups and the factors that are most associated with poor outcomes – including non-participation or underachievement in higher-level tertiary education.

This research uses data from the Statistics New Zealand Integrated Data Infrastructure (IDI) to identify:

- factors which predict a greater risk of non-participation in tertiary education at qualification Level 4 or above, or bachelors, by age 20
- factors which predict a greater risk of underachievement in tertiary education at qualification Level 4-7, or bachelors, for young people who enrol by age 20.

The analysis tests a full range of individual, family, education and socio-economic variables factors available in the IDI.

The data is modelled using logistic regression. We identify the factors with the greatest *explanatory power* in each model. We also identify the *size of effect* that specific risk factors have on the relative *likelihood* of non-participation or underachievement.

This analytic approach enables us to better understand learner pathways through the education system and the multiple individual, family, education and socio-economic factors that identify young people with greater risks of non-participation or underachievement in higher-level study.

This presentation will outline the key findings and encourage group discussion of the potential use of this type of analysis to inform tertiary education policy and practice.

Why this topic is important

Identifying risk factors for non-participation or underachievement in education at different ages or stages provides a foundation for more evidence-based policy, services and investment. The findings help to identify potential barriers to access and achievement in higher-level study - and possible intervention points.

The results will be of interest to policy-makers, academics, and teachers and with an interest in lifting access and achievement in higher-level education for under-represented or 'at-risk' population groups, including Māori, Pasifika, and young people from low socio-economic backgrounds.

We also aim to encourage discussion of the limitations of this type of analysis. For example, statistical associations do not necessarily indicate *causation*. Many of the factors which we

know influence individuals' education attainment and choices are not captured by administrative data.

For any given individual, the likelihood of future education participation and achievement is dynamic, influenced by what has happened in their lives to date, as well as upcoming events, experiences and actions. This means that the relationship between a particular risk factor and a future outcome is not static or unchangeable.

Factors which identify population groups with a greater risk of poor outcomes reflect – at least in part – the success or otherwise of past government policies and services in meeting the needs of all New Zealanders. In turn, changes to current policy and practice have the potential to disrupt the link between population risk factors, and actual patterns of tertiary education participation and achievement.

How this session will be run

This session will begin with a brief introduction to this research and the key findings.

Participants will be divided into groups to reflect on the results and to consider:

1. What strategies does your institution use to lift access, retention, progression, and qualification completion for 'at-risk' learners? What are the lessons for policy-makers, other institutions, academic staff, or student support services?
2. What are the implications of this type of analysis for your own tertiary education organisations' work to enable access to, or increase achievement in, higher-level study?
3. What are the possibilities for greater use of learner analytics within tertiary education organisations to improve access, retention and progression and qualification completion rates for 'at-risk' population groups? What are the barriers?
4. What are the main pitfalls or risks of using predictive modelling or learner analytics to inform education policy or institutional practice? How could these risks be mitigated?

Each group will report back on the main points raised during their discussion. In doing so, participants will increase their understanding of the potential uses (or misuse) of predictive modelling to lift access and improve teaching and learning for population groups 'at-risk' of non-participation or underachievement in higher-level study.

Migration and cultural contexts: What are the lived experiences of overseas tertiary teaching staff who have moved to New Zealand?

Dr Ursula Edgington, Independent Scholar and Educational Consultant, Waikato,
u.edgington@gmail.com

Dr Luk Swiatek, Massey University, L.Swiatek@massey.ac.nz

The research

The growing, global professionalisation of tertiary teaching is undeniably linked with individuals' qualifications and the perceived reputation of awarding bodies involved (Meyer & Benavot, 2013). In an increasingly competitive market, universities' staff recruitment focuses on individuals recognised as potentially 'adding value' to the institutions' educational league table results (Brown & Lauder, 1996). In the relatively small population of New Zealand, this inevitably means employing academics from overseas (Shore, 2010). In an historical study, Brailsford (2011) comments that New Zealand universities have 'lagged behind' in terms of strategies like recruitment that address teaching quality. But as the Tertiary Education Strategy sets out (Joyce, 2014), neoliberalist pressures are growing in New Zealand, with a strong focus on delivering a future knowledge economy (Roberts, 2007).

Tertiary teaching practice involves reflecting on our individual teaching philosophies, especially when working in unfamiliar territory (philosophically and/or geographically). That's because reflecting on combinations of practical pedagogical skills and academic theory assists us to interpret/develop various aspects of ourselves, our professional identity, and our teaching; hopefully as a route towards evolving student-centred curricula. But what challenges do overseas-trained tertiary teachers face in New Zealand, and how can considerations of these cultural contexts be beneficial?

Studies on the complexities of teachers' identities and emotional labour within the wider context of ever-shifting working environments have included the everyday experience of teaching (Constanti & Gibbs, 2004; Palmer, 1998). This interpretive research project aims to build on these understandings to illuminate the lived experiences of overseas tertiary teaching staff who have moved to New Zealand. More specifically, it aims to explore how their cultural contexts and teaching philosophy impact upon their motivations, teaching methods and professional identities.

Why this topic is important

Worldwide, universities are under pressure. Student numbers are growing, the expectations of multiple sets of stakeholders (including industry and community groups) are rising, and forces from neo-liberalist politics such as the UK Teaching Excellence Framework (TEF) increasingly emphasise the marketisation and commercialisation of institutions through various measureable outcomes (Skourdoumbis & Gale, 2013). New Zealand is not immune to these shifts. One result of these pressures is attempts to 'measure' teaching quality through analysis of staff achievement. This, and associated evaluation criteria and league

tables means universities have 'raised the bar' in terms of essential requirements for job applicants; overseas markets respond to this demand.

International applications submitted to New Zealand Immigration's 'Expression of Interest' scheme have increased by almost 40% over the last two years (Ministry of Business Innovation and Employment, 2017). This is perhaps unsurprising, considering the ongoing economic and political turmoil that Europe and the USA are experiencing. Understandably, the perception of New Zealand's relatively stable and equitable society, along with its 'clean, green' image and physical distance from 'troubled' areas, is perceived as an attractive alternative for many skilled migrants, including tertiary teachers.

So what cultural and other challenges do overseas-trained and qualified tertiary teachers experience when they begin working in New Zealand? Currently, support mechanisms seem focused on (international) students' – rather than staff – needs. What coping mechanisms do staff use? Official Information Act (OIA) requests to New Zealand university Human Resource departments reveal data relating to overseas-recruited academic staff retention rates are scarce or go unrecorded. Hence the importance of this research: the authors seek to highlight these issues with a view to helping to address future academic staff training and development needs.

How the session will be run

We will briefly present our findings from our literature review of this topic, alongside some contrasting relevant quotes from volunteer respondents and our own teaching reflections. Visual prompts will be used to assist with participants' own reflections and comparisons of their work experience in New Zealand and overseas.

We will then ask participants (in pairs or small groups) to consider our draft questionnaire, which is based on questions relating to the lived experience of tertiary teaching staff. For example, one of the proposed questions is: "Reflecting on the last year of your teaching and/or research, list 3 things that you have found most challenging in your everyday working environment, and how these might be overcome." These questions are appropriate for a diversity of audience members - whether from overseas or not - and will promote debate about further questions for the research project's questionnaire and interview themes.

The session will not only provide a space to discuss these vital, timely issues; it will also provide an opportunity to gain feedback from participants that will assist us to develop our research ideas, methodology and theoretical framework.

References

- Benade, L. (2012). *From technicians to teachers: Ethical teaching in the context of globalised education reform*. eBook: Bloomsbury Publishing.
- Brailsford, I. (2011). 'We know no such profession as a university teacher': New Zealand academics' teaching capabilities, and student performance in the years of academic boom and student strife. *History of Education Review*, 40(1), 30–46.
- Brown, P., & Lauder, H. (1996). Education, globalisation and economic development. *Journal of Education Policy*, 11(1), 1–25.

- Constanti, P., & Gibbs, P. (2004). Higher education teachers and emotional labour. *International Journal of Educational Management*, 18(4), 243–249.
doi:10.1108/09513540410538822
- Joyce, S. (2014). Tertiary Education Strategy 2014-2019. Ministry of Education, New Zealand Government. Retrieved from <http://www.education.govt.nz/further-education/current-priorities-for-further-education/tertiary-education-strategy/>
- Meyer, H.-D., & Benavot, A. (2013). *PISA, power, and policy: the emergence of global educational governance*. Symposium Books Ltd.
- Ministry of Business Innovation and Employment. (2017). Migration Trends Report updated. Retrieved from <http://www.mbie.govt.nz/info-services/immigration/migration-research-and-evaluation/migration-and-labour-force-trends/2015>
- Palmer, P. (1998). *The courage to teach: Exploring the inner landscape of a teacher's life*. San Francisco: Jossey Bass.
- Roberts, P. (2007). Neoliberalism, performativity and research. *Review of Education*, 53, 349–365.
- Shore, C. (2010). Beyond the multiversity: neoliberalism and the rise of the schizophrenic university. *Social Anthropology*, 18(1), 15–29.
- Skourdoumbis, A., & Gale, T. (2013). Classroom teacher effectiveness research: a conceptual critique. *British Educational Research Journal*, 39(5), 892–906.

Project-based learning: Enhancing students' learning experience

Siham El-Kafafi, siham@icl.ac.nz

Olkan Guler, Whitireia, olkan.guler@whitireia.ac.nz

The research

The authors have conducted a literature survey on the value of Project-based learning (PBL) as a means of building a strong foundation for improving students' potential and success in their future careers.

Ngai, Lok, Ng, Lo and Wong's (2005) research results confirmed that using project-based teamwork is very effective in teaching introductory courses to undergraduate business students as it provides a hands-on approach of learning for the students who took direct action in designing and setting up the project of an e-shop. On the other hand, a study conducted by Gunsekaran, McGaughey and McNeil (2004) highlighted some significant challenges, such as lack of budget, expertise, support from educational institute and support from government, that may hinder the success of the project-based approach in teaching and learning.

The authors further reflect on their use of project-based learning (PBL) as one of their teaching strategies which is grounded in their constructivist approach to teaching and follows Dewey's proposition that experience is the basis of education (1933 as cited by Lee et al., 2010). The authors concur with Gulbahar and Tinmaz (2006) and Hallinger and Lu (2011) that the constructivist approach is the most suited teaching philosophy as it's a learner-centred approach with focus on learning by doing and emphasis on active student participation to enhance students' life skills. Their research noted significant increase in students' engagement, research and problem-solving skills, self-confidence, passion/motivation and organising and analysing information skills.

Why this topic is important

Feedback from employers indicates that students who have been exposed to a PBL-based learning programme fit into the work environment faster and more effectively.

The old-school model of passively learning facts and reciting them out of context is no longer sufficient to prepare students to survive in today's world. Solving highly complex problems requires that students have both fundamental skills (reading, writing, and math) and 21st century skills (teamwork, problem solving, research gathering, time management, information synthesizing, utilizing high tech tools). With this combination of skills, students become directors and managers of their learning process, guided and mentored by a skilled teacher.

By bringing real-life context and technology to the curriculum through a PBL approach, students are encouraged to become independent workers, critical thinkers, and lifelong learners. Teachers can communicate with administrators, exchange ideas with other teachers and subject-area experts, and communicate with parents, all the while breaking down invisible barriers such as isolation of the classroom, fear of embarking on an unfamiliar process, and lack of assurances of success.

PBL is not just a way of learning; it's a way of working together. The most valuable aspect to it is that it encourages students to learn to take responsibility for their own learning, which will form the basis for the way they will work with others in their adult lives.

How the session will be run

Power point slides highlighting main points of the research and of the importance of the topic will be prepared and distributed to workshop attendants. These slides will be briefly presented and the contents will be explained.

Attendees will be asked to form groups of 4-5 individuals to assume working as a project-based team. Each group will be provided with an ethical dilemma case that they will be working on together to provide a solution. (N.B. each case has a different scenario with different questions to be solved.)

Each group will present their findings in front of all attendees.

Questionnaires will be distributed among attendees to provide their feedback on project-based teamwork conducted from both an educator's perspective and a students' perspective.

References

- Buckler, B. (1996). SA learning process model to achieve continuous improvement and innovation. *The Learning Organisation*, 3(3), 31- 39.
- Gulbahar, Y. & Tinmaz, H. (2006). Implementing project-based learning and e-portfolio assessment in an undergraduate course. *Journal of Research and on Technology in Education*, 38(3), 309-327.
- Gunasekaran, S., McGaughey, R.E. & McNeil, R.D. (2004). E-commerce: Teaching and learning. *Journal of Electronic Commerce Organisations*, 2(2), 1-16.
- Hallinger, P. & Lu, J. (2011). Implementing problem-based learning in higher education in Asia: Challenges, strategies and effect. *Journal of Higher Education Policy and Management*. 33(3), 267-285.
- Lee, G., McGuiggan, R. & Holland, B. (2010). Balancing student learning and commercial outcomes in the workplace. *Higher Education Research and Development*, 29(5), 561-574.
- Ngai, E.W.T., Lok, C.K., Ng, E.M.W., Lo, C.N. & Wong, Y.K. (2005). Collaborative project across three Hong Kong universities: A case study on e-commerce education. *Journal of Information Systems Education*, 16(1), 109-116.
- Revans, R.W. (1982). *The origins and growth of action learning*, Lund, Sweden: Studentlitteratur.
- Senge, P.M. (1990). *The fifth discipline*. London: Century Business.

Creative thinking skills as a learning outcome for tertiary STEM students: Researching the impact of the regular use of non-routine problem solving as a pedagogical strategy

Tanya Evans, Sergiy Klymchuk & Mike Thomas, University of Auckland,
t.evans@auckland.ac.nz

The research

In this session, we will give an overview of a project aimed at incorporating non-routine problem solving into university courses by introducing collaborative small team problem solving activities during traditional lectures. The intention of using non-routine problem solving in teaching and learning is to engage students' emotions, creativity and curiosity and also enhance their critical thinking skills and lateral thinking "outside the box". The current large-scale project is based on a related joint pilot project of AUT and University of Auckland titled "Enhancing Generic Thinking Skills of Tertiary STEM Students through Puzzle-Based Learning: Students' Perspectives" in 2016-2017 supported by the Northern Hub Regional Fund of Ako Aotearoa. The impact was evaluated via comprehensive questionnaires, interviews and class observations involving 137 STEM students from four groups at AUT and the University of Auckland. The vast majority of the participants reported enhanced problem-solving skills (91%) and generic thinking skills (92%). Moreover, 82% of the participants commented on other benefits of this pedagogical strategy. After analysing the observed overwhelmingly positive students' attitudes we suggest that there is a need for further and more rigorous investigation of the suggested pedagogical strategy.

Why this topic is important

In 2012 the New Zealand government identified the need to reduce the undersupply of students studying STEM subjects as a priority for delivering its Business Growth Agenda (<http://www.mbie.govt.nz/>). Low engagement and retention rates in STEM subjects contribute to the shortage of STEM graduates, producing a negative impact on the New Zealand economy. A significant number of STEM tertiary students drop out from their study during the first-year, not because the courses are too difficult but because, in their words, they are too dry and boring (Klymchuk, 2017). There are even specific terms to describe this, such as emotional disengagement and academic disinterest. With this in mind, the proposed project seeks to implement and evaluate a pedagogical intervention aimed at enhancing learner engagement in STEM courses and increasing their creativity more generally.

This issue is very important and timely in the New Zealand context. At the launch of the AUT's STEM Tertiary Education Centre (STEM-TEC) in 2014, Hon Steven Joyce commented that many New Zealand innovative high-tech companies could not find suitable candidates in New Zealand and had to go through a long and expensive recruitment process hiring staff from overseas. There were many local applicants with suitable university degrees who could presumably do a routine job very well but the companies needed more than that – they needed candidates with highly innovative and creative thinking skills.

How the session will be run

We will take about 10 minutes to present our research followed by a 40-minute workshop, during which we hope to leverage expertise of the participants to inform our research programme with a particular focus on how to evaluate improved creativity. Guided by the research question “Is the integration of non-routine problems associated with changes in participants’ ability to exhibit creative thinking?” we would like to seek feedback from the participants about the best definition of creativity that we can use in our research. To that end, we will begin by asking participants to work in small groups and to come up with a definition of creativity which is suitable in this context. After sharing ideas around, we will aim to identify what definition is best suited and match it to the definitions used in mathematics education research projects as documented in the literature. We plan to achieve this by letting the groups look at the commonly used definitions (Guilford, 1959; Haylock, 1987,1997; Leikin, 2009, 2013) and comment on their feasibility in the context of their group discussions. By the end of the session we would like to provide an opportunity for each group to share their opinions with the rest of the group.

References

- Guilford, J. P. (1959). Traits of creativity. In H. H. Anderson (Ed.), *Creativity and its cultivation* (pp. 142- 161). New York: Harper & Brothers Publishers.
- Haylock, D. (1987). A framework for assessing mathematical creativity in school children. *Educational Studies in Mathematics*, 18(1), 59–74.
- Haylock, D. (1997). Recognizing mathematical creativity in school children. *International Reviews on Mathematical Education*, 29(3), 68-74.
- Klymchuk, S. (2017). Puzzle-based learning in engineering mathematics: Students’ attitudes. *International Journal of Mathematical Education in Science and Technology*, published online 15 May. doi: 10.1080/0020739X.2017.1327088.
- Leikin, R. (2009). Exploring mathematical creativity using multiple solution tasks. In R. Leikin, A. Berman, & B. Koichu (Eds.), *Creativity in mathematics and the education of gifted students* (pp. 129–145). Sense Publishers: Rotterdam.
- Leikin, R. & Pitta-Pantazi, D. (2013). Creativity and mathematics education: The state of the art. *ZDM - The International Journal on Mathematics Education*, 45(2), 159–166.

Collaborating with mature-aged students to facilitate participation in an academic discourse

Prue Fry, Massey University, P.Fry@massey.ac.nz

The research

Over three years and four cycles of action research, I developed a study group for mature-aged students concurrent with their first semesters. The initial focus was specifically to help participants learn to write for university, with the concomitant understanding that writing is a cultural practice. However, it was clear very quickly that participants' first encounters with university were of a "foreign culture" with an unfamiliar language and practices. In each cycle, students had expectations for teaching and learning, and even the nature of knowledge, that did not match those of academia. Clearly, their transitions to university required a sociocultural, holistic approach to gaining familiarity with all the cultural practices of an unfamiliar knowledge community.

Each cycle of the study group became a community of practice in which participants collaboratively reflected on familiar ways of learning as a baseline from which to develop ways of thinking, reading, approaching knowledge, and writing, appropriate for university. In this process, writing was treated as a situated, social practice rather than a linguistic skill, and texts as artefacts of academic culture which displayed some of its core values, particularly that knowledge is constructed and contested. Through a guided discovery pedagogy and collaborative deconstruction and discussions of extracts from journal articles, using everyday language, participants were able to discover this epistemological key. Talk around writing provided multiple opportunities to explore diverse sociocultural aspects of the student experience. Familiarity with these new practices encouraged participants to recognize themselves as legitimate members of their new community.

Why this topic is important

Understanding transition for mature students as a holistic, social process of acquiring the ability to function in a new culture is vital for this cohort because, while open entry would seem to offer them potential for social mobility through higher education, it actually currently positions them in an unequal starting place. Unless transition is approached socioculturally, the social justice potential afforded by open entry may not be realized.

Internationally, mature students are introduced to ways of thinking, listening and reading foundational to their academic engagement through academic preparation. They then incorporate these new ways into their writing. In New Zealand, however, only one university insists on academic preparation for mature-aged students. In this context, almost all the participants in my research struggled to engage with university study because of their mismatched expectations. Many were unable to engage with their lectures – "you sit there boggled, thinking, 'what am I going to do with all this information?'".

Writing represented an additional challenge for these students because many had never learnt academic writing skills: "I need to learn to write, really". Students needed specific writing instruction including an introduction to the previously unfamiliar language used for academic writing: "My definition of 'argue' is different. I've seen violence in its worst

forms.” Many were not able initially to engage with writing support provided by Student Learning which assumed some knowledge and experience with writing and its metalanguage. Their lack of understanding about purposes for acknowledging sources resulted in an almost paralysing fear of plagiarising.

How the session will be run

Introduce the topic and talk briefly about my research (covering the material in sections 1 and 2 above).

Collaborating with participants to model one way by which students may be guided to discover appropriate academic concepts such as “no right answers”, knowledge as constructed and contestable, and taking a stance. This operationalises a sociocultural approach to learning in which insiders to a discipline model and collaborate in disciplinary processes with newcomers to a discipline (Haggis, 2006).

Participants in groups first comment on the usefulness of the approach modelled for their discipline and then consider ways in which that might be adapted for newcomers in their field. Feedback from each group about their ideas.

Presenter outlines ways by which students may be introduced to new vocabulary and concepts in a discipline (Northedge, 2003a, 2003b).

Participants again work in their groups to identify at least two key concepts 100-level students may find challenging in their discipline and consider ways, using commonly understood language, by which they might lead new students to an understanding of those concepts. Collaborative feedback to end session.

References

- Haggis, T. (2006). Pedagogies for diversity: Retaining critical challenge amidst fears of ‘dumbing down’. *Studies in Higher Education*, 31(5), 521-535.
- Northedge, A. (2003a). Enabling participation in academic discourse. *Teaching in Higher Education*, 8, 169-180.
- Northedge, A. (2003b). Rethinking teaching in the context of diversity. *Teaching in Higher Education*, 8, 17-32.

Group work: Developing core competencies that prepare students for 21st century challenges

Helen Gaeta, Sue McNaughton, Jane Morgan, Alexandra Bowmar, Kay Hammond, Claire Phipps & Deborah Hay, Auckland University of Technology, helen.gaeta@aut.ac.nz

The research

Group work within university courses is gaining agency as a way to develop graduate attributes considered valuable in the changing nature of the work environment. Multiple research studies have examined group work to determine if this approach fulfils its promise in developing transferable skills such as ethical practice, social and citizenship attitudes, self-awareness and direction, information sharing, interpersonal and communication skills, and the ability to work in multi- or interdisciplinary teams as core competencies that can be applied to resolve complex cross-sectorial problems (Barrie, 2012; Bravo, Lucia-Palacios & Martin 2016; Jackson, 2016).

Many of these studies only use an acute snapshot of group work. This provides no opportunity to examine the trajectory of transferable skill development as a student progresses through their undergraduate degree or for comparing the effectiveness of different models of group work. Our research used a longitudinal approach to follow groups of students from the first, through to the final semester of undergraduate study. Students in the study had participated in either one or two group projects in their first semester and up to six by their final semester. Data were collected using focus groups and questionnaires.

Analysis of the data revealed considerable variability in the implementation and outcomes of group work. There was evidence that some models fared better in facilitating a context for the development of insight, understanding of collaboration, and appreciation of social learning. The findings suggest that, as educators, we need to consider how best to create a context for group work so it meets its intended educational goals.

Why this topic is important

Globalization, new technologies, migration, international competition, changing markets, and transnational environmental and political challenges are challenging education to undergo a transformation in order to prepare the next generation for the complex global problems they will face (Scott, 2015). Students exiting from tertiary education will need to leave with a range of competencies such as flexibility of thought, personal skills (e.g. resilience, risk-taking) and the ability to critically analyse information if they are to be successful in managing the future.

There is much discussion on how curricula should be structured to create learning environments that enable the desired competencies to develop (Ackerman & Perkers, 1989; Sternberg & Subotnik, 2006; for an extensive review see Scott, 2015). Group work has been adopted in many tertiary courses as a model of learning because it has been easy to integrate into the current learning environment. It has been proposed to enable “student-centred” learning (Armbruster, Patel, Johnson & Weiss, 2009; Junko & Aldricha, 2010; Michael, 2006) where students learn from each other through collective knowledge creation, engaging in peer review and in self-reflection, and supposedly developing their

ability to think critically. Furthermore, group work is expected to improve communication skills and personal/interactive skills that are considered relevant to workplace practice (Rosin & Hyland, 2010), so extend well beyond the academic programme. Despite the many positive claims made about the value of group work, evidence in support of these views is limited. The purpose of this study is to contribute to the data examining these claims.

How the session will be run

Present overview of the research and issues arising.

Divide attendees into groups of 3-4. Each group will be assigned the same problem to solve constrained to one of three protocols. The protocols have been identified by the researchers as an application of a group work model. Instructions will be given in writing. Groups will work on the problem, then reflect on how they approached the task and how much scope they felt the model provided for critical thinking, problem solving, communication and collaboration, creativity and innovation, information and media and technology literacy.

Regroup to discuss and share reflections on the process, and consider the value of the three protocols in developing transferable skills identified as relevant to managing 21st century challenges.

The overarching goal of this session is to formulate some basic recommendations for the development of effective group work.

References

- Ackerman, D. & Perkins, D. N. (1989). Integrating thinking and learning skills across the curriculum. In H. Jacobs (Ed.). *Interdisciplinary curriculum: Design and implementation*. Alexandria, VA: Association for Supervision and Curriculum Development.
www.ascd.org/publications/books/61189156/chapters/Integrating-Thinking-and-Learning-Skills-Across-the-Curriculum.aspx
- Armbruster, P., Patel, M., Johnson, E., & Weiss, M. (2009). Active learning and student-centered pedagogy improve student attitudes and performance in introductory biology. *Life Sciences Education*, 8(3), 203–213. doi: 10.1187/cbe.09-03-0025
- Barrie, S. C. (2012). A research-based approach to generic graduate attributes policy. *Higher Education Research and Development*, 31(1), 79–92.
doi:10.1080/07294360.2012.642842
- Bravo, R., Lucia-Palacios, & Martin, M. L. (2016). Processes and outcomes in student teamwork: An empirical study in a marketing subject. *Studies in Higher Education*, 41(2), 302–320. doi:10.1080/03075079.2014.926319
- Jackson, D. (2016). Skill mastery and the formation of graduate identity in Bachelor graduates: Evidence from Australia. *Studies in Higher Education*, 41(7), 1313–1332. doi:10.1080/03075079.2014.981515
- Junko, S., & Aldricha, H. (2010). Group work can be gratifying: Understanding and overcoming resistance to cooperative learning. *College Teaching*, 58(2), 52-57. doi:10.1080/87567550903418594

- Michael, J. (2006). Where's the evidence that active learning works? *Advances in Physiology Education*, 30(4), 159-167. doi:10.1152/advan.00053.2006.
- Rosin, D., & Hyland, T. (2003). Group work-based learning within higher education: An integral ingredient for the personal and social development of students. *Mentoring & Tutoring: Partnership in Learning*, 11(2), 153-162. doi:10.1080/13611260306860
- Scott, C.L. (2015). The futures of learning 1: Why must learning content and methods change in the 21st century? [ERF Working Papers Series, No. 13]. <http://unesdoc.unesco.org/images/0023/002348/234807E.pdf>
- Sternberg, R. J., & Subotnik, R. F. (Eds). (2006). *Optimizing student success in school with the other three Rs: Reasoning, resilience, and responsibility*. Research in Educational Productivity Series. Charlotte, NC: Information Age.

Supporting academics', students' and employers' identification of invisible attributes

Amanda Gilbert & Bernadette Knewstubb, Victoria University of Wellington,
amanda.gilbert@vuw.ac.nz

Barbara Kensington-Miller, University of Auckland, b.kensington-miller@auckland.ac.nz

The research

This research concerns the attributes that students develop as a result of their university study but are often unaware of. We developed the term 'Invisible attributes' to refer to skills or qualities similar to 'soft' or 'transferable' skills or 'generic' attributes, but referring specifically to qualities that are generally not formally assessed or captured amongst more easily reported graduate attributes. These qualities have become increasingly influential in a graduate's employment future. They are usually applicable, albeit in very different ways, across all disciplines. For example, empathy is a valued attribute in Psychology, Law and Dance but apparent in different ways.

Our project, funded by Ako Aotearoa (www.ako.aotearoa.ac.nz), aimed to identify a method by which these attributes might be described more explicitly, allowing them to be recognised and developed in disciplinary contexts and reported on by students. Interview data from employers and university teachers were collected to identify methods by which these attributes were taught and applied in employment contexts. Survey data helped to identify those attributes that students felt were most important for them.

The SEEN framework was developed through analyses of the ways in which these attributes were characterised in the interview transcripts. The framework allows us to 'Specify' and 'Explain' these attributes in context and to 'Embed' them in the classroom learning environment, then to 'Nudge' them into wider contexts. Each component is operationalised in three stages: a learning objective, teaching-learning activities and observable evidence of related behaviour.

Why this topic is important

This research is important because it allows teachers to provide students with more clarity around the development of invisible attributes and the capacity to describe and demonstrate them to prospective employers.

The framework forms the basis of a series of booklets designed to help teachers and students showcase invisible attributes. By reflecting on each element of the framework, teachers can develop a clear explanation of how they are developing particular attributes within their courses and how they can recognise them in their students. The framework can also be used as a curriculum development tool so that teaching of key invisible attributes can be incorporated into course design.

For students, the framework allows specific invisible attributes to be revealed as it provides a structure for describing the process by which they were developed as well as specific examples. These examples can be used to illustrate portfolios or facilitate explanation in employment interviews.

Employers may also find the framework useful as it allows them to explore the qualities a potential employee might bring to their organisation in more depth. A booklet is also being developed to help employers ask questions designed to allow interviewees to demonstrate invisible attributes.

How the session will be run

The session will begin with a short introduction to the project including a short discussion about the nature of invisible attributes. The SEEN framework will be introduced and its use demonstrated.

We will then introduce the three booklets designed to support the process of developing and identifying these attributes. Participants will be asked to take the role of student, teacher or potential employer and consider how they might use the booklets in their particular context. 'Teachers' will discuss how a particular teaching activity might be used to surface and describe an attribute, 'students' will consider how that attribute might be best described and demonstrated and 'employers' will determine the types of information that they might wish to elicit from potential employees.

Participants will attempt to complete the SEEN framework for a specific invisible attribute from the perspective of teacher, student or employer. A round-robin discussion will allow participants to share their thinking with other groups.

Groups will then convene for a final discussion about the validity and potential utility of the SEEN framework and the resources associated with it.

Comparing problem-based learning with didactic lecture-based learning using the teaching of “equine diarrhoea” to veterinary students as a case study

Stuart Gordon, Massey University, S.J.G.Gordon@massey.ac.nz

The research

In the Equine Veterinary Studies course at Massey University, a more integrated mode of teaching and learning needs to be introduced which facilitates a learning experience for students that most resembles the way information and problems are encountered in the workplace. It is imperative that veterinary students emerge from their training programs equipped with the knowledge and skills that are relevant to a constantly changing workplace.

The topic of equine diarrhoea is currently taught to fourth-year veterinary undergraduate students using a traditional didactic lecture format. A new learner-centred teaching episode, based on problem-based learning, has been developed. The aim of this study was, therefore, to compare the effectiveness of this teaching method to the traditional didactic method of teaching.

The fourth-year veterinary class was split randomly into two equal groups. The first group received a traditional didactic teacher-centred lecture on equine diarrhoea during a one-hour lecture period. The second group were taught the same topic during another one-hour lecture period using the new student-centred problem-based approach.

At the end of each teaching and learning episode, students from both groups were asked to complete a purpose-designed Likert scale questionnaire in which opinion was solicited on the suitability of the format of the teaching and learning episode and whether this lesson facilitated the process of clinical reasoning and enhanced problem-solving skills. One open-ended question seeking further comments about the suitability of each teaching style was included at the end.

Why this topic is important

Traditionally, Veterinary Schools have assumed the role of content experts in the veterinary curriculum and have imparted this information to students who adopt a passive role in the process (Howell et al., 2002). There is, however, an increasing need for veterinary education to focus on the ability to find and apply information instead of the straightforward transmission of this ever-expanding information (Lane, 2008). Research on student learning has shown that there is a positive correlation between deep, meaningful and elaborated learning and students' ability to retain and apply knowledge to new problems (Lane, 2008). The veterinary undergraduate programme, therefore, has two obligations: to teach students what to know and also how to know (Herron et al., 1990). Students should become active discoverers and constructors of their own knowledge with the teacher creating environments and experiences that help to achieve this (Barr & Tagg, 1995). Newble and Entwistle (1986) suggested that veterinary schools had an obligation to provide opportunities for students to integrate their learning into conceptual frameworks

characterised by relevant and realistic scenarios and argued that this was the type of learning most useful to veterinary practitioners engaging in continuing professional development.

This study, therefore, explored the effect on veterinary student learning by changing from rote learning delivery methods to methods which enhanced student problem-solving abilities. West (1988) claimed that this change in approach to teaching and learning could represent the greatest advance veterinary medical education has made in over one hundred years.

How the session will be run

This session will run like a mini student lecture and will mimic part of the learner-centred teaching episode, based on problem-based learning. The attendees will be split into groups. Each group will select a “leader”, who will co-ordinate the group activities and a “speaker” who will verbally represent the group during “class discussions”.

A few problems (with accompanying questions) will be presented to the groups relating to a case of equine diarrhea. The groups will have access to a good article on equine diarrhea (written in layman’s terms) to help them formulate the answers to the questions posed.

This exercise will hopefully help the participants to practise their problem-solving skills as amateur veterinarians (specialising in equine diarrhoea!). There will be a debrief at the end to discuss what this process offers over a didactic approach. During this debrief, the findings of the veterinary student survey will be shared.

References

- Barr, R. & Tagg, J. (1995). From teaching to learning - a new paradigm for undergraduate education. *Change*, 27(6), 12.
- Herron, M., Alexander, P.A. & DiBrito, W. (1990). A proposal for problem-solving instruction in Veterinary Education programs. *Journal of Veterinary Medical Education*, 17, 21-24.
- Howell N.E., Lane I.F., Brace J.J., & Shull R.M. (2002). Integration of problem-based learning in a veterinary medical curriculum: First-year experience with application-based learning exercises at the University of Tennessee College of Veterinary Medicine. *Journal of Veterinary Medical Education*, 29, 169–175.
- Lane, E.A. (2008). Problem-based learning in Veterinary Education. *Journal of Veterinary Medical Education*, 35(4), 631-636.
- Newble, D.I., & Entwistle, N.J. (1986). Learning styles and approaches: Implications for Medical Education. *Medical Education*, 20, 162–175.
- West, R.L. (1988). Education in transition. *Journal of Veterinary Medical Education*, 15, 20-22.

Curriculum, teaching and powerful knowledge

Tony Harland, University of Otago, tony.harland@otago.ac.nz

The research

In this session, I examine the concept of 'powerful knowledge' for higher education. To do this I draw on research into the experiences of 15 years teaching on a university science programme in which undergraduate ecology students are trained as researchers during the three years they attend university. The key to attaining powerful knowledge is 'epistemic access' to a discipline, which is access to the generative principles of knowledge creation. Hence there is a close alignment between teaching students to do research and powerful knowledge.

However, the social realists, who originally framed the concept, have suggested that the power in powerful knowledge comes from what the holder does with it, and that its purpose is social in that it should allow graduates to make a better contribution to society. I argue that in addition to such an aspirational 'outcome', it can be part of the *process* of education and early acquisition of powerful knowledge can influence all subsequent formal and informal learning experiences as the student progresses through university.

A simple model for powerful knowledge is presented in which there is the *possibility* of powerful action after graduation, but this remains in the theoretical realm while there is very little empirical evidence that would support such a hypothesis for ecology students. Powerful action therefore questions the limits of responsibility of a teacher.

Why this topic is important?

Firstly, I propose that powerful knowledge is a more appropriate objective for learning in mass-higher education, and that it could substitute for the over-specified lists of skills and graduate attributes and graduate attribute frameworks that are currently in vogue.

Secondly, there is presently not much known about powerful knowledge, including how it might function across different subjects and disciplines, and whether or not different forms of curriculum can lead to this outcome. Answers to these questions may inform the limits or boundaries of the idea for the tertiary sector.

How the session will be run

Participants will be introduced to the theory and the example I have worked on and then asked to engage in a group discussion to a) challenge the theory, and b) benchmark their own subject teaching to see how powerful knowledge might operate. The first 20 minutes of the discussion will be a structured and address theory (the ideas I have presented) and the second 20 minutes will examine how this works in each discipline. The session structure will be flexible depending on how many attend and what their disciplines are. With a large audience, I will break participants into similar subjects and have small group discussion with plenary. With a small audience, we will simply have one single group discussion.

Should HERDSA New Zealand publish a journal on teaching and learning in higher and tertiary education?

Eva Heinrich, Massey University, e.heinrich@massey.ac.nz

The research

The proposal is for a new journal focused on research-based teaching and learning in higher and tertiary education in the New Zealand context. This such journal should serve the following needs:

- Provide an outlet for research-based explorations of teaching and learning in higher and tertiary education.
- Focus on the New Zealand context to build on common understanding of teaching and learning contexts.
- Report on research-based approaches with a focus on enabling replication and further development in a rapid fashion.

A large number of education journals are already available world-wide. To justify this proposal, I have examined a wide selection of those journals, looking at criteria such as focus and scope, regional affiliation, publishing model, and viability.

The research on publishing models concludes that the new journal should be diamond open access (no subscription fees, no author publishing fees) and peer reviewed. The journal should be available electronically only, with articles being published on an ongoing basis into one volume per year (without sub-division into issues). I recommend for the journal to be independent of commercial publishing houses, with the sponsorship coming from HERDSA NZ.

HERDSA NZ would be the right organization to publish the journal, as HERDSA NZ is the premier grouping for research on teaching and learning in higher and tertiary education in New Zealand.

Why this topic is important

We are entering a phase in tertiary education with more emphasis on teacher certifications, for example via the Higher Education Academy scheme. With this we anticipate more interest in moving via scholarly teaching into research on teaching and learning, providing both interest in writing and reading articles the journal would publish.

Tertiary education faces difficult challenges, linked to technological change, increasing costs, internationalization, changing expectations and demographics (New Zealand Productivity Commission, 2017). To address those challenges innovation is required. While we have many excellent and innovative tertiary teachers in New Zealand, as evidenced in the profiles of Tertiary Teaching Excellence Award recipients (<https://ako.aotearoa.ac.nz/ako-aotearoa/resources/pages/ttea-recipients>), the rate of innovation is not as high as it should be. The new journal aims to improve this situation. It will provide an avenue for publication of teaching innovation implemented in the New Zealand context, allowing others in New Zealand to understand the practical and theoretical limitations and opportunities. While the articles will be aligned with theory and contextualized in literature, the journal will not

demand proof of the effectiveness of a new approach beyond doubt. Instead, the journal will accept that improvements in teaching and learning build on multiple components and are difficult to attribute to one specific factor. This outlook will allow earlier publication of innovation and will facilitate a faster rate of innovation than achieved with current research-based journal publications.

At this stage, the proposal for a new journal has been discussed in the HERSDA NZ Committee. A small working group has been tasked with further exploration. Discussion with TERNZ delegates will present an opportunity to evaluate the proposal.

How the session will be run

We will spend the first 5-10 minutes introducing the motivation for a new journal, its proposed focus and scope and how it is different from existing journals.

We will then invite the participants to form groups with 4 to 5 members. Each group will draw on the research by one of the participants and try to sketch out a journal article in line with the proposed focus and scope.

We then pull all groups back together. The groups will introduce their article outlines and report on their experiences on working within the proposed focus and scope for the journal. This will transition into a general discussion about the need for a new journal and its focus and scope.

We will conclude the session by summarizing the discussions. If there seems to be general support for the idea of a new journal we will briefly seek input into how to move forward towards establishing the journal. We will aim to have at least a few minutes for concluding comments but can spend more time for this if required (either talking about future directions, or revisiting the comparison to existing journals).

Reference

New Zealand Productivity Commission (2017). New models of tertiary education: Final Report. Available from www.productivity.govt.nz/inquiry-content/tertiary-education

Modified problem-based learning in a large stage one competitive course

Dennis Hsu, University of Auckland, d.hsu@auckland.ac.nz

The research

Population health is a relatively new discipline and a foreign term for many first year undergraduates. We introduced a modified problem-based learning (PBL) pedagogical approach in a large Stage-1 course to stimulate students' interest and deep learning in the subject. Over 1100 students in the Faculty of Medical and Health Sciences and Faculty of Science were randomly assigned into teams of five to seven, in a workshop class of 40 students. Each team was then randomly assigned a health issue in New Zealand, which they researched, applying the knowledge and frameworks learnt in the course. At the end of the semester students presented their assigned health issue, using the *Public Health Framework* as a tool. Students were expected to meet formally five times during the workshops and at least three times informally in their own time and submit meeting minutes documenting their discussions. They were also peer-evaluated by their peers for their contribution to the project.

An anonymous class evaluation on the students' perceptions on the PBL initiative took place after they had presented their project. Approximately 80% students reported that the project had stimulated and deepened their learning in the subject; helped them to integrate learnings of different topics in the course; and helped develop their ability to work in a team, which was helpful to their learning. Overall, the students found the project was a positive and valuable learning experience.

Why this topic is important

This initiative reflects the importance of deep learning and teamwork that PBL brings while demonstrating that it works even in a highly competitive large class environment.

Many of our students have aspirations of studying towards a professional health qualification, and need to excel in this first year core-course, in order to get entry in to the competitive programmes. While many do pass the course with flying colours, within this competitive environment, there is growing concern that our students may sometime miss the bigger picture of understanding what population health is.

PBL helps students to relate their learning to real life problems, which are often complex with no straightforward dichotomy solution (Hmelo-Silver, 2004). As students try to apply their learnings to a real life problem, different course modules become more coherent and students see the meaning and connection between each. They gradually develop skills in 'thinking' and 'applying' through deep learning rather than 'memorising' the facts superficially, enabling knowledge retention.

In addition, the opportunity to work as a team also breaks down the competitive nature of this core-course and encourages a collaborative learning environment. While the 'competition' per se does not change, students see the benefits and values of collaborative learning and additionally, make new friends in their first year of University. After all, many

of their peers are likely to be their colleagues throughout their undergraduate years and possibly in their future work settings, as they all aspire to work in the health sector.

How the session will be run

Begin with a presentation on our experience and feedback received.

PBL in 30 minutes—Participants will be divided into teams. Each team will go through the following steps:

- Introduction—self, course teaching
- Identify one course and see how PBL can be used to stimulate students' interest and deep learning in the subject
- Present back to the class and focus on the following: course background; focus of PBL and how it relates to the learning objective/s of the course; assessments and evaluation
- Open for questioning, followed by wrap-up and conclusion

Reference

Hmelo-Silver, C.E. (2004). Problem-based learning: What and how do students learn?
Educational Psychology Review, 16(3), 235-266.
doi:10.1023/B:EDPR.0000034022.16470.f3

“E-quality” of synchronous tutorials online in supporting distance students’ learning journeys

Ying Jin, Massey University, Y.Jin@massey.ac.nz

The research

Students tend to find learning challenging in a large content-driven first year course. Traditional face-to-face tutorials offer an additional form of learning opportunities via students’ interactions and discussions within small group settings, building informal encounters. Frequent contact and technology-enhanced interactive lectures are used to give opportunities for students to interact openly with educators and their immediate peers. However, it is difficult to implement such goals with distance learning. Advanced developments in technology and online tutorials can provide “e-quality” and channels which offer similar learning experiences to distance students (Price, Richardson & Jelfs, 2007). A current first year course provides no less than four scheduled online interactive tutorials giving opportunities for communication with students in real-time, streamed online during the 2nd, 5th, 8th and 11th weeks of the semester. The designed research will investigate students’ and tutors’ perspectives of the “e-quality” of usefulness of these tutorials.

The objectives:

- to explore the effectiveness and practical issues of online tutorial offerings for distance students’ learning journeys from an educators’ perspective
- to explore the effectiveness and practical issues of online tutorial offerings for distance students’ learning journeys from the learners’ perspective

Why this topic is important

Online learning has been increasingly popular in training and higher education teaching worldwide. The effectiveness of delivery of such courses has been frequently explored. Traditionally, tutorials have been well received. High quality tutorials increase academic success and students’ retention, positively enhancing students’ learning journeys in the higher education sector. While traditional internal delivery remains common, more online distance courses are frequently offered for all learners and giving extra assistance to more non-traditional students.

Students enrolled in distance learning often report feeling isolated and disconnected. They are encouraged to post discussions on both academic and social forums, using them as asynchronous technologies. However, perceived non-participation remains a concern for online learning (Anderson & Simpson, 2004), and imbalance of participation can create high levels of frustration among specific learners (Capdeferre & Romero, 2012). Forums may provide less assistance when compared to other forms of synchronous technologies, such as chat rooms, video-conference systems, or instant messaging tools (Kear, Chetwynd, Williams & Donelan, 2012). Online learning support not only provides student-instructor interaction, but also allows interaction among peer-to-peer, student to content, in three dimensions (Subramaniam & Kandasamy, 2011). Continued support to distance students academically is essential, particularly to first year students, for whom it can appear to be an overwhelming experience. It is anticipated to design online tutorials to be as effective as

traditional face-to-face sessions for students, where research has suggested possible barriers may exist for such students. However, so far little published literature measures the effectiveness of online tutorials to teach distance students from either or both learners' and educators' perspectives.

How the session will be run

The first 5-10 minutes will introduce the current practice in online tutoring, describing its usage by distance students, followed by an outline of the research plan. The research will have two standpoints: a survey at the start of the semester to ask students' views about online tutorials; then a final survey at the close of the semester to review online tutorials from students' perspective. Possible in-person interviews from willing students will then take place.

Then in the session, small groups with 4 to 5 members each will be formed. Each group will draw on their members' personal experiences to provide suggestions for key improvements to online tutorials.

We then "flip the coin", and ask each group to consider themselves to be at the receiving end of online tutorials, and suggest what factors are most for improving effectiveness.

Calling the groups back together, each will report back, identifying useful factors for effective online tutorials from both educators and students' perspectives. This may transition into a general discussion about how to improve online tutorial supporting distance learning.

The session will end by effectively summarizing the discussions, followed by concluding comments, which may give rise to further additional points of interest, prior to departure.

References

- Anderson, B. & Simpson, M. (2004). Group and class contexts for learning and support online: Learning and affective support online in small group and class contexts. *The International Review of Research in Open and Distance Learning*, 5(3).
- Capdeferre, N. & Romero, M. (2012). Are online learners frustrated with collaborative learning experiences. *The International Review of Research in Open and Distance Learning*, 13, 26-44.
- Kear, K., Chetwynd, F., Williams, J. & Donelan, H. (2012). Computers and education Web conferencing for synchronous online tutorials: Perspectives of tutors using a new medium. *Computer Education*, 58(3):953-963.
- Price L, Richardson JTE, Jelfs A. (2007). Face-to-face versus online tutoring support in distance education. *Studies in Higher Education*, 32(1), 1-20.
- Subramaniam, N.K. & Kandasamy, M. (2011). The virtual classroom: A catalyst for institutional transformation. *Overview of Open University Malaysia (OUM) Blended Learning at OUM*, 27, 1388-1412.

Teaching the European Middle Ages in Aotearoa New Zealand: Issues and opportunities

Chris Jones & Madi Williams, University of Canterbury, chris.jones@canterbury.ac.nz ,
madi.williams@canterbury.ac.nz

The research

This discussion will explore ways in which subjects inherited from the ‘traditional’ university curricula of Europe and North America can be tailored to offer specific benefits in the tertiary environment of Aotearoa New Zealand. It will present research conducted in the University of Canterbury’s Ngāi Tahu Research Centre into low participation rates of pākehā students in voluntary courses designed to teach cultural confidence, a concept identified by UC as a key graduate skill linked to meeting its Treaty of Waitangi commitments. It will then focus on alternative ways of teaching skills and competencies relating to biculturalism through the existing curriculum, employing medieval European history as a case study. While not questioning the intrinsic value of studying such topics for their own sake, the presentation will explore the possibility of adopting an approach that encourages students to evaluate their content within a framework informed by knowledge of Aotearoa New Zealand. Examples of areas where comparisons may be drawn include the transition from an oral culture to a written culture; the transition from customary title (take whenua) to ‘legal’, documented forms of land tenure; and the relationship of genealogy (whakapapa) to land and identity. By reflecting on both parallels and differences between Māori culture and, in this case, that of medieval Europe, the discussion will consider the degree to which such approaches can build a genuine awareness of bicultural issues and the extent to which they impact on the research competence of students studying ‘traditional’ disciplines.

Why this topic is important

The discussion offers participants the opportunity to consider two areas of considerable significance to educators working in New Zealand’s tertiary environment. The project was conceived as part of a 2016 UC Teaching Development grant with the aim of supporting the building of students’ cultural confidence within the framework of te Tiriti o Waitangi. The University of Canterbury’s Learning & Teaching Plan considers this a key aspect of its graduate profile. But what does ‘cultural confidence’ actually mean, how can developing such skills enable students to engage more fully with Aotearoa’s bicultural policies, and how can their development be integrated within the university curriculum? The discussion will, firstly, consider the aim of building cultural confidence into tertiary education in Aotearoa as a means of enabling universities to play a role in meeting their Treaty obligations. Second, it will offer colleagues the opportunity to discuss, in practical terms, the means by which greater bicultural awareness can be developed within an existing Arts curriculum while maintaining student choice (i.e. without the requirement for compulsory, dedicated courses). It challenges participants to explore two issues in particular: how to overcome ‘consumer resistance’, that is students who choose tertiary pathways that avoid, either deliberately or as a result of apathy, engaging with such issues; and how the integrity of existing disciplines may be retained while ensuring their relevance to contemporary New

Zealand society. The project's significance is underlined by the inclusion of an article derived from this research in *Making the Medieval Relevant* (Jones, Kostick & Oschema, 2018).

How the session will be run

The session will be broken down into four fifteen minute blocks, the first three of which will be introduced by short 4-5 minute presentations before being opened to discussion amongst the participants. The first block, which will be introduced by both presenters, will focus on the idea of building 'cultural confidence' as a graduate skill. Participants will be asked to consider what the key features of such a graduate attribute are and how their development might be best assessed. The second block will be presented by Madi Williams, a doctoral researcher in UC's Ngāi Tahu Research Centre. It will focus on low participation in dedicated courses dealing with bicultural issues and the possible reasons for this. The third block, presented by Chris Jones, a UC History lecturer, offers a case study of the way in which medieval history can be taught to include bicultural elements. It will consider the ways in which a 15th-century European genealogical text can be employed to introduce students to concepts connected with whakapapa. The final 15 minutes of the session will divide participants into groups and then asked them to brainstorm the advantages and disadvantages of the approaches explored.

Reference

Jones, C., Kostick, C. & Oschema, K. (Eds.) (forthcoming 2018). *Making the medieval relevant: How medievalists are revolutionising the present*. Berlin: De Gruyter.

Experiences of undergraduate and postgraduate Business students using online writing tools to support their writing

Shireen Junpath & Sue Gough, University of Auckland, s.junpath@auckland.ac.nz

The research

This research explored how undergraduate and postgraduate students engage with the various tools to understand their perspectives on its effectiveness for writing and learning. This is a qualitative study where data was collected from students by interviews and a questionnaire. Students were introduced to the various tools in semester one of 2017 and were interviewed later in that semester.

This research aimed to offer understandings of the effectiveness of the tools from the students' perspectives. Unlike quantitative studies that look at performance grades of students before and after exposure to a tool, this study has provided rich data that captures the students' engagement with the tools to determine their effectiveness in their writing. Not only will the findings of this study be beneficial to the Business School, but it has the potential to provide a research background for other faculties to make an informed decision on its effectiveness for learning, thereby improving teaching and learning. This study is of particular relevance in the 21st century, where educators and learners seem to be inundated with online tools that surface without a research background.

This research project is a pilot study for further studies in this area of writing and literacy in higher education. We intend to:

- Develop a sustainable package of resources for other teachers to use;
- Communicate this research with special interest groups;
- Present at various educational conferences.

Why this topic is important

A key area of focus in my teaching is addressing the academic skills needs of the diverse undergraduate first year cohort. The support for first year students is done by providing the context for students' needs to be addressed. The areas of focus include study skills (note-taking, summarising, researching information etc.); cognitive processes (development of critical thinking); language skills (reading, writing, speaking, listening strategies); and linguistics (development of academic language e.g. vocabulary, sentence structures and grammar). For the purposes of this research we targeted students in the Business School who are identified through the DELNA (Diagnostic English Language Needs Assessment) screening. About one-third of the undergraduate cohort is identified from the DELNA screening as requiring language support. Almost 40% of the cohort are second language learners. A key challenge especially for second language students is understanding the expectations of the various writing tasks in the different disciplines. There is a significant number of students at all levels who require some degree of language support.

To address these needs the academic skills team offers support in the form of weekly hourly discipline-specific workshops, one-to-one help and online help. The Skills Hub on Canvas has a wealth of resources in the areas of academic writing, reading study skills and maths.

Undergraduate and postgraduate students can access the online writing tools from the Skills Hub to help them with their writing tasks. Some of these online writing tools include Grammarly, Lextutor, Academic Phrasebank and Turnitin. Grammarly, which corrects up to 250 types of grammatical errors, gives students an opportunity to engage with it independently as and when required. Lextutor is a free online tool which gives students feedback on their use of academic vocabulary in their writing. Academic Phrasebank created by John Morley is a useful resource for academic writers. Turnitin is offered on the postgraduate Skills Hub so students can submit writing for feedback from tutors as well as get a similarity report.

How the session will be run

We will present a brief background of who we are and our role at the university.

Activity 1 – Groupwork

Identify challenges students in the undergraduate or postgraduate may experience with regard to academic writing and reading - Discuss and feedback.

Present a summary of the key findings of the research on “Experiences of students using online writing tools to support their writing.”

Activity 2 – Engaging with tools

Brief introduction of each tool – what it is, why is it used? Attendees to use devices to engage with these tools.

Share responses – discuss how they might use these with their students.

Feedback.

Does successful teamwork negate the benefit of competition?

Paul Kane, Billie Mudie & Hazel Neser, University of Otago, paul.kane@otago.ac.nz

The research

At last year's TERNZ conference we reported on the evaluation of a practical assessment for a new first year clinical practice paper in the Bachelor of Radiation Therapy (BRT). The assessment aims to provide clinical context to academic work. The assessment consisted of a team task, requiring students to demonstrate some of the interpersonal and technical skills used by radiation therapists. Simulations, in the form of role play and a virtual reality system were used. Based on the discussions at TERNZ 2016, in 2017 we also required students to evaluate their contribution to the team effort and provide supporting statements.

The evaluation originally aimed to compare student perception of experience to actual performance. We wished to collate a second set of data for comparison to that collected from the previous cohort of students. Post assessment but prior to grade notification, students were invited to respond to an 11 item questionnaire (10 items in 2016). Items included preparation for the assessment, perceptions around assessment performance and the ability of the assessment to make links to other course and programme content. The extra item we included was an open question inviting students to tell us how they felt about evaluating their contribution to the team.

Why this topic is important

Our graduates become Radiation Therapists who conduct their challenging clinical work in a team-orientated environment. It would seem that an educational environment and ethos which reflects practice is appropriate. Our ongoing evaluation of the assessment strategy in question continues to present ideas which feed into the development of the environment we are attempting to foster.

For this session we wish to focus on the ideas emerging from our data around competitive students and how they function in a team environment. It is generally accepted that competition is encouraged by the school system in NZ, admission to tertiary education is competitive as is entry to the workplace as a graduate. Student feedback indicates a strong perception that team assessment inhibits individual ability to achieve in a system based on individual performance. Such perceptions can lead to disempowered and disgruntled students who fail to engage with a team environment. A series of questions arise.

1. How then do we go about channelling that competitive edge to the advantage of the individual student AND the teams they contribute to?
2. Are there hallmarks we can look for indicating a student who thinks they are a good team player but in reality are not?
3. How can we best mentor those students to become better team players and thus promote desirable personal and professional values?
4. Can we take inspiration from the competitive team sport environment?

We would value the chance to garner input from the broad range of disciplines and experience present at TERNZ.

How the session will be run

We will commence with a 10-12 minute presentation providing a context for the discussion.

The primary questions will be:

1. How can we identify those students who will struggle to work as part of a team?
2. What steps can we take to develop a team learning environment that allows competitive students to achieve their goals?

We anticipate exploring ideas around:

Positive learning outcomes for a team are also positive for the individual, the challenges of teaching professional and personal values and how well a team learning environment prepares graduates for entry into the competitive world of employment.

Strategies to encourage discussion

Strategy 1

We will draw some comparisons to the competitive team sport environment. Some examples:

- High performance athletes are by necessity competitive, yet many sports are team based where different team members have roles which will contribute to overall success of the team.
- Coaches have a role in assisting athletes with great natural talent to reach their full potential. Additionally, they must help improve those aspects which they are less successful in, yet are still important to the success of the team.

Strategy 2

A teamwork task will be proposed to the group attending our session. Based on their experience with that we would like to hear about:

- Expressing difference and agreement in teams
- Conflicting norms for decision making
- Direct and indirect communication
- Approaches to hierarchy, authority and respect
- Competition vs collaboration

Strategy 3

We will ask participants to reflect on a single instance where they interacted with a competitive student who seemed dissatisfied with the learning environment they were operating in. Participants will be asked to report on their response to that scenario.

Strategies for teaching international students in New Zealand

Barbara Kneuer, Whitireia, Barbara.Kneuer@whitireia.ac.nz

The research

The aim of this research is to gather different strategies for teaching international students at New Zealand tertiary education institutions. The idea is to share successes and failures of using different teaching strategies in the New Zealand context and provide ideas for experimentation and exploration. For the author, the session will create first valuable insights into the actual use of different approaches.

International students can be defined as students who had their previous education in countries where English is not the first language (Arkoudis, 2011) or not spoken in day to day life, such as India.

This research project's intent is to conduct in-depth interviews using this session at TERNZ as a starting point to develop themes but also as a means of encouraging discussion and information sharing among teaching academics. We are looking for interested study participants among conference attendees.

Why this topic is important

In 2016, 416,000 students were enrolled in formal tertiary study programmes in New Zealand. Of those, 62,000 were international students (Ministry of Education, 2016). Teaching classes with diverse student groups, including international students, is a reality for most academics in New Zealand.

Particular challenges international students are facing include learning and living in a different culture, studying in a foreign university context, developing English language proficiency, and learning the academic disciplinary discourse (Arkoudis, 2011). While many of the difficulties experienced by students and staff are well known, there is still much to be done to address curriculum, pedagogical and assessment practices (Ryan, 2011). Although there is literature examining the experience of international learners, among it some New Zealand-based studies (Campbell & Li, 2008; Holmes, 2004; Skyrme, 2007; Zhang & Brunton, 2007), little is known how lecturers in New Zealand address those needs of international students.

This research attempts to contribute to the growing dialogue amongst academics about effective strategies around culturally relevant pedagogy and teaching resources for international students. It is intending to collect approaches to teaching, learning, assessment and course design that give practical guidance to other academics so they can adapt or adopt these strategies.

How the session will be run

This session will encourage attendees to reflect on and share their experiences using different strategies when teaching international students.

- Food for Thought: The session will begin with a short presentation of the issues surrounding the internationalisation of higher education and in particular potential issues surrounding the teaching of international students.
- Group mind map: In smaller groups, participants will discuss practical strategies used in their teaching e.g. internationalisation of the curriculum, making lectures accessible, encouraging participation in small group work, approaches to plagiarism, supporting students in developing critical thinking skills, explaining assessment expectations. A template will be provided to stimulate discussion and to stay within the designated time frame.
- Group Discussion: Participants will report on their discussion. How are individual participants addressing the challenges and opportunities of international students in their classroom? What was learned and what will you take away?
- Invitation to take part in an in-depth interview conducted by author.

References

- Arkoudis, S. (2011). *Teaching international students: Strategies to enhance learning*. Melbourne: Centre for the Study of Higher Education.
- Campbell, J., & Li, M. (2008). Asian students' voices: An empirical study of Asian students' learning experiences at a New Zealand university. *Journal of Studies in International Education*, 12(4), 375-396.
- Holmes, P. (2004). Negotiating differences in learning and intercultural communication: Ethnic Chinese students in a New Zealand university. *Business Communication Quarterly*, 67(3), 294-307.
- Ministry of Education. (2017). Profile and trends: New Zealand's tertiary education enrolment. Retrieved from: https://www.educationcounts.govt.nz/__data/assets/pdf_file/0010/182296/2016-pt-provider-based-enrolments-part1b.pdf
- Ryan, J. (2011). Teaching and learning for international students: Towards a transcultural approach. *Teachers and Teaching*, 17(6), 631-648.
- Skyrme, G. (2007). Entering the university: The differentiated experience of two Chinese international students in a New Zealand university. *Studies in Higher Education*, 32(3), 357-372.
- Zhang, Z., & Brunton, M. (2007). Differences in living and learning: Chinese international students in New Zealand. *Journal of Studies in International Education*, 11(2), 124-140.

Support through virtual spaces: A model for embedding academic support into online courses

Narissa Lewis & Marcia Leenen-Young, University of Auckland, m.leenen@auckland.ac.nz

The research

Technology has offered us opportunities to deliver cutting edge programmes for learners outside the traditional classroom. One such programme is the fully online national Masters of Māori and Indigenous Business (MAIBUS) that begins in April 2018. This programme is a collaboration between AUT, the University of Auckland, the University of Waikato, Massey University, Victoria University of Wellington and the University of Otago, with students enrolling through the institution of their choice. Students in this programme will be located far and wide, which begs the question – how do we intend to provide academic support to a widely dispersed student body? The need for academic support is heightened further when you consider the anticipated variation in student backgrounds, geographic locations, computer literacy, age, and previous academic exposure. A robust process of support is needed to ensure that we provide these students with what they need in order to succeed in an online environment, while also prioritising these students as Māori learners and, in many cases, established professionals.

In this presentation, we will discuss the learning design and academic skills support regime we have developed to embed contextualised and timely academic skills support for these students. We will draw on our design and development experiences and invite participants to share ideas and refine our models of practice.

Why this topic is important

Academic learning support is an integral component in the design and delivery of online courses (Beetham & Sharpe, 2010; Palloff & Pratt, 2007). As we move increasingly towards blended and fully online teaching in tertiary education, we need to consider how to provide timely academic support to students we might never physically meet. This model intends to promote practices that embed academic support into courses to ensure students are provided with relevant and efficient support.

The MAIBUS programme is also expected to attract mostly Māori students who are considered priority learners in NZ tertiary education. Our work is underpinned by kaupapa Māori pedagogies (Bishop, Berryman, Cavanagh & Teddy, 2009; Chauvel & Rean, 2013; Hall & Jerram, n.d) where:

- Te Ao Māori is acknowledged
- Whakawhanaungatanga is developed
- Relationships foster Ako where learners and teacher are considered equal
- Manaakitanga is fostered through caring and respectful relationships

We will share our practices and invite contributions from others to develop a shared understanding of how we might support Māori in online learning environments.

How the session will be run

Introductions

Background information – MAIBUS overview and student profile

Invite participants to work in small groups to discuss how they would embed academic support

Whole group discussion

Present our models of practice

Whole group discussion

Thanks and close

References

- Bishop, R., Berryman, M., Cavanagh, T., & Teddy, L. (2009). Te kotahitanga: Addressing educational disparities facing Māori students in New Zealand. *Teaching and Teacher Education*, 25(5), 734-742.
- Chauvel, F., & Rean, J. (2012). *Doing better for Māori in tertiary settings: Review of the literature*. Wellington: Tertiary Education Commission.
- Hall, M. & Jerram, K. (n.d). *A guide to teaching Māori content in university courses – nāu to rourou, nāku te rourou*. Wellington: Centre for Academic Development, Victoria University of Wellington.
- Palloff, R. M., & Pratt, K. (2007). *Building online learning communities: Effective strategies for the virtual classroom*. San Francisco: John Wiley & Sons.
- Sharpe, R., & Beetham, H. (2010). Understanding students' uses of technology for learning: towards creative appropriation. In R. Sharpe, H. Beetham & S. de Freitas (Eds.), *Rethinking learning for the digital age: how learners are shaping their own experiences* (pp. 85-99). New York: Routledge.

Making sense of the adoption of learning and teaching innovations in higher education: Implications from a systematic literature review

Qian Liu, Susan Geertshuis & Jiwon Hyeong, University of Auckland, g.liu@auckland.ac.nz

The research

In this review, we aim to synthesise and comprehend themes that shape the adoption of learning and teaching innovations by academic staff in the higher education context. Guided by the systematic review procedure (Tranfield, Denyer, & Smart, 2003), we selected initial articles through database search, and then selected additional articles from the reference lists of the initial articles. In total, we found 133 articles, including 111 empirical studies and 22 conceptual or review papers. A model consisting of seven themes (and 24 sub-themes) emerged from the review process. These themes relate to: 1) the innovation; 2) the infrastructure; 3) the adopter; 4) the institutional structure, culture and disciplinary practices; 5) institutional approaches to the introduction of innovations; 6) the roles and activities of key stakeholders; and 7) academic development.

In addition to identifying areas of future research, our findings have important practical implications for staff who are innovating in learning and teaching or those who are leading innovations in learning and teaching. The research reveals the complex nature of adoption of learning and teaching innovations in higher education. This complex nature of adoption contrasts markedly with some of the most common practices in higher education: learning and teaching innovations are mandated top-down with support provided to introduce features of innovations. Staff are assumed to adopt innovations purely through the introduction and use of innovations. Practices of this kind acknowledge innovation-related themes but they leave other themes unattended which results in failure or resistance to adoption at the individual staff level.

Why this topic is important

Higher education institutions increasingly engage with learning and teaching innovations in response to changing environmental conditions and the shift of their roles in society. While innovations in learning and teaching are valued institutionally, academic staff display varying attitudes and behaviours to their adoption (Gilbert & Kelly, 2005; Quinn, 2012). Therefore, in order for learning and teaching innovations to transform and improve higher education offerings, researchers and practitioners need to better understand the adoption of innovations at the academic staff level.

A review that captures the unique nature of learning and teaching innovations in higher education will provide insight into practice. Prior literature reviews tend to focus on one type of learning and teaching innovation such as e-learning (Singh & Hardaker, 2014), blended learning (Brown, 2016) or medical curriculum innovations (Bland et al., 2000). In our research, we synthesise findings from types of learning and teaching innovations and recognise characteristics of the higher education context, the academic profession and the academic staff member.

In sharing our framework, we will provide a powerful tool that can be used to analyse innovation opportunities and plan effective implementation strategies.

How the session will be run

The session begins with an introduction, overview and group allocations. After a short presentation on the paradox of learning and teaching innovations, we invite attendees in groups to produce a list of best practices based on a single element of the model for a given scenario. We then discuss the model as a whole and invite each group to feedback on their strategies to ensure the successful adoption within their element of the model. The session concludes by bringing insights from each group together and reflecting our current practice.

The session is intended for higher education researchers and practitioners. Stickies and flipcharts will be used during group exercises. We will summarise the outcome of these activities and distribute these to attendees.

References

- Bland, C. J., Starnaman, S., Wersal, L., Moorhead-Rosenberg, L., Zonia, S., & Henry, R. (2000). Curricular change in medical schools: How to succeed. *Academic Medicine*, 75(6), 575-594.
- Brown, M. G. (2016). Blended instructional practice: A review of the empirical literature on instructors' adoption and use of online tools in face-to-face teaching. *The Internet and Higher Education*, 31, 1-10.
- Gilbert, J., & Kelly, R. (2005). Frontiers and frontlines: Metaphors describing lecturers' attitudes to ICT adoption. *Journal of Educational Technology & Society*, 8(3), 110-121.
- Quinn, L. (2012). Understanding resistance: An analysis of discourses in academic staff development. *Studies in Higher Education*, 37(1), 69-83.
- Singh, G., & Hardaker, G. (2014). Barriers and enablers to adoption and diffusion of eLearning: A systematic review of the literature – a need for an integrative approach. *Education + Training*, 56(2/3), 105-121. doi:10.1108/ET-11-2012-0123
- Tranfield, D., Denyer, D., & Smart, P. (2003). Towards a methodology for developing evidence-informed management knowledge by means of systematic review. *British Journal of Management*, 14(3), 207-222.

Towards mitigating cheating in multiple-choice examinations

Sathiamoorthy Manoharan, University of Auckland, s.manoharan@auckland.ac.nz

The research

In 2004, Zobel published a paper describing the so-called 'mytutor case' at RMIT where a number of students were found to have cheated in assignments as well as in examinations [Zobel 2004]. Nearly 15 years on from the case, and with nearly all academic institutions now having compulsory tuition on academic integrity and honesty, have the number of cheating incidents reduced? This is a difficult question to answer. However, experience suggests that cheating is still more common than we like to see. Technology has made detection somewhat easier, but it also has made cheating a lot easier.

From the time-tried cheat-sheets and invisible inks to modern Bluetooth-enabled cheating devices, exam invigilators find themselves having to deal with a mixture of cheating mechanisms and strategies. It is reported that some exam centres in China jam wireless signals to prevent wireless communications during the exam. Highly competitive examinations such as "gaokao" in China or "JEE" in India tempt several students to cheat, resulting in governments imposing many measures including lengthy prison terms to offenders.

Multiple choice exams are common in large classes, since they are the most cost-effective way to grade large volumes of answer scripts. However, the limited choice of answers makes these exams an easy target for cheaters. While the examiners use measures to deter direct copying, for example, by shuffling answers and/or questions, cheating strategies that attempt to circumvent these measures have been observed. Some of these strategies include in-room coded communication between participating students, where the codes carry potentially correct answers. Limited answers make such coded communication quite effective.

This session reports on our research around personalized multiple-choice exams where each student gets their own copy of the exam script, rendering in-room collaboration ineffective. Each student will have to solve their own problem set which is different from that of any other student. We previously developed a system to generate, distribute, and mark personalized assignments in order to stop blind copying of assignment solutions [Manoharan 2017]. The exam framework is loosely based on this system. We will discuss administrative and procedural challenges such as associating students with scripts, and pedagogical challenges such as ensuring fairness and correctness.

We are using this system in a large Computer Science class (with over 400 students), and we will discuss our experience with the system and its perceived effectiveness.

Why this topic is important

A number of academic institutions use multiple-choice questions in examinations, and this is the only practical assessment mechanism when the class sizes are large (e.g., hundreds of students). Therefore, having robust means to mitigate cheating in these examinations is both relevant and important.

How the session will be run

This session will encourage attendees to reflect on and share their experiences on the prevalence of examination cheating in their teaching practice, and discuss the means employed to mitigate such cheating. The discussion is expected to be generic and not limited to multiple-choice examinations.

The session will begin with an introduction to the common cheating strategies in examinations. The participants, in order to engage with the topic, will attempt two short multiple-choice examinations - a classical one that is prone to collusion and a personalized one that is collusion-resistant.

Participants will discuss various aspects used by them and/or their institutions to counter examination cheating.

Group discussion, reflection, and report back on the results of the session. What was learned? What will we take away?

References

- Manoharan, S. (2017). Personalized assessment as a means to mitigate plagiarism. *IEEE Transactions on Education*, 60(2), 112–119.
- Zobel, J. (2004). 'Uni Cheats Racket': A case study in plagiarism investigation. *Proceedings of the Sixth Australasian Conference on Computing Education*, 30, 357–365.

Teaching sensitive topics

Clare Mariskind, Massey University, c.j.mariskind@massey.ac.nz

The research

One of the undergraduate human development courses I teach includes topics that have the potential to cause discomfort or distress for students. Learning about attachment theory, child abuse and neglect, loss and bereavement, can be challenging for some students, especially as this is a distance course and taught solely on-line. Recently I conducted a survey that asked students if they experienced any discomfort or distress studying the course topics and if so, what effects did studying these topics have and how did they deal with these effects. The findings showed that for some students, particular topics generated feelings such as distress, unease, sadness, grief and guilt, and they used various problem-focused and emotion-centred coping strategies to deal with these feelings. Tronto's (1993, 2013) model of care was used to analyse the findings and consider effective teaching strategies for teaching a course with sensitive topics. Tronto's five phases of caring—caring about, taking care of, caregiving, care-receiving, and caring with—can be employed by teachers to identify and address the needs of students studying sensitive topics before, during and after learning activities, as well as considering their own needs and the roles of their communities and institutions. The research found that in spite of the challenges some students faced with sensitive topics, they were unanimous in that learning about these topics was worthwhile, not just as part of their programme of study but also to inform their personal lives.

Why this topic is important

There are many 'sensitive topics' that are essential to the courses students choose to study in tertiary education. These topics have the potential to cause distress because students have personal experience (direct or indirect) of the topic, or their empathy means they experience vicarious distress (Kennedy & Scriver, 2016). Yet too often rationality is privileged over emotions in tertiary education (Walker & Palacios, 2016). Learning is viewed as an intellectual activity and students are expected to control their emotions. This is accentuated in online learning, which is generally seen as a disembodied experience. Yet students do not leave their emotional selves at the door of the real or virtual classroom; they are whole persons (physical, mental, emotional, social, spiritual) with particular past experiences, present circumstances, and future hopes and plans. To teach sensitive topics effectively, teachers need to be aware of the ways that students are affected by studying such topics, and have strategies to address to any difficulties that arise. Such strategies include: signalling the nature of the course topics in the course information so students make informed enrolment decisions; clear and supportive communication enabling students to convey any difficulties encountered; assessment options for students who experience distress, such as alternative assignment topics or extensions; providing information about relevant university and external support services; and recognizing appropriate limits of the teacher's role and referring students to support services.

How the session will be run

This session will begin with a 10-minute presentation about the survey findings and some key points from the literature. This will be followed by a discussion identifying sensitive topics that session participants teach (in face-to-face contexts and online) and their students' responses to studying these topics. Next, Tronto's ethics of care will be used as a model for examining how we can teach sensitive topics effectively and support students' wellbeing. In small groups, participants will apply this model to their own teaching and identify the effective practices they already employ and consider other strategies that might be useful. This will then be shared with the whole group, and the session will end with participants sharing what insights they will take away. The aim of the session is for participants to share effective teaching practices and to gain some new perspectives and ideas that will inform their teaching.

References

- Kennedy, K. & Scriver, S. (2016). Recommendations for teaching upon sensitive topics in forensic and legal medicine in the context of medical education pedagogy. *Journal of Legal and Forensic Medicine* 44, 192-195.
- Tronto, J. (2013). *Caring democracy: Markets, equality, and justice*. New York, NY: New York University.
- Tronto, J. (1994). *Moral boundaries: A political argument for an Ethics of Care*. New York, NY: Routledge.
- Walker, J. & Palacios, C. (2016). A pedagogy of emotion in teaching about social movement learning. *Teaching in Higher Education* 21(2), 175-190.
doi:10.1080/13562517.2015.1136280

Examining the alignment of self-, peer-, and teacher-assessment in Initial Teacher Education

Sandi McCutcheon & Bernadette Knewstubb, Victoria University of Wellington,
Sandi.McCutcheon@vuw.ac.nz, Bernadette.Knewstubb@vuw.ac.nz

The research

This study compared the self-, peer-, and teacher-assessment of 34 pre-service teacher education students and their teacher. The focus was to evaluate the alignment of self-, peer-, and teacher-assessment. The self-assessment task required students to select and annotate an artefact evidencing their attainment of Aotearoa New Zealand Graduating Teacher Standard Three: Graduating teachers understand how contextual factors influence teaching and learning. Students in peer groups and their teacher then assessed the annotated artefacts using the same collaboratively constructed assessment rubric and feedback template.

A thematic analysis was undertaken to identify possible reasons for the degree of alignment and to discover emerging themes within the reasons and across the participant cohorts. Twenty of the 34 annotated artefacts were assessed as completely aligned and 14 were partially aligned. No artefacts were found to have no degree of alignment between the three cohorts. Emerging themes across the aligned artefacts included positive and respectful relationships, differentiated learning opportunities, bi-cultural teaching and learning contexts, and reflective practice. Within the 14 partially aligned artefacts, self-efficacy, incomplete attainment of all the GTS criteria, the dilemma of teaching in theory and in practice, and modesty were identified as emerging themes.

Three research questions underpinned this project:

1. To what extent do the self-, peer-, and lecturer-assessment of the same artefact align?
2. What themes are evident within the self-, peer-, and lecturer-assessments of the aligned artefacts?
3. What themes are evident within the self-, peer-, and lecturer-assessments of the divergent artefacts?

Why this topic is important

Assessment in Higher Education (HE) is an integral part of the learning-teaching process and is identified as the aspect to which many students pay the most attention. Educators in HE should capitalise on the potential assessment holds for encouraging critical and creative thinking, promoting autonomous learning, and authentically connecting students' university study with their future professions, whilst supporting their immediate success.

Within Initial Teacher Education (ITE), self- and peer-assessment are particularly important. Students must be able to reflect on their practice and make judgements about and revise their practice in light of evidence. As practicing teachers, they will provide feedback to colleagues, receive peer-assessed feedback in their own development, and set assessment tasks for their students. Together, self- and peer-assessment are critical features for developing teachers who practise and promote self-regulated learning and who reflect on

their own practice in order to support the learning of their future students. However, at many tertiary institutions peer- and teacher-assessment can contribute to the final grade but self-assessment cannot. In order to make a case for considering the inclusion of self-assessment as a summative assessment task its reliability needs to be established.

Twenty-four percent of the participants were less confident about their attainment of GTS 3 than their peers and teacher, indicating that students in this research tended to underestimate when self-assessing. The next step in this research will be to focus on the self-efficacy of pre-service teacher education students and the potential influence of self-efficacy on the reliability of self-assessment.

How the session will be run

Introduction and the origin of my research

Session participants participate in a brainstorming post-it note activity where they reflect on their experiences as a learner and/or teacher with self-, peer-, and teacher-assessment. Other-assessment will also be included for discussion in case session participants have experience such as group-assessment. This activity will ensure all participants can participate based on their own experiences and learn from others experiences.

In three/four groups session participants will complete a PMI for either self-, peer-, or teacher-assessment (or other-assessment if there are enough responses to this category) by reorganising the brainstormed post-it notes. Each group reports back.

Present the motivation for my research, methodology, and findings

Discussion

- What factors have session participants experienced affording or constraining the reliability of self-, and or peer-assessment? For example: self-efficacy, cultural bias, social status?
- Should a formative self-assessment be able to contribute toward a final summative grade?
- How can structures and support be provided that would qualify self-assessment to be recognised as a valid form of summative assessment to the benefit of all learners?

Conclude the session with a question and answer time

Ingesting or digesting the course readings in Initial Teacher Education

Sandi McCutcheon, Victoria University of Wellington, Sandi.McCutcheon@vuw.ac.nz

The research

As a teacher in Initial Teacher Education (ITE) in Higher Education (HE), I have often wondered:

- a) Why do my students not read the course readings? and;
- b) How can I encourage and support them to read the readings?

By read I mean more than a cursory glance or skim read of the article, only reading the abstract and conclusion, reading to find an answer or pithy quote, or for compliance. Instead, I want my students to read to react, understand, interpret, infer, critique, elaborate, organise, connect, synthesise, contextualise, and question.

In 2016 and 2017 I trialed a written approach aimed at increasing student engagement in course readings. The KCQ approach required students to identify and blog the following from a course reading:

- Key concepts discussed in the article
- Connections you can make between the literature, your own experiences, and other literature
- Questions you have arising from the article or gaps you may have identified.

Students also provide feedback to a peer who responded to a different article and suggest possible answers to one question posed by them.

Post-graduate and graduate students in two ITE (face to face and online) courses were invited to participate in this research by completing a Qualtrics Survey and being interviewed. Through the survey I sought to better understand students' general approaches to reading, dis/engagement with academic readings, reasons for the dis/engagement, their responses to approaches they have previously experienced, and their responses to the KCQ approach.

Why this topic is important

Limited research has been conducted to evaluate the effectiveness of innovative and compliance strategies focused on increasing tertiary student engagement with course readings. In particular Kitchen, Jeurissen, Gray, and Courtney (2017) noted how surprising it was that academic reading was given little explicit attention in the fields of pre-service teacher education and in-service teacher professional development.

Course readings provide the opportunity for students to connect new information to their existing knowledge and experiences, to learn about a topic on a wider scope than lectures and tutorials allow for, and enhance class discussions through deeper questioning and increased participation. Research has shown a correlation between those who engage with the course readings, participation, and higher grades. Equally, not engaging with the course readings can lead to declines in performance.

Students do not engage with course readings because of a perceived or real lack of reading skills, they lack motivation, they procrastinate, and because the introduction of electronic information requires a different (and perhaps not taught) approach to reading on the web. They do engage when the reading is associated with an assessment task, when the readings are interesting and relevant to their future study and careers, when they understand the rationale for the course readings, and when they respected and had a good relationship with their lecturer. My aim is to better understand ITE student engagement in course readings so that I can change my practice and increase opportunities for students to raise their engagement.

How the session will be run

Introduction.

I will share my own experiences as a learner on the Victoria University of Wellington Postgraduate Higher Education Learning and Teaching (PHELT) diploma and discuss how my engagement with course readings moved between a continuum of best and not so best practice!

Discussion question examples

- What difficulties have participants experienced in engaging students with course readings?
- Are session participants teaching students how to engage with academic material?
- What strategies have participants trialed to increase engagement with course readings?
- Are session participants including web-based resources in course reading lists?
- Do session participants alter how they teach students to engage with academic writing because of the move to web based resources?

Share my KCQ approach and the research findings from the Qualtrics survey

Session participants will trial writing a KCQ for themselves or in small groups. The KCQ will be based on a short reading related to recent educational blogs or articles.

Session participants will complete a PMI (plus, minus, interesting) brainstorming activity in groups and we will discuss their feedback.

Conclude the presentation with a question and answer time.

Supporting ourselves, each other (and our supervisors!) when learning and using an uncommon research strategy for PhD

Rhonda McKelvie & Rachel Webster, Massey University, R.Mckelvie@massey.ac.nz

The research

This is a pragmatic reflexive session by two doctoral scholars on strategies employed to support themselves and each other when using an uncommon research methodology, Institutional Ethnography (IE), for PhD. To the best of our knowledge, NZ wide only six other Doctoral candidates have used, or are currently using, this research approach. The lack of local 'expert' knowledge has led us to broaden our horizons in order to support ourselves through this research journey.

In response, we started a number of local and international 'clubs' to enable access to other IE users. We have established a number of online shared resources that helped us create a 'virtual classroom' in which to support ourselves and others to learn and test the application of the rich and dense theories and concepts of IE to our various topics. More traditional strategies such as journaling and covering walls with post-it notes have also been used to good effect. Additionally, we attended a 7-day workshop in Toronto, Canada, with the pioneer of IE – Professor Dorothy Smith (retired). This exclusive workshop employed a number of different strategies to maximise our learning from Dorothy and from other IE students that we would like to share in the session.

Unique to our experience has been the process of formally sharing this learning with our supervisor. The departure from the classic apprenticeship model between student and supervisor, into that of a collegial learner relationship, has been particularly successful and we believe is worth sharing and exploring further.

Why this topic is important

Social media and the online world provide almost limitless access to other researchers and resources for PhD students. The assumption is that all of this 'availability' is useful and helpful. However, application of a degree of structure to, and critical analysis of, these resources has proved valuable in our experience. Each strategy we have established ourselves, or been encouraged to use by our supervisors and other researchers, has added value to our learning. Itemising these strategies and the benefits gained, not only helps us to articulate what has been gained for ourselves and others, it also identifies gaps that members of the session may have experienced or have suggestions to address.

The location of supervisor as a collegial learner is important to discuss. With the ever-increasing scope of PhD research and access to uncommon methodologies such as in our case, supervisors will be continuously pushed to keep pace with essential understanding. We hope to encourage personal reflection and promote new research attitudes to nurture conceptually complex learning in partnership with research students.

How the session will be run

Rhonda and Rachel will introduce and present their reflection and the resources employed to support themselves and others in learning and using IE.

A mind-mapping group discussion of learning outcomes and wider application of our work will follow, which will be interactively mapped onto Prezi*.

The following topics will sequentially guide the discussion;

1. Exploring the situations where this type of support may be necessary
2. Exploring the researcher/supervisor role and the audience's experience of teacher as learner
3. Discussing what other strategies people have employed to overcome similar challenges to create a combined resource

Concluding comments and revision of completed Prezi mind-map

*This will provide an opportunity to test the efficacy of the Prezi platform as an interactive session tool.

Increased flexibility in summative assessments – incorporating student choice in assessment style

Pii-Tuulia Nikula, Eastern Institute of Technology, PNikula@eit.ac.nz

The research

This research explores tertiary students' reactions to and perceptions of increased flexibility in summative assessments. The case study is based on international students enrolled at a New Zealand tertiary education institution in 2017. Previously in this course, students were required to submit all their assessment work in a written format. However, in 2017 students were offered three alternatives to choose from: a written report, a video presentation, and an in-class presentation. These changes were introduced to increase student choice. Course participants were asked to complete an anonymous closed-ended questionnaire asking about their prior experience with the offered assessment styles, the choice they made in their individual assessment, and their attitudes towards increased flexibility. The objective is to examine two aspects of assessment style choice. First, the issue of consequential validity will be addressed. For example, do students' familiarity with and prior success in specific submission styles have an impact on their choices? Second, the question of whether increased choice allows students to better demonstrate their learning outcomes will be addressed.

Why this topic is important

Flexibility in tertiary studies can be implemented by offering alternatives in “how, what, where, when, and with whom” students participate in learning (Collis & Moonen, 2011, p. 15). New Zealand tertiary institutions have been active in integrating more personalised (e.g. culturally sensitive, such as Māori related) teaching practices and blended/online learning environments (Gregory et al., 2013; Schwenger, 2016; Tiakiwai, 2001). However, there appears to be less interest in introducing flexibility in assessments.

Wood and Smith (1999) distinguish nine methods for increasing choice in assessments, including flexibility in components, style, tools, feedback, grouping, weighting, content and marking. This research will focus on flexibility in assessment styles, exploring the provision of different methods for students to demonstrate their learning. The scholarly literature in this area is somewhat limited in scope; and further research is required to better understand its importance (e.g. Irwin & Hepplestone, 2012). Some of the available studies have linked increased choice in assessments with many potential benefits, such as more valid assessment of student learning, increased student engagement/fairness, and improved student performance (e.g. Hanafin, Shevlin, Kenny, & Neela, 2007; Irwin & Hepplestone, 2012; Steventon, 2012; University of Teesside, 2012). For instance, certain groups struggling with academic writing may benefit from alternative submission styles (e.g. Hanafin, Shevlin, Kenny, & Neela, 2007; Steventon 2012). From this perspective, the growing number of international students enrolled in New Zealand tertiary institutions further emphasises the need to improve our understanding of the benefits and limitations of increased choice in assessment styles.

How the session will be run

This is an interactive session. First, the theory on student choice and flexibility in assessment styles will be introduced and discussed in the context of the research conducted. After that, small group discussion and the Poll Everywhere/Padlet board application will be used to explore the experiences and views of the audience, such as whether they have introduced choice in assessments (and if yes, how). Following the group discussion, further insights into the relevant theory and the reasons supporting/opposing increased choice in assessment style/other assessment areas will be presented. These ideas will be discussed in small groups and each group is asked to come up with an idea of increased flexibility in assessments they could introduce in their own teaching.

Overview of the research context (student choice/ flexibility in assessments)

Small group discussion and collation of the experiences and views

Recap of the common approaches and concerns discussed

Introduction to relevant theory (e.g. limitations/benefits of flexibility in assessments)

Small group discussion: how could participants increase flexibility in their own teaching

Collation, recap and discussion of the ideas

References

- Collis, B., & Moonen, J. (2011). Flexibility in higher education: Revisiting expectations. *Media Education Research Journal*, 19(37), 15–25.
- Gregory, S., Gregory, B., Reiners, T., Fardinpour, A., Hillier, M., Lee, M., ... Larson, I. (2013). Virtual worlds in Australian and New Zealand higher education: Remembering the past, understanding the present and imagining the future. Paper Presented in ASCILITE 2013 "Electric Dreams", 1-4 December 2013, Macquarie University, Sydney, NSW.
- Hanafin, J., Shevlin, M., Kenny, M., & Neela, E. M. (2007). Including young people with disabilities: Assessment challenges in higher education. *Higher Education*, 54(3), 435–448
- Irwin, B., & Hepplestone, S. (2012). Examining increased flexibility in assessment formats. *Assessment & Evaluation in Higher Education*, 37(7), 773–785.
- Schwenger, B. (2016). Enhancing students' tertiary blended learning experience through embedding digital information literacy. *Journal of Perspectives in Applied Academic Practice*, 4(1), pp.71-77.
- Steventon, G. J. (2012) Finding their voice: Podcasts for teaching, learning and assessment. In L. Clouder, C. Broughan, S. Jewell and G. Steventon (Eds.) *Improving Student Engagement and Development through Assessment: Theory and practice in higher education*, (pp. 86-98). Oxford: Routledge
- Tiakiwai, S. J. H. (2010). A literature review focused on virtual learning environments and e-learning in the context of te reo Māori and kaupapa Māori. Wellington: Ministry of Education.
- University of Teesside. (2006). *Inclusive assessment*. Rough guides to learning & teaching series. Teesside: University of Teesside

Wood, L. N., & Smith, G. H. (1999). Flexible Assessment. In *The challenge of diversity: Proceedings of the [Delta] '99 Symposium on Undergraduate Mathematics* (pp. 154–158). Laguna Quays: University of Southern Queensland Press.

I scratch your back and you scratch mine: Using dialogic feedback to enhance students' feedback experiences in higher education

Krishneel Krishna Reddy, University of Otago, krishneel.reddy@postgrad.otago.ac.nz

The research

Formative feedback plays a central role in students' learning journey in higher education. However, students are generally dissatisfied with their feedback experiences. Reasons for students' dissatisfaction with feedback include issues, such as feedback being difficult to interpret (Price et al.), feedback lacking guidance on how to revise current work and improve subsequent performance (Higgins et al., 2001), and feedback being too brief (Orsmond et al., 2005). One way to resolve this issue is by academics engaging with their students; however, because of mass higher education, it becomes difficult for academics to engage with their students for a sustained period. To resolve this problem, it has been suggested that students should engage in student peer review (SPR) (Nicol, 2010; Topping, 1998; Yang & Carless, 2013). SPR is a process in which students evaluate their peers' work using specific criteria and provide formative feedback. However, a key criticism of SPR was that it is monologic in nature, i.e. one-way transmission of information (Nicol, 2010). Thus, to counter the monologic nature of the SPR, dialogic feedback (DF) has been proposed (Nicol, 2010; Yang & Carless, 2013). DF is an interactive exchange between the reviewer and the student to clarify assessment expectations, seek clarification on doubts and discuss feedback. It is also argued that DF provides opportunities for students to engage in rich, iterative and discursive exchanges with both self and peer feedback providers (Nicol, 2010). However, there is little direction on how students experience DF, especially, the type of comments students provide as feedback (within a DF context) and how feedback comments lead to revisions in students' work. Therefore, my research aims to provide insights into the type of comments students provide as feedback to their peers, how students react to the comments provided to them as feedback and how students use the feedback comments to revise their work. In doing so, I also compare how students' feedback comments compare with staff comments. The research also explores students' perceptions regarding the use of DF as an alternative to academic staff feedback.

Why this topic is important

There are two distinct reasons for the importance of this topic. Firstly, the findings from this research will make a theoretical contribution to the scholarship of formative feedback practices in higher education. The theoretical contribution will be in understanding how peer interaction within a DF context between students who are trained and experienced in providing formative feedback allow students to seek, discuss, clarify, negotiate and act on feedback between peers. This will be done by analysing the type of comments provided by peers and how students respond to the comments provided by their peers. The research also compares students' feedback with staff feedback within the context of DF to determine similarities and differences. In doing so, the research will add to the current knowledge on DF by providing a fine-grained account of the dialogue operating within DF. Second, the findings from this research will allow insights into how students experience DF. Harland et al.'s (2017) arguments suggest that skills, such as critical thinking, independent learning and

problem solving can transfer from one paper to the next. Therefore, understanding how students experience DF in an undergraduate curriculum will in turn shed light on how students use knowledge and skills gained in one paper and apply it in other papers. It will also provide insights into how altruism can be embedded in higher education because when students provide feedback, they are not given any form of incentive or mark. It is done as part of the course in the greater philosophy that by engaging in DF, they are not only helping their peers, but they are also improving their own learning skills, such as critical thinking and independent learning.

How the session will be run

My proposal for the session is based on the conference's broader philosophy that the conference should be educational for both the participants and the presenter. Therefore, I aim to briefly talk about my research. I will then get feedback from the participants about their perceptions of problems with feedback in higher education and get their views of DF.

I will introduce myself and outline the presentation format. I will then briefly talk about my PhD research and discuss key terms. Then in a group activity, participants will consider the following:

1. How can they implement DF in their papers/courses?
2. What challenges do participants envisage that they will encounter when implementing DF in their papers and how will they overcome these challenges?

I will facilitate a discussion based on group responses:

1. What type of training should be given to students engaging in peer review within the context of DF? For this activity, participants will be provided an example of a training schema (attached) for training students in peer review. They will be asked to reflect on the value and utility of the training schema and how it can be amended to suit their needs.
2. There is mixed reaction amongst students on getting formative feedback from their peers. For some students, academics have far more expertise than students. Some students feel that despite training in providing feedback, their peers are not qualified to provide feedback (Liu & Carless, 2006), while other students found that getting feedback from their peers was very beneficial (Mulder et al., 2014). As such, participants need to discuss whether they think that it is ethical for universities to use students to provide formative feedback to their peers, particularly in situations when the review has a direct impact on marks or grades.

I will end the session by thanking everyone for their participation and outline the plan for the rest of my PhD. It will also be an opportune time for individuals working in the areas of student learning, feedback and student learning adviser to network

Peer Review Training

Part One: In-class modelling

- a. Students are given a marking rubric and a sample essay composed by a former student.
- b. Then, the tutor guided the students into reviewing the sample work by identifying the following:

- i. clarifying the writer's intentions by asking questions such as "Are you saying", "Do you mean ...", "What do you mean by ...", etc.
 - ii. identifying the source of problems by explaining what the reviewer thought was problematic.
 - iii. explaining the nature of problems. If the reviewer identifies a problem in the text, then the reviewer will need to explain why they identified that portion of the text as problematic.
 - iv. making specific suggestions for improvement by giving specific examples on how to improve the work.
- c. Using the above method, students then worked in pairs to review an earlier work of their peer. Each student was required to review two different drafts of their peers in class and provide a written commentary to their partners for revision. Students were then given a week to revise their work. In revising the work, if students disregarded their peer feedback, then they had to explain in their revision why they felt that certain suggestions did not work.

Part Two: Teacher- Reviewer Conference

After a lapse of a week, the tutor collects students' draft work, revisions and reviewer's comments. Because the tutor is able to track each reviewer's comments, the tutor discusses the weakness of the comments and explains how those weaknesses can be rectified. The actual peer review starts after meeting all the students.

References

- Carless, D., Salter, D., Yang, M. & Lam, M. (2011). Developing sustainable feedback practices. *Studies in Higher Education*, 36(4), 395-407.
- Harland, T., Wald, N. & Randhawa, H. (2017). Student peer review: Enhancing formative feedback with a rebuttal. *Assessment & Evaluation in Higher Education*, 42(5), 801-811.
- Higgins, R., Hartley, P. & Skelton, A. (2001). Getting the message across: The problem of communicating assessment feedback. *Teaching in Higher Education*, 6(2), 269-274.
- Min, H-T. (2006.) The effects of trained peer review on EFL students' revision types and writing quality. *Journal of Second Language Writing*, 15(2), 118-141.
- Nicol, D. (2010). From monologue to dialogue: Improving written feedback processes in mass higher education. *Assessment & Evaluation in Higher Education*, 35(5), 501-517.
- Orsmond, P., Merry, S. & Reiling, K. (2005). Biology students' utilization of tutors' formative feedback: A qualitative interview study. *Assessment & Evaluation in Higher Education*, 30(4), 369-386.
- Price, M., Handley, K., Millar, J. & O'Donovan, B. (2010). Feedback: All that effort, but what is the effect? *Assessment & Evaluation in Higher Education*, 35(3), 277-289.
- Topping, K. (1998). Peer assessment between students in colleges and universities. *Review of Educational Research*, 68(3), 249-276.
- Yang, M. & Carless, D. (2013). The feedback triangle and the enhancement of dialogic feedback processes. *Teaching in Higher Education*, 18(3), 285-297.

Social inclusion and international students

Mulyadi Robin, Monash University, mulyadi.robin@monash.edu

The research

This research aims to create a framework for social inclusion among international students. International students continue to be an important stakeholder in the Australian higher education sector and a growing proportion of these students enter Australian universities through alternative pathways of entry (university-backed, guaranteed entry foundation study programs). Enrolments into guaranteed entry foundation studies are appealing to international students as they enable students to enroll into tertiary education with lower English language requirements as well as academic entry scores.

However, previous research shows that the low level of language fluency and literacy skills that characterize many of these students, as well as their concomitant interactions with the larger University student community, tend to become barriers to success. This is further confounded often with high levels of pressure from their families to do well in these courses. This is alarming, as prior international research found that acculturative stress, social exclusion, and both academic and financial pressures are linked with depressive symptoms and lower life satisfaction among international students.

Drawing from the sojourner adjustment, self-efficacy, and positive organisational behaviour literatures, I tested the influence of acculturative factors, personal dispositions, and perceived support structures as key drivers for students' success. The study found support for the idea that social inclusion, through perceived organisational and social support, is positively related with students' academic and social outcomes.

Why this topic is important

Despite the increasing popularity and numbers of international students being accepted through alternative pathways, there is still a lack of understanding of the academic and social needs of the international students' community, as well as how educators can better cater for and facilitate their learning. Further, the academic literature on international students, while diverse, still lacks direction (Bierwiazzonek & Waldzus, 2016). As international students are important stakeholders in the Tertiary education sector, this research has significant impact potential in providing valuable insights into the challenges that both international students and academics face. The potential findings may also offer solutions to increase the quality of life and social inclusion for international students.

From a learning perspective, this presents a challenge for academics and their pedagogical approaches. Extant research indicates that current pedagogical approaches adopted in Australian and "western" universities need to be adapted to fit the needs of international students, many of whom come from Asian or Confucian learning backgrounds (Cadman & Song, 2012; Saravanamuthu & Yap, 2014). The current study provides an empirically-based framework to enhance students' success in tertiary settings. Further, this topic is also important from a funding and business perspective – as funding pressures for Australian

Universities continue to increase, this market segment becomes more important as a stream of revenue (Robertson, 2011).

How the session will be run

I will start the session with a 5-minute reflective exercise where participants are asked to reflect on and share their experiences of trying to adjust to new environments. I will ask participants to choose one or two words that describe what they felt via Poll Everywhere, an interactive live polling.

This will be followed by a 10-minute presentation of the results of the study. The presentation will focus mainly on the key findings of my first study. This will also set the stage for the remaining session.

Subsequently, participants will then be asked to reflect on the results of the study in groups of approximately 5, focusing on their personal experiences in teaching either international students or diverse student groups.

In their respective discussion groups, participants will be asked to reflect on the following:

- Key challenges and skill gaps faced by students and academics
- Strategies and techniques that have been adopted, or might be adopted to enhance social inclusion of international students

I will then ask participants to share some of their reflections and conclude the sessions with an exploration of future research agenda – specifically designing research that can be used to inform practice.

References

- Bierwiazzonek, K. & Waldzus, S. (2016) Socio-cultural factors as antecedents of cross-cultural adaptation in expatriates, international students, and migrants: A review. *Journal of Cross-Cultural Psychology*, 47(6), 767-817.
- Cadman, K., & Song, X. (2012). Embracing transcultural pedagogy: An epistemological perspective. In X. Song, & K. Cadman (Eds.), *Bridging transcultural divides: Asian languages and cultures in higher education* (pp. 3-26). Australia: University of Adelaide Press.
- Saravanamuthu, K. & Yap, C. (2014). Pedagogy to empower Chinese learners to adapt to Western learning circumstances: A longitudinal case-study. *Cambridge Journal of Education*, 44, 361-384.
- Robertson, S. (2011) Cash cows, backdoor migrants, or activist citizens?: International students, citizenship, and rights in Australia. *Ethnic and Racial Studies*, 34(12), 2192 – 2211.

Reflecting on student agency

Linda Rowan, Victoria University of Wellington, linda.rowan@vuw.ac.nz

The research

Agency is required for learners to understand knowledge and where it fits in personal understanding (Nye et al., 2011). As agents in the dissemination of knowledge, academics take knowledge generated and applied within particular disciplines and contexts and represent it to learners (Luckett, 2009). The construction of this knowledge reflects the structures, priorities and values of the various social contexts in which it was formed. In developing their own knowledge, students must then negotiate their way through these levels of social structures. How much freedom students then feel they have to act on the knowledge encountered is in turn influenced by their own social and cultural contexts. Studies of student agency in higher education currently emphasize either individual learning or students' social contexts. Few studies consider the interrelationship between individuals and the wider educational and socio-cultural environments (Jääskelä, Poikkeus, Vasalampi, Valleala, & Rasku-Puttonen, 2016); it is this gap which my PhD research addresses.

Why this topic is important

Characteristics of agency are reflected in graduate attributes or outcomes in higher education. The term student agency, however, remains elusive as its definition and use differs between paradigms (Emirbayer & Mische, 1998). Few teachers have the time to consider what is meant by agency, the characteristics of agency and the relationship between their teaching practice, student learning and student agency. Increasingly the use of project and group work, opportunities for self-directed learning, development of student and staff partnerships and the use of technology to promote student voice are seen to promote particular types of learning but continue to raise issues of power and context, autonomy and student independence to achieve their success. All these issues affect student agency. Heng's (2016) research of international students' experiences in western study provides one glimpse of cultural learning contexts that were initially seen as barriers to student agency and hence their success. The actions taken by students to work through the barriers demonstrated that this group of learners used and developed their agency to work towards their learning goals.

How the session will be run

The goal of this workshop is to provide some time, space and collegiality in considering what student agency means within our own teaching context and to share ideas on teaching and learning practice that builds students' agency.

The format:

An overview of socially located structures that influence our teaching practice that students must negotiate through in learning.

1. Working in groups – we first introduce ourselves, our teaching learning context and our goals for the workshop. We then look at what learner agency means for us.

2. Coming back together the key ideas from our group will be presented. Collectively we will then look at how agency is affected by micro, meso and macro contexts.
3. Back in our groups we will revisit the ideas of micro, meso and macro contexts considered earlier in terms of their implications for our teaching context and practices. We identify what it is that we do or might do in our teaching practice to enable and promote student agency.
4. We draw the ideas together in looking specifically at Heng's (2016) findings.

References

- Emirbayer, M., & Mische, A. (1998). What Is Agency? *American Journal of Sociology*, 103(4), 962-1023. doi:10.1086/231294
- Heng, T. T. (2016). Different is not deficient: Contradicting stereotypes of Chinese international students in US higher education. *Studies in Higher Education* (online). Retrieved from <http://dx.doi.org/10.1080/03075079.2016.1152466>
- Jääskelä, P., Poikkeus, A.-M., Vasalampi, K., Valleala, U. M., & Rasku-Puttonen, H. (2016). Assessing agency of university students: Validation of the AUS Scale. *Studies in Higher Education* (online). Retrieved from <http://dx.doi.org/10.1080/03075079.2015.1130693>
- Luckett, K. (2009). The relationship between knowledge structure and curriculum: A case study in sociology. *Studies in Higher Education*, 34(4), 441-453. doi:10.1080/03075070902772018
- Nye, A., Hughes-Warrington, M., Roe, J., Russell, P., Deacon, D., & Kiem, P. (2011). Exploring historical thinking and agency with undergraduate history students. *Studies in Higher Education*, 36(7), 763-780. doi:10.1080/03075071003759045

Use of learning management system: Pedagogical or technological?

Kwong Nui Sim, Victoria University of Wellington, kwongnui.sim@vuw.ac.nz

The research

This discussion reports the findings from a pilot study that investigated the use of the tools on Blackboard (the learning management system in this context) in the process of teaching and learning among academics at one university. Data sources included class observation sessions with photograph or video captures and individual discussions. Data were analysed using an interpretive approach resulting in two themes: (a) the diverse perspectives of the role of Blackboard in the process of teaching and learning; and (b) the questionable use of Blackboard, in terms of 'efficiency' and 'effectiveness'. The focus of the data was the alignment between specific features or affordances of Blackboard, the learning objectives of the courses, and the beliefs held by the academics responsible for the design and operation of the courses that affect the use of various tools differently. Through observing the participants in the classes as well as on their Blackboard courses, it captured how participants incorporated Blackboard in their process of teaching and learning. The follow-up individual discussion sessions revealed the understanding of Blackboard use among the participants and therefore the findings provided insights into ideas about how institutions could develop a shared sense of the learning management system use. Part of this development would be to articulate a vision about the notion of blended learning within the institutional context. In short, this study is framed by the question "How do the assumptions and expectations of the learning management system use held by academics influence their practice and vice versa?"

Why the topic is important

In the 21st century, teaching and learning environments increasingly incorporate 'e-elements' into higher education contexts. The use of a learning management system, such as Blackboard, is one of the significant e-elements. Thus, the predominant message of the learning management system use is that there is a paradigm shift in the process of teaching and learning, which forms the basis of blended learning. However, it is unclear that how and to what extent the learning management system has played a role within the context of blended learning. This paper therefore aims to contribute new knowledge to this emerging area by exploring the relationship between the concept of blended learning and the use of the learning management system in the process of teaching and learning.

While there is an expectation and/or assumption that the use of the learning management system enhances the process of teaching and learning, it is found that the pedagogical use could have been overlooked. There are also issues that hinder the perceived role of the learning management system in relation to engaging with students' experiences in academic practices, within the notion of blended learning. The diverse perspectives on the notion of blended learning in higher education appear to be the barriers for the effective and efficient use of the learning management system in the process of teaching and learning. Therefore, we advocate the development of new learning schemas that are incorporating a high level of production leading to broadcasting/open-sharing through the use of the learning management system.

How the session will be run

This discussion aims to focus on the ways a learning management system (e.g., Blackboard) could be adopted to enhance the process of teaching and learning.

Part 1

Participants will be invited to share their reflections and experiences of their learning management system use as revealed through the data captured in this pilot study.

Part 2

The facilitator will lead the participants to discuss and explore the Information and Communication Technology (ICT) being adopted in higher education, particularly in the process of teaching and learning.

Part 3

The facilitator will lead the participants to question the notion of 'efficiency' and 'effectiveness' of ICT use in relation to 'digital literacy' in the discussion.

Part 4

The facilitator will invite the participants to discuss the concept of 'digital' within the changing landscape of the university in terms of how we understand and view the fact that higher education has yet to achieve a shared sense of 'blended learning' in the process of teaching and learning.

In short, the session will provide participants with an opportunity to review the idea of using ICT, particularly the use of learning management system in order to open a space for nurturing the development of 'blended learning'.

Dissolving the walls: Learning across the boundaries of tertiary institutions and work

Matthew Stevens, Auckland University of Technology, matsteve16@gmail.com,
matthew.stevens@mediadesignschool.com

The research

“Dissolving the Walls” looks at learning within creative technology domains across the boundaries of formal learning courses and workplaces. Viewed through the lens of third generation activity theory (Engeström & Sannino, 2010), the intersection of learning and work activities can be framed as a “transaction space” (McMillan, Goodman & Schmidt, 2016). Within this transaction space, new activities and practices can emerge through a process of “expansive learning” involving students, teachers, practitioners and industry employers. In addition to looking at “work integrated learning”, in which work practices and experiences are incorporated into course curricula, the transaction space also includes “learning integrated work” as a way of understanding the learner’s transition from formal learning activities to work activities, through work placements, internships, graduate programmes etc., as well as the ongoing learning as a working practitioner. Merged together, this becomes “integrated learning and work”.

Following Engeström and Sannino (2010), the expansive learning process begins with experienced or felt tensions and contradictions by those involved in the activities. This research starts with the tensions I have personally experienced developing and applying an “agile” teaching and learning approach (Stevens, 2013) within creative technology domains. In these domains, current domain knowledge and practices are in a continual state of flux, emerging dynamically from the interactions between practitioners, rather than being located within individual teachers, curriculums, practitioners or workplaces. Consequently, in the agile approach, the teacher is a guide or broker, introducing and connecting students to the “domain of practice” where they learn as participants interacting with practitioners, teachers, other students and open resources. In practice, however, integrating learning and work activities can be problematic due to an “expectations gap” (Pilgrim & Koppi, 2012) between the two activity systems which have their own goals, values, culture and narratives that do not always align.

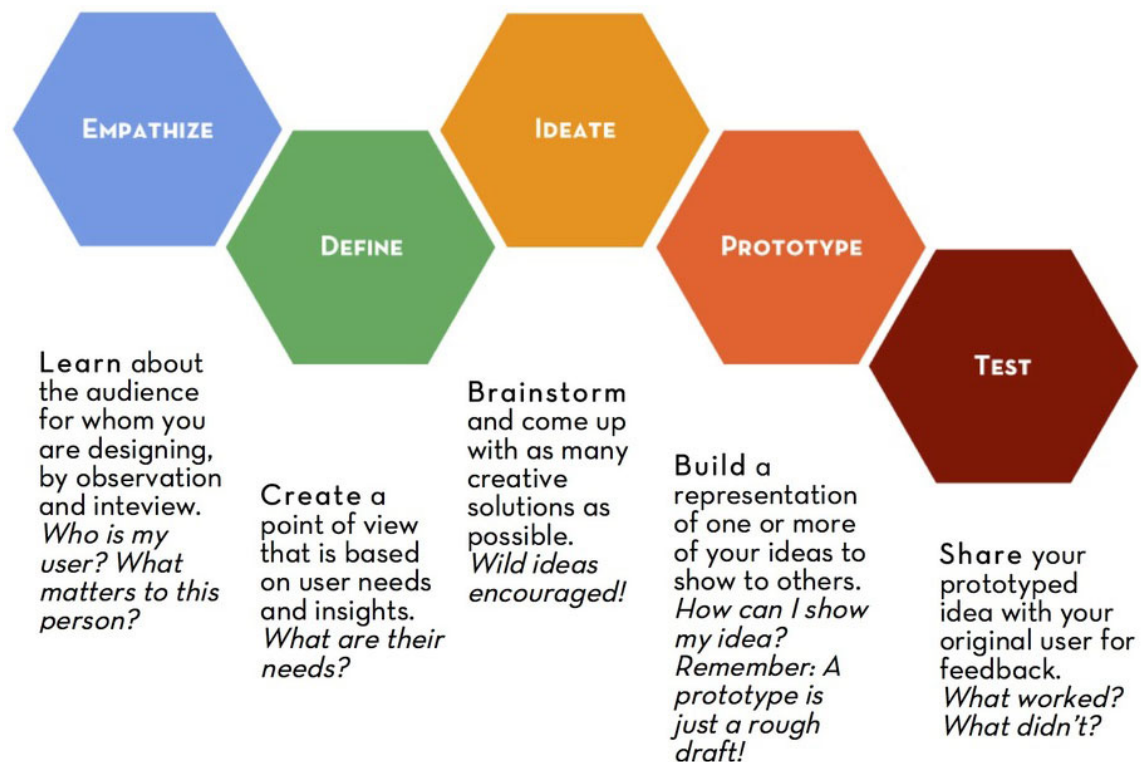
Why this topic is important

This topic is important to students, teachers, educational institutions, industry employers, practitioners, as well as government education policy and funding. For students (both school leavers and those changing careers), it potentially opens up more effective and flexible ways of becoming a practitioner and transitioning to working life. For teachers and institutions, it can inform and improve teaching practices and learning situations, as well as provide an opportunity to re-evaluate the effectiveness and relevance of traditional teaching practices and qualification structures in an open, connected and rapidly changing world. For practitioners and industry employers, it potentially offers opportunities for ongoing learning through collaborating with students and tertiary institutes.

There has been a lot of discussion recently about industry employers experiencing a shortage of skilled workers, especially in the “tech” industries. The story, however, is usually told from the employers’ perspective who see the main purpose of education as being to provide industry employers with a sufficient supply of suitably skilled employees. At the end of last month, over 100 NZ companies signed an open letter titled “NZ Talent: Educate for the Future” (<https://nztalent.org/>) in which they question the value of tertiary qualifications and whether employers and employees might not be better off learning their skills on the job. However, this shift from demanding that tertiary institutions provide them with skilled workers, to providing on-the-job training themselves, still privileges employer perspectives over those of learners, practitioners, teachers, educational institutes and society. The aim of this research is to broker an open dialogue between all the relevant perspectives so they can jointly contribute to possible new integrated learning and working activities.

How the session will be run

Following a human-centered “design thinking” approach, I anticipate that the session will run along the lines of a “rapid prototyping” jam that loosely follows the “empathize; define; ideate; prototype; test” design thinking model, but in a rapid and agile way. The main purpose of the session is to share teacher and tertiary institute perspectives on integrating learning and work, with the output being rough prototypes of possible approaches. In groups of four or five, participants will start by empathizing with (i.e. putting themselves in the shoes of) the different people involved in the learning and work activities (e.g. learners, teachers, practitioners, employers etc.), identifying their possible “pain points”, as well as the tensions and contradictions that might exist between them. This leads to defining the needs and goals of each of the identified “users” groups and then brainstorming as many creative solutions as possible. From this, each group then chooses one or two of the ideas and creates a rough visual representation (the prototype), in the form of a sketch, diagram or model, which can be shown to others. The session will finish up with each group presenting their prototype to the whole session group.



Design Thinking graphic retrieved from

<http://www.elonnewsnetwork.com/article/2016/10/elon-design-thnking-studio-semester>

References

- Engeström, Y., & Sannino, A. (2010). Studies of expansive learning: Foundations, findings and future challenges. *Educational Research Review*, 5(1), 1-24.
- McMillan, J., Goodman, S., & Schmid, B. (2016). Illuminating "Transaction Spaces" in Higher Education: University–community partnerships and brokering as "Boundary Work". *Journal of Higher Education Outreach and Engagement*, 20(3), 8-31.
- Pilgrim, C. J., & Koppi, T. (2012, January). Work integrated learning rationale and practices in Australian information and communications technology degrees. In *Proceedings of the Fourteenth Australasian Computing Education Conference Volume 123* (pp. 25-32). Australian Computer Society, Inc.
- Stevens, M. (2013). A Proposal for an agile approach to the teaching and learning of creative technologies (Honours dissertation). Auckland University of Technology, Auckland, New Zealand.

Building students' enterprise skills through inductive teaching

Lukasz Swiatek & Grant Verhoeven, Massey University, L.Swiatek@massey.ac.nz,
G.Verhoeven@massey.ac.nz

The research

Around the world, calls continue to grow for students to be taught 'enterprise skills' by universities and other higher education institutions (Belwal, Al Balushi & Belwal, 2015). These transferrable skills – of which there is no universally agreed set – include, for example, responsibility, initiative-taking, creativity, organisation, communication, as well as motivation and commitment (Deema, 2010). These skills are being increasingly recognized as valuable in the growing 'self-employment revolution' (Card, 2016), in which more people are working for themselves than ever before.

This proposed session explores a novel way of fostering students' 'enterprise skills': namely, through an inductive teaching style. This student-centred teaching approach is valuable because it obliges students to engage in active learning by arriving at an understanding of ideas and concepts from patterns in evidence of different kinds, such as multiple examples (in contrast with the more teacher-centred deductive approach that does the reverse) (May, 2009). The inductive teaching style, with its emphasis on student ingenuity, complements enterprise skills' focus on initiative-taking or self-reliance and creativity. It also aligns with evidence suggesting that many of the skills and thought processes associated with innovative and enterprising behaviour are developed through authentic experience (Cooper, Gordon & Lucas, 2014): something that can be achieved through inductive teaching.

The session explores the opportunities and limitations of this teaching style for fostering enterprise skills with reference to a pilot event run by the Massey University Career and Employability Service (in association with the School of Communication, Journalism and Marketing). The event, held on September 15, 2017, responded to a focus group held in June, and tested initial assumptions about the suitability of the approach that the session will outline and further interrogate with participants.

Why this topic is important

Efforts to enhance 'enterprise education' continue to grow globally, given the importance of teaching enterprise skills. Although enterprise education initiatives have taken different shapes over the last 30 years or so, as Jones and Iredale (2014, p. 43) point out, they have generally aimed to encourage young people to have a "more enterprising approach to life in order to help them cope with a rapidly changing world".

It is especially vital to help people learn to cope with, and adapt to, a more insecure and uncertain world of work (Heery & Salmon, 2000). Indeed, a recent future of work report highlighted the fact that enterprise skills develop employability: a particularly important element for young people (FYA, 2017). Enterprise education has wider benefits, as well. It helps positively shape social, personal, political and other relations. It also promotes the creation of life-wide opportunities, more "go-getting" societies, more "can-do" cultures, and can lead to an improvement in life chances (Jones & Iredale, 2014).

More research in the teaching and learning of enterprise skills is also needed, given the current gaps in this area. For example, as Struder (2006) comments, there is a “great need” for sharing materials and experiences between colleagues – and, we would argue, students – across disciplines. (This is something that the pilot event attempted to do.) Also, many reports about tertiary programs aimed at developing enterprise skills (see, for example, Chalkley & Gibson, 2009; Chapman & Skinner, 2006) show tendencies towards developing entrepreneurship (in relation to businesses), rather than enterprise skills.

How the session will be run

The session will be run in an inductive style, in order to reflect the theoretical content. That is, answers and explanations will not be offered immediately up-front; instead, participants will have the chance to arrive at potential answers themselves first.

Specifically, after a brief introduction, the general parameters of the enterprise skills program will be outlined; participants will then have the opportunity to suggest how they would have developed and run the enterprising skills event themselves, within those parameters, if they had been in charge of it. Next, the actual research will be presented, focusing on the results of the pilot event held in Wellington.

After the presentation, a series of questions will be provided to foster discussion among participants. The questions will help critically interrogate the suitability and limitations of the inductive approach to teaching enterprise skills. New ideas for teaching these skills should also emerge from the discussion; it is hoped that all participants will benefit from these new insights.

References

- Belwal, R., Al Balushi, H. & Belwal, S. (2015). Students’ perception of entrepreneurship and enterprise education in Oman. *Education + Training*, 57(8/9), 924-947. doi: 10.1108/ET-12-2014-0149
- Card, J. (2016, October 6). What entrepreneurs want from the ‘self-employment revolution’. *The Guardian*. Retrieved from <https://www.theguardian.com/small-business-network/2016/oct/06/what-entrepreneurs-want-from-self-employment-revolution>
- Chalkley, B. & Gibson, K. (2009). Enterprise education in Geography: The case of the Plymouth Dragons. *Planet*, 21(1), 43-46.
- Chapman, D. & Skinner, J. (2006). Collaborations, courses, and competitions: Developing entrepreneurship programmes at UCL. *Education + Training*, 48(5), 386-397. doi: 10.1108/00400910610677081
- Cooper, S., Gordon, J. & William, L. (2014). Developing entrepreneurial self-efficacy and intent through Youth Enterprise Programmes. Retrieved from https://www.researchgate.net/publication/237490478_DEVELOPING_ENTREPRENEURIAL_SELF-EFFICACY_AND_INTENT_THROUGH_YOUTH_ENTERPRISE_PROGRAMMES
- Deema, R. (2010). The significance of problem-based Learning in developing enterprise skills for Pharmacy students in UK HEI. In *Business and Organisational Survival and Sustainability: Papers from the Northern Leadership Academy Fellows 2009 Conference*. Leeds University Press, Leeds, UK, pp. 73-84. Retrieved from: <http://eprints.hud.ac.uk/id/eprint/17228/3/RefaiNLA.pdf>

- FYA (2017). *The new work order: Ensuring young Australians have skills and experience for the jobs of the future, not the past*. Foundation for Young Australians. Retrieved from <http://www.fya.org.au/wp-content/uploads/2015/08/fya-future-of-work-report-final-lr.pdf>
- Heery, E. & Salmon, J. (2000). The insecurity thesis. In E. Heery & J. Salmon (Eds), *The insecure workforce*, (pp. 1-24). London: Routledge.
- Jones, B. & Iredale, N. (2014). Enterprise and entrepreneurship education: Towards a comparative analysis. *Journal of Enterprising Communities: People and Places in the Global Economy*, 8(1), 34-50. doi: 10.1108/JEC-08-2012-0042
- May, O. B. (2009). Inductive and deductive instruction. *Best of Bilash: Improving Second Language Education*. The University of Alberta. Retrieved from <https://sites.educ.ualberta.ca/staff/olenka.bilash/Best%20of%20Bilash/inductivedeductive.html>
- Struder, I. (2006). Enterprising geography, earth and environmental sciences students. *Planet*, 16(1), 26-29.

Attention-enhancing pedagogies for focus, connection, and critical thinking

Heather Thomas, Massey University, H.G.Thomas@massey.ac.nz

The research

My doctoral research (Ed D) is about mindfulness practice and contemplative pedagogy in higher education. I began with a large-scale email survey of educators at most of the universities in Aotearoa New Zealand, and continued with in-depth, semi-structured interviews with 20 of these educators. The research has highlighted the diversity of approaches to contemplative education across disciplines and paradigms, and the potential to positively impact attention, resilience, engagement, and critical thinking. It is attention which is this session's topic, as we explore how mindful teaching practices can enhance student attention, and thereby enhance focus on content, connection with others, and the critical thinking necessary to intellectual freedom.

To develop and maintain attention, we may need an "Inner Curriculum" (Ergas, 2017) which would simultaneously increase awareness of our inner mental workings and our control over them. This could involve exercises to strengthen agency and engagement, such as reflective practice, journaling, and mindfulness. For example, to understand distraction, David Levy's (2016) students use software to monitor their behaviours while writing assignments. To deepen engagement with literature in general, and Dante in particular, Georgetown University's (2017) EdX students follow comprehensive sequences of reading, reflection, content study and discussion. Deepening connection to others through attentive listening is targeted in Otto Scharmer's MOOC which aims to catalyse social change (MIT, 2017). In an example of critical social justice teaching, Beth Berila (2016) turns the beam of attention inward, helping students to mindfully explore how power relationships are embodied in their own thoughts, emotions, behaviours, and physicality.

Why this topic is important

Attention is arguably the cornerstone of education, and is vital to the quality and character of the consciousness we bring to study. Higher education is tasked with preparing students to turn their attention to solving global crises and to being collaborative global citizens, but our capacity to pay attention is undergoing intense challenges, including information overload and digital distraction. Further, although now connected with strangers across the world on social media, we may struggle for connection with the people nearest to us. Also, we each struggle daily to maintain some semblance of personal freedom in this new attention economy, as a system which has been termed, "cognitive capitalism", expertly manipulates us to control our purchasing power, political decisions, and our thoughts (Moulier-Boutang, 2011).

How the session will be run

In meeting each of these challenges, honing our attention is vital, or at least honing our ability to become aware of influences on that attention and to critically evaluate the many pressures we face. Participants are invited to consider how our teaching methods may be

harnessed to develop student attention. They are invited to share their existing teaching practices, and to design courses or lessons for the future.

The session is organised as follows:

Part One: Introduction

Part Two: Experience of Attentional Focus

- 2-minute mindful breathing exercise, followed by 3-minutes free-writing
- Short feedback

Part Three: Small-Group Discussions of Questions

1. How is attention a problem or challenge in our teaching? What do we do to address this?
2. How could we re-design our teaching practices to enhance attention? Participants are encouraged to think of specific courses or situations.
3. Choose a teaching goal or course of one group member. Brainstorm practical ways to enhance attention in this class.

Groups report back.

References

Berila, B. (2016). *Integrating mindfulness into anti-oppression pedagogy: Social justice in higher education*. New York, NY: Routledge, Taylor & Frances Group.

Ergas, O. (2017). *Reconstructing 'Education' through mindful attention: Positioning the mind at the center of curriculum and pedagogy*. London, U.K.: Palgrave Macmillan.

Georgetown University. (Producer). (2017). *The Divine Comedy: Dante's journey to freedom*. [MOOC]. Retrieved from <https://courses.edx.org/courses/GeorgetownX/HUMX421-01x/3T2014/course/>

Levy, D. M. (2016). *Mindful tech: How to bring balance to our digital lives*. Boston, MA: Yale University Press.

Moulier-Boutang, Y. (2011). *Cognitive capitalism*. Cambridge, UK: Polity Press.

Scharmer, O. (2009). *Theory U*. San Francisco, CA: Berrett-Koehler Publishers.

MIT. (Producer). (2017). *U.lab: Leading change in times of disruption*. [MOOC]. Retrieved from <https://www.edx.org/course/u-lab-leading-change-times-disruption-mitx-15-671-0x>

Examining the roles of students as sessional teachers in Higher Education

Navé Wald & Tony Harland, University of Otago, nave.wald@otago.ac.nz

The research

This session is inspired by a literature review-based opinion article about the ethical aspects and practical ramifications of having students as sessional teachers in higher education. Students employed as teaching assistants (STAs) have been for quite some time a taken-for-granted phenomenon in higher education. The proliferation of this phenomenon has been linked to the massification and neoliberalisation of higher education, where increasing number of students, dwindling funding and relaxed labour laws both prompted and enabled the casualisation of academic teaching. While there is evidence for benefits associated with employing STAs, there seems to be a trade-off between employing them and maintaining quality teaching. This is because as a group STAs tend to have a limited level of subject and pedagogical knowledge, and limited to no teaching experience. STAs may carry out different teaching tasks in the classroom or lab, but the research has identified assessment feedback, both formative and summative, to be particularly problematic when entrusted to STAs. This is because assessment feedback is seen as both paramount to student learning and as difficult to perfect, even for experienced teachers. In this review of the literature, we found that while the focus was mainly on postgraduate students as teachers, institutions also employ undergraduate students as STAs. Little research has explored this phenomenon, how widespread it is, and the possible implications for student learning and for quality teaching. We found very limited critical discussion of these issues and thus wish to encourage an open and honest debate about the ethical and practical implications of employing undergraduate students as STAs.

Why this topic is important

Students employed as sessional teachers in higher education are a common feature in many institutions. In fact, it can be argued that many institutions will not be able to cover all teaching requirements without them. STAs' importance has been recognized in the literature, as well as their qualities and deficiencies. The latter are mostly framed in terms of STAs' limited levels of subject knowledge, pedagogical knowledge and teaching experience. The most common recommendation in the literature is to provide STAs with more training. These findings usually refer to sessional teachers who are postgraduate students, but there are also instances where such teachers are undergraduate students, with potentially even less knowledge and experience. Therefore, can undergraduate students with no teaching experience become effective teachers following a few workshops and within a short period of time (sometimes a single semester)? Can we as educators, and our institutions more widely, guarantee that students receive quality teaching when, for example, undergraduate teaching assistants are tasked with providing summative and formative feedback on written assignments? Given that STAs, which include undergraduate students, often have a substantial role in the provision of teaching, a more critical examination is needed. This examination should address ethical as well as practical issues associated with employing undergraduates as STAs, but the discussion may also include other sub-groups of STAs. A

critical examination should also acknowledge the multiplicity of tasks within teaching. This would allow for a more nuanced discussion about the perceived appropriateness of different practices involving students as teachers.

How the session will be run

The session will consist of three sections. In the first section, we will provide a brief overview of the topic of students as sessional teachers, situating it in the context of changes in higher education over the last few decades, following with outlining the perceived benefits and challenges associated with having students as teachers. We will pay particular attention to undergraduate students as teaching assistants and to assessment feedback as specific issues that we believe deserve more critical attention. The phenomenon of employing undergraduate students as teachers will be highlighted as a little explored and potentially controversial issue. The presentation will conclude by posing a number of critical questions that will form the basis for subsequent discussions in the session. The second section will be dedicated to identifying and debating the key ethical and practical issues associated with employing undergraduate STAs, drawing on participants' experiences from their own institutions. Participants will be divided into four groups, with two groups focusing on ethical issues and the other two on practical issues. Each group will then present its ideas to the whole group. In the third section, the discussion will focus on what would constitute best-practice regarding the employment of STAs and quality teaching, with a particular attention given to undergraduate STAs.

Integration of the graduate profiles and academic literacy capabilities into the academic curricula: An undergraduate Year 1 case-study

Neda Zdravkovic & Josta Heyligers, University of Auckland, n.zdravkovic@auckland.ac.nz

The research

This case study describes the process of transforming the SOCIOL 100: Issues and Themes in Sociology course curricula to accommodate students' learning needs and develop transferable capabilities as defined in the newly released Graduate Profile. The course is offered twice during an academic year and has approximately 1000 enrolments, resulting in a heavy teaching and marking workload.

We present the process of gathering learning analytics data from the Canvas learning management system to identify key Year 1 students' needs in relation to study, essay writing and exam preparation support, and the way our findings have been applied in the online assessment activity design, in conjunction with the First Year Experience programme and targeted learning sessions of the Faculty of Arts.

The project team engaged the following methods to obtain and analyse data and apply the informed learning design to address key threshold concepts (Ellis, Han & Pardo, 2017; Townsend, Brunetti & Hofer, 2011) and create a variety of academic and information literacy learning and assessment activities:

- Design and release of a week 1 diagnostic quiz and produce analysis report to identify students' learning needs/gaps;
- Analyse web usage data from previous course iterations;
- Obtain feedback from students using Qualtrics online surveying tool on blended learning activities they have completed;
- Map identified needs with newly released UoA graduate capabilities;
- Develop weekly online quizzes
- Re-develop SOC 100: Academic skills online modules (Being sociological; Succeeding in this course; Test preparation; Starting the essay; Research; Crafting your essay; Preparing for the exam; Cite & reference) to enable blended learning engagement and consistent scaffolding/progression of learning;
- Employ SRES Reporter to harvest learning analytics data from Canvas (course LMS)
- Design and integrate the new trigger assessment (5% course mark) into the course structure and timeline;
- Integrate e-learning activities, quizzes and assessment into the SOC 100 Canvas weekly modules.

The impact of the intervention into the year 1 course curriculum and assessment design will be discussed based on the findings of the Course and Teaching Evaluations (Semester 1 2017 cohort) and data analysis.

Why this topic is important

Achieving constructive alignment in curriculum and assessment design is one of the key challenges for faculty teaching staff and course coordinators. A primary driver for this alignment is the attainment of specific capabilities defined through graduate profiles, employability-driven needs, disciplinary knowledge and practice (Barrie, 2005). Traditionally teaching staff have considered content first rather than the way students learn and acquire these capabilities (Stark, 2000). With the recent focus on course learning outcomes, however, a parallel commitment has emerged to develop student academic literacies and integrate these 'seamlessly' rather than 'add them on' into the curriculum (Wang, 2011).

Integrating academic and information literacy (AIL) skills into the academic curricula at individual course level, as well as at undergraduate and research-postgraduate levels, involves a longitudinal team-based collaboration between faculty teaching staff, course coordinators, learning designers, academic advisers, subject/liaison librarians and learning support librarians (Creaser & Spezi, 2014; Curzon, 2004; Brasley, 2008).

At The University of Auckland, New Zealand, several AIL collaborations have been undertaken resulting in the integration of the Graduate Profile (2017) attributes and employability capabilities into the curriculum design, assessment and teaching and learning pedagogy. During this process, different forms of curriculum analysis, adjustments, design and blended learning innovations have taken place.

How the session will be run

The presentation – We will address the collaboration, the application of learning analytics to identify gaps, curriculum analysis, assessment design, the frameworks and pedagogy applied, the online AIL activities we created, evidence of impact data and outcomes.

The workshop activities - The workshop participants will be asked to arrange themselves into groups of three/four for each of the four activities:

Activity 1: Curriculum mapping & analysis against the graduate profile(s) – each group will analyse c-map examples provided and discuss;

Activity 2: Assessment redesign to scaffold study, research and academic skills development - based on the SOC 100 example provided, each group will draft an online assessment activity and report back;

Discussion topic 1: Curriculum transformation to incorporate blended learning and flipped-classroom activities - each group discusses their experience(s) to date and reports back;

Discussion topic 2: Learning analytics - each group discusses any methods applied to date (or would like to apply) to obtain data related to the quality of student learning and level of engagement throughout a semester.

Session wrap-up

References

Barrie, S. (2005). Rethinking generic graduate attributes. *Higher Education Research and Development Society of Australasia*, 27(1), 1-6.

- Brasley, S. S. (2008). Effective librarian and discipline faculty collaboration models for integrating information literacy into the fabric of an academic institution. *New Directions for Teaching and Learning*, 114, 71-88. Retrieved from <http://onlinelibrary.wiley.com/doi/10.1002/tl.318/epdf>
- Curzon, S. C. (2004). Developing faculty-librarian partnerships in information literacy. In Rockman and Associates (Eds.), *Integrating information literacy into the higher education curriculum: Practical models for transformation* (pp. 30-42). San Francisco: Jossey-Bass.
- Creaser, C. & Spezi, V. (2014). Improving perceptions of value to teaching and research staff: The next challenge for academic libraries. *Journal of Librarianship and Information Science*, 46(3), 191 – 206. Retrieved from <https://doi-org.ezproxy.auckland.ac.nz/10.1177/0961000613477678>
- Ellis, R. A., Han, F. & Pardo, A. (2017). Improving learning analytics—combining observational and self-report data on student learning. *Educational Technology & Society*, 20(3), 158 – 170.
- Stark, J. S. (2000). Planning introductory college courses. *Instructional Science*, 28, 413–438. doi:10.1023/A:1026516231429
- The University of Auckland (2017). The Graduate Profiles. Retrieved from <https://www.auckland.ac.nz/en/students/forms-policies-and-guidelines/student-policies-and-guidelines/graduate-profile.html>
- Townsend, L., Brunetti, K. & Hofer, A. R. (2011). Threshold concepts and information literacy. *Libraries and the Academy*, 11(3), 853-869. Retrieved from <https://doi.org/10.1353/pla.2011.0030>
- Wang, L. (2011). An information literacy integration model and its application in higher education. *Reference Services Review*, 39(4), 703-720. Retrieved from <http://hdl.handle.net/2292/20326>

ESOL tertiary teachers' perception of the effect of self-driven professional learning and development on their collective efficacy

Said Zohairy, University of Canterbury, saidzohairy@gmail.com

The research

In every teacher's life, there is a lesson that was not a good one and could be taught better. Also, there are a couple of unanswered questions about improving their daily practices. To what extent do teachers make the best use of these moments, and use them as a motivation towards becoming better teachers? This qualitative phenomenological study aims to understand the phenomenon of ESOL tertiary teachers taking charge of their professional learning and development (PLD) and its effect on teachers' collective efficacy from their own points of view. Self-driven PLD refers to activities that are internally determined, individually initiated, collaboratively and continuously implemented by teachers, and based on teachers' real learning needs. Moreover, collective efficacy has two main strands: professional efficacy (professional identity, career development and professional networking); and classroom efficacy (teaching skills, subject content knowledge). As this study was guided by the philosophical underpinnings of constructivism, I require a methodology that accepts the notions of: a) individuals are interacting with the world and their understanding of it is connected to their cultural, historical and social perspectives; and b) generation of meaning is mainly social. This leads me to Moustakas' (1994) transcendental phenomenological model as it has systematic procedures in data collection and data analysis that have a vital role in building the textural and structural description, and gaining the essence of ESOL teachers' true experiences, feelings, and community culture. In this study, data collection includes in-depth semi-structured interviews with ESOL tertiary teachers in tertiary organizations in Christchurch. Tertiary organizations encompass all post school education such as universities, private training establishments, institutes of technology and polytechnics, and wananga.

Why this topic is important

This qualitative phenomenological research study focuses on tertiary teachers and their perceptions of their own learning and development. ESOL tertiary teachers are in need of learning activities that are bottom-up rather than being top-down activities. This study tends to understand teachers' engagement in activities initiated, implemented and evaluated by them. Recent literature investigated teacher development activities, and traditional PLD activities have been heavily criticised, and many voices call for finding alternative learning strategies for ESOL teachers that value their learning as in-service adult-learners, respect their cognition, and understand their autonomy. These alternative strategies include collaborative learning, sustained enquiry, action research and self-driven learning, to mention a few. This study is important as it introduces one of the most effective factors, however neglected, in the educational process which is teachers' learning and development, and ESOL tertiary teachers as agents of educational reform who can own their professional learning and development and reflect on its effects on their classroom and professional efficacies in a collaborative manner. Although this study focuses on ESOL tertiary teachers, its findings can inform all in-service teachers of other subjects, policy

makers, and teacher educators. This study could also inform PLD specialists by understanding the outcome of teachers' experiences of getting engaged in bottom-up rather than traditional top-down PLD activities.

How the session will be run

Introduction - Introducing attendees to the topic of the session; teachers quickly answer questions like:

Have you ever left your classroom with the feeling of

"Oh, I could have done much better today"

Why were my students not learning today?"

"Why doesn't Anne participate in listening activities; she is a good student in general?"

Presentation - Explaining what is meant by self-driven and collective efficacy (classroom efficacy and professional efficacy, presenting research project, its importance).

Teachers' voice - How can teachers better their performance, and what are their learning choices?

Self-driven meaning and experiences - attendees define self-driven learning and describe their experiences of taking charge of their learning and development.

Self-driven learning and teachers' efficacy - Attendees discuss the effect of being engaged in self-driven learning on teachers' classroom efficacy and professional efficacy.

Future plans as a self-driven learner - Concluding the session and agree on future self-driven PLD plans.

TERNZ 2017 Conference Programme

Wednesday, 29th November All events take place in Sir Geoffrey Peren Building, Massey University, Palmerston North		
2:00 pm	Registration desk opens	
2:30 – 5:00 pm	Workshops	
	Non-traditional students and employability outcomes Susan Geertshuis and Narissa Lewis, University of Auckland Room 3.24	ePortfolios in a changing landscape of learning (bring a laptop) Mandia Mentis, Massey University Room 3.42
5:00 – 6:00 pm	Poster presentations with drinks and nibbles; live classical music from local students Auditorium	
	Work Integrated Learning (WIL) practitioners' perceptions of the value of communities of practice Leanne Nicholas, WelTec, Wellington Smartphones for education - are we ready to leverage their potential? Roxanne Hawi, Eva Heinrich and Sunil Lal, Massey University Self-paced, on-demand consultation times: A novel approach to providing assessment advice through instructor-made videos Giriraj Singh Shekhawat, University of Auckland; Luk Swiatek, Massey University	

Thursday, 30th November

All events (besides the Conference dinner) take place in Sir Geoffrey Peren Building (SGP)

8:15	Registration desk opens					
8:45 - 9:30	Conference opening					
	Mihi whakatau; Conference information and housekeeping (Auditorium)					
9:30 - 10:00	Morning tea (Auditorium)					
10:00 - 11:00	Parallel sessions					
	Migration and cultural contexts: what are the lived experiences of overseas tertiary teaching staff who have moved to New Zealand Ursula Edgington, Independent Scholar and Educational Consultant; Luk Swiatek, Massey University Room 1.02	Curriculum, teaching and powerful knowledge Tony Harland, University of Otago Room 1.03	Teaching the European middle ages in Aotearoa New Zealand: issues and opportunities Chris Jones and Madi Williams, University of Canterbury Room 2.04	Using predictive modelling to identify factors associated with non-participation and under achievement in tertiary education at qualification Level 4 and above David Earle and Marny Dickson, Ministry of Education Room 3.24	Embedding academic numeracy support Julia Crawford, University of Auckland Room 3.42	Project-based learning for business students Siham EL-Kafafi and Olkan Guler, Whitireia, New Zealand Room 1.04

11:00 - 12:00	Parallel sessions					
	Academics as privileged actors: challenge and opportunity in teaching civic engagement Janine Cook, Massey University Room 1.02	Use of learning management system: pedagogical or technological Kwong Nui Sim, Victoria University of Wellington Room 1.03	Teaching sensitive topics Clare Mariskind, Massey University Room 2.04	Building students' enterprise skills through inductive teaching Lukasz Swiatek and Grant Verhoeven, Massey University Room 3.24	Support through virtual spaces: a model for embedding academic support into online courses Narissa Lewis and Marcia Leenen-Young, University of Auckland Room 3.42	Collaborating with mature aged students to facilitate participation in an academic discourse Prue Fry, Massey University Room 1.04
12:00 - 1:00	Lunch (Auditorium)					
1:00 - 2:00	Host groups					
	Host group 1: Pohangina Room 1.02	Host group 2: Turitea Room 1.03	Host group 3: Oroua Room 2.04	Host group 4: Mangaone Room 3.24	Host group 5: Tokomaru Room 3.42	

2:00 - 3:00	Parallel sessions					
	Examining the roles of students as sessional teachers in higher education Nave Wald and Tony Harland, University of Otago Room 1.02	Professional recognition for educators in higher education Elizabeth Beckmann, Australian National University; Piki Diamond, Nell Buissink, Auckland University of Technology Room 1.03	Modified problem based learning in a large stage one competitive course Dennis Hsu, University of Auckland Room 2.04	Reflecting on student agency Linda Rowan, Victoria University of Wellington Room 3.24	Strategies for teaching international students in New Zealand Barbara Kneuer, Whitireia Room 3.42	
3:00 - 3:30	Afternoon tea (Auditorium)					
3:30 - 4:30	Parallel sessions					
	Supporting academics', students' and employers' identification of invisible attributes Amanda Gilbert, Bernadette Knewstubb, Victoria University of Wellington; Barbara Kensington-Miller, University of Auckland; Room 1.02	Supporting ourselves and each other when learning and using a rare research strategy for PhD Rhonda McKelvie and Rachel Webster, Massey University Room 1.03	Integration of the graduate profiles and academic literacy capabilities into the academic curricula: An undergraduate Year 1 case-study Neda Zdravkovic and Josta Heyligers, University of Auckland Room 2.04	Dissolving the walls: learning across the boundaries of tertiary institutions and work Matthew Stevens, Media Design School Auckland/PhD candidate, AUT Room 3.24	Supporting students' transitions Erik Brogt, University of Canterbury Room 3.42	Social inclusion and international students Mulyadi Robin, Monash University Room 1.04

4:30 - 5:30	Host groups					
	Host group 1: Pohangina Room 1.02	Host group 2: Turitea Room 1.03	Host group 3: Oroua Room 2.04	Host group 4: Mangaone Room 3.24	Host group 5: Tokomaru Room 3.42	
6:00 - 7:00	Pre-conference dinner drinks and optional golfing challenge Manawatu Golf Club , 19 Centennial Drive, Palmerston North					
7:00 - 10:00	Conference dinner and HERDSA NZ Research Medal Presentation Manawatu Golf Club , 19 Centennial Drive, Palmerston North					

Friday, 1st December All events take place in Sir Geoffrey Peren Building (SGP)						
8:30	Registration desk opens					
9:00 - 10:00	Parallel sessions					
	ESOL tertiary teachers' perception of the effect of self-driven professional learning and development on their collective efficacy Said Zohairy, University of Canterbury; Room 1.02	Should HERDSA New Zealand publish a journal on teaching and learning in higher and tertiary education? Eva Heinrich, Massey University Room 1.03	Attention-enhancing pedagogies for focus, connection, and critical thinking Heather Thomas, Massey University Room 2.04	Increased flexibility in summative assessments- incorporating student choice in assessment style Pii-Tuulia Nikula, Eastern Institute of Technology Room 3.24	“E-quality” of synchronous tutorials online in supporting distance students' learning journeys Ying Jin, Massey University Room 3.42	

10:00 - 10:30	Morning tea (Auditorium)					
10:30 - 11:30	Parallel sessions					
	Ingesting or digesting the course readings in initial teacher education Sandi McCutcheon, Victoria University of Wellington Room 1.02	Towards mitigating cheating in multiple choice examinations Sathiamoorthy Manoharan, University of Auckland Room 1.03	Comparing problem based learning with didactic lecture-based learning using the teaching of "equine diarrhoea" to veterinary students as a case study Stuart Gordon, Massey University Room 2.04	Group work: developing core competencies that prepare students for 21st century challenges Helen Gaeta and Sue McNaughton et al., Auckland University of Technology Room 3.24	Experiences of undergraduate and postgraduate Business students using online writing tools to support their writing Shireen Junpath and Sue Gough, University of Auckland Room 3.42	
11:30 - 12:30	Host groups					
	Host group 1: Pohangina Room 1.02	Host group 2: Turitea Room 1.03	Host group 3: Oroua Room 2.04	Host group 4: Mangaone Room 3.24	Host group 5: Tokomaru Room 3.42	
12:30 - 1:30	Lunch + HERDSA NZ AGM (from 12:45) Auditorium + Room 2.68					

	Parallel sessions					
	Examining the alignment of self-, peer-, and teacher-assessment in initial teacher education Sandi McCutcheon and Bernadette Knewstubb Victoria University of Wellington Room 1.02	Making sense of the diffusion and adoption of learning and teaching innovations in higher education: a systematic literature review Qian Liu, Susan Gerrtshuis and Jiwon Hyeong, University of Auckland Room 1.03	I scratch your back and you scratch mine: using student peer review to enhance students' feedback experiences in higher education Krishneel Krishna Reddy, University of Otago Room 2.04	Does successful teamwork negate the benefit of competition Paul Kane, Billie Mudie and Hazel Nesar, University of Otago, Wellington Room 3.24	Creative thinking skills as a learning outcome for tertiary STEM students Tanya Evans, Sergiy Klymchuk and Mike Thomas, University of Auckland Room 3.42	
2:30 - 3:00	Host groups					
	Host group 1: Pohangina Room 1.02	Host group 2: Turitea Room 1.03	Host group 3: Oroua Room 2.04	Host group 4: Mangaone Room 3.24	Host group 5: Tokomaru Room 3.42	
3:00 - 4:00	Conference closing (Auditorium)					
	Brief address by Dr Stanley Frielick, Director Ako Aotearoa Host group reports Thank you and handover to next year's team					