



# **The University of Melbourne Teaching and Learning Conference**

4 – 5 June 2019  
Glyn Davis Building  
The University of Melbourne

## Contents

Welcome	3
Keynote Presentation – Day 1	4
Keynote Presentation – Day 2	5
General Information	6
Program day one	7
Program day one - continued	8
Program day two	9
Abstracts	10 - 31

## Contact us

Melbourne Centre for the Study of Higher Education

E: [melbourne-cshe@unimelb.edu.au](mailto:melbourne-cshe@unimelb.edu.au)

T: 03 8344 4605

W: <http://melbourne-cshe.unimelb.edu.au>

***In line with Melbourne CSHE's commitment to the University's Sustainability Plan this program will only be available electronically.***

# Welcome

On behalf of the Conference Organising committee, we would like to welcome you to the 2019 Teaching and Learning Conference.

This conference seeks to bring together academic and professional staff involved in teaching and learning from across the University to share scholarly approaches that contribute to a unique Melbourne experience. The University of Melbourne educational experience prepares well-rounded graduates who are academically outstanding, practically grounded and socially responsible. We seek within our teaching and learning environments to enhance student learning in ways that typify the Melbourne experience, the foundations of which are evidence based.

The six themes of this year's Teaching and Learning Conference are:

- Assessment and feedback
- Innovation in virtual teaching environments
- Transition into university life
- Effective pedagogy in large classes
- Evaluation of teaching
- Transition out to employment

We hope that you enjoy the Conference and it provides you with an opportunity to network with colleagues, forge new collaborations and gain new insights into teaching and learning.

We acknowledge the Wurundjeri people as the Traditional Owners of the land upon which this conference will be held and pay our respects to elders past, present, and future.

*Professor Sophie Arkoudis and Dr Julie Blasioli*

## **Conference Co-Chairs**

### **Organising Committee**

Professor Sophia Arkoudis

Dr Julie Blasioli

Dr Gavin Buskes

Ms Cathleen Benevento

Mr David Israel

Ms Deborah Jones

A/Professor Kate Tregloan

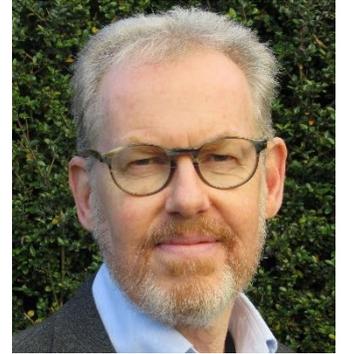
Professor David Williams

# Keynote Presentation - Day 1

## ***What's not to like about teaching excellence? Some critical questions***

Professor William Locke

On the face of it, 'teaching excellence' would seem to be something that we should all be in favour of, rather like motherhood and apple pie, and so is not really open to question. However, Professor Locke will argue that the way it has come to be interpreted in policy discourses and operationalised in assessment and funding schemes in various parts of the world is open to criticism and – at the risk of being charged with heresy – not all it's cracked up to be.



Originally, the term 'teaching excellence' was employed to raise the profile of teaching within universities and to match the emphasis on research, and research excellence, that has become so dominant in the reputations of institutions and individual academics. But even this serves to reinforce the separation of teaching from research and focuses attention on teaching and teachers, rather than on students and their learning, or their university experiences more broadly. It assumes that everyone knows and agrees what excellent teaching (and learning) looks like, regardless of context, and implies that all teachers can (and should) achieve excellence every time, all of the time.

More recently, system-wide efforts to evaluate and reward 'teaching excellence' are often more about government policies and priorities than actually measuring the quality of teaching, let alone encouraging improvements in students' learning. They privilege outputs and outcomes at the expense of processes, and latch onto existing metrics, such as retention/attrition, student satisfaction and graduate employment, rather than devising evidence-based, valid and reliable measures of the quality of teaching and learning. Professor Locke will argue that these initiatives encourage us to chase the metrics, begin to distort how we think about education and its connection with research and, ultimately, diminish rather than expand our conceptions of teaching and learning.

Professor Locke will conclude by suggesting how we might move on from 'teaching excellence' to enhancing the learning opportunities we might provide for our students and, indeed, create for ourselves as educators.

*Professor William Locke is the Director of the Melbourne Centre for the Study of Higher Education.*

*He was previously Reader in Higher Education Studies at the UCL Institute of Education, University College London, where he was Director of the Centre for Higher Education Studies and Deputy Director of the Centre for Global Higher Education.*

*He has published on topics such as higher education policy, management and governance of institutions and the changing academic profession. He has led the development of highly-regarded professional development programs for those working in the higher education sector, including the internationally-renowned MBA in Higher Education Management at the UCL Institute of Education.*

*Professor Locke has held various positions across the higher education sector and is a member of the Publications Committee of the Society for Research into Higher Education (SRHE) and founding Joint Editor of the SRHE journal, Policy Reviews in Higher Education.*

# Keynote Presentation - Day 2

## ***Shaping the Student Experience***

Professor Philippa Pattison, AO, PhD (Melbourne), FASSA

In this talk, Professor Pattison draws on an account of the student experience by Chambliss and Takacs in their 2014 book, *How College Works*, to develop a framework for the student experience that emphasises its relational, navigational and enabling aspects and the interplay among them. Using this framework, she describes some data on common gaps between what students would like to experience and what they report as experiencing and argue that there are some distinctively Australian challenges in creating an excellent student experience. She suggests that, just as curricular experiences benefit from careful, creative and evidence-informed design, so too do broader aspects of the student experience. She concludes by sketching what she sees as some key design considerations for an outstanding student experience.



*Professor Philippa (Pip) Pattison was appointed Deputy Vice-Chancellor (Education) at The University of Sydney in June 2014. As Deputy Vice-Chancellor (Education), Professor Pattison is responsible for the University's strategy and vision for teaching and learning and students' educational experience. She oversees institution-wide development of better support for student learning, including the University's approach to curriculum renewal, new thinking in pedagogy, learning and teaching analytics, e-learning and quality assurance for learning and teaching.*

*A quantitative psychologist by background, Professor Pattison began her academic career at the University of Melbourne, and has previously served as president of its Academic Board and most recently as Deputy Vice-Chancellor (Academic).*

*The primary focus of Professor Pattison's research is the development and application of mathematical and statistical models for social networks and network processes. Recent applications have included the transmission of infectious diseases, the evolution of the biotechnology industry in Australia, and community recovery following the 2009 Victorian bushfires.*

*Professor Pattison was elected a Fellow of the Academy of the Social Sciences in Australia in 1995. She was named on the Queen's Birthday 2015 Honours List as an Officer of the Order of Australia for distinguished service to higher education, particularly through contributions to the study of social network modelling, analysis and theory, and to university leadership and administration.*

# General Information

## Internet/Wifi

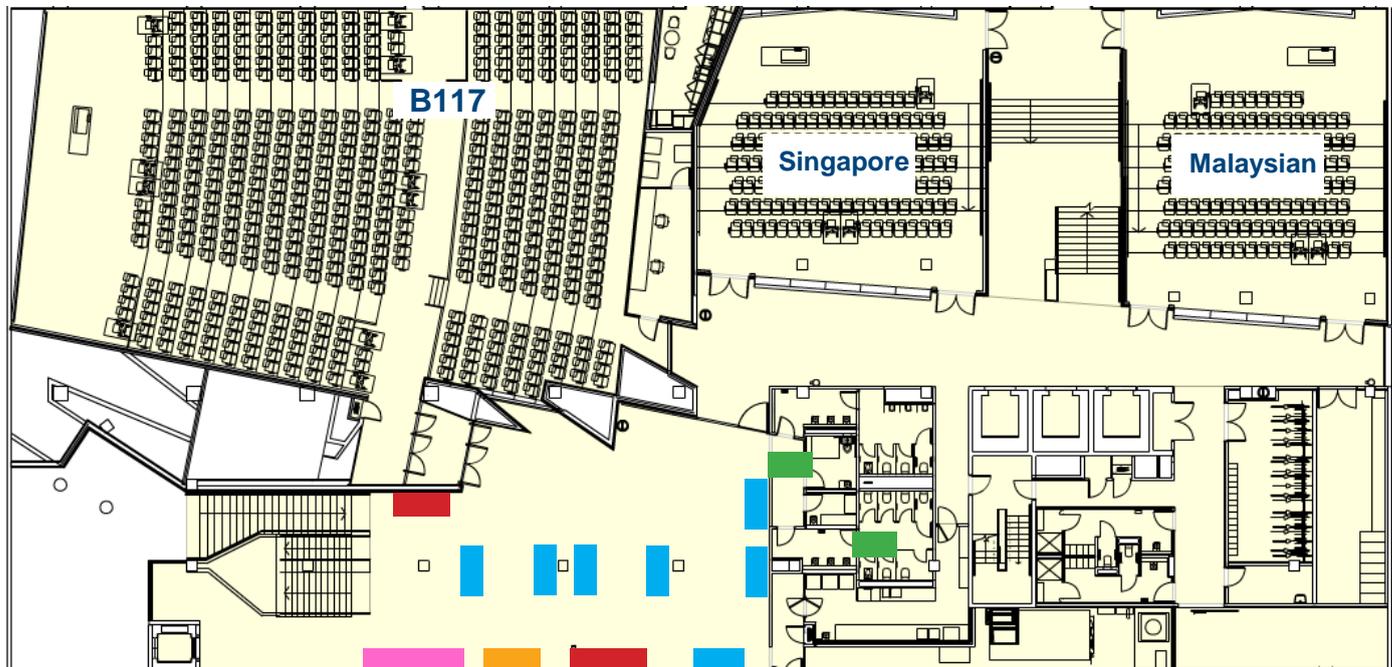
To log onto the wifi:

1. Go to WIFI on your device and select Uniwireless
2. A pop up will appear
3. Use your unimelb username and password to connect

## Mobile devices

As a courtesy to other participants, please ensure that all your mobile devices are on 'silent' mode during presentations.

## Venue floorplan and map



## Key

- Registration desk/kiosks
- Catering
- Dietary requirements
- Bathrooms
- Learning Environments



# Program day one – Tuesday 4 June 2019

8.30am - 9.00am		Registration		
9.00am – 9.10am		Acknowledgement of Country and Welcome Professor Duncan Maskell ( <i>Vice-Chancellor</i> )		
Keynote presentation (B117 Theatre)				
9.10am – 10.25am		What's not to like about teaching excellence? Some critical questions Professor William Locke ( <i>Director, Melbourne Centre for the Study of Higher Education</i> )		
10.30am – 11.30am		Concurrent session 1		
B117 Theatre		Singapore Theatre		Malaysian Theatre
Chair: Deborah Jones		Chair: Dr Julie Blasioli		Chair: Dr Chris Deneen
10.30am - 11.00am	When we don't know what we don't know: Supporting the rapid and dynamic development of online learning activities Meredith Hinze ( <i>Arts</i> ) & Bronwyn Disseldorp ( <i>University Services</i> )	Surveying the digital literacy landscape through the student lens Kwang Cham, Mary-Louise Edwards, Andrea Philips & Lisa Kruesi ( <i>MDHS</i> )	Empowering students for group work: an integrated program of in-class real (face-to-face) and virtual reality activities Angelina Y. Fong, Charles P. Sevigny, David A. Williams, Theresa Jones & Raoul A. Mulder ( <i>MDHS</i> )	
11.00am - 11.30am	Team member feedback with Qualtrics Natalie Courtman ( <i>FVAS</i> ), Bronwyn Disseldorp & Damian Sweeney ( <i>University Services</i> )	Building digital capabilities: What students want, what teaching staff need Mary-Louise Edwards, Trent Hennessey & Andrea Phillips ( <i>Academic Services</i> )	Creating belonging at scale: An online quest-based approach Logan Balavijendran & Imran Zaveer ( <i>University Services</i> )	
11.30am – 12.00pm		Morning tea		
12.00pm – 1.30pm		Concurrent session 2		
B117 Theatre		Singapore Theatre		Malaysian Theatre
Chair: Dr Gavin Buskes		Chair: Samantha Marangell		Chair: A/Prof Kristine Elliott
12.00pm - 12.30pm	Integrating employability skills into a postgraduate accounting group assignment Matt Dyki & Valerie Cotroneo-Baird ( <i>FBE</i> )	From premise to practice: Culturally and linguistically diverse students in transition Xia Cui, Dongmei Li, Megan McIntosh & Nira Rahman ( <i>Arts</i> )	MuSHRoM - Melbourne School of Health Science Research Methods platform Betina Przybylak ( <i>MDHS</i> )	
12.30pm - 1.00pm	Multiple Choice Questions for test-enhanced learning Simone Elliott, Anna Ryan & David Swanson ( <i>MDHS</i> )	'I don't want to be erased': LGBTI+ inclusion in curriculum Megan Sharp & Lee Hazel ( <i>MDHS</i> )	Development and deployment of virtual reality (VR) learning tools at scale Charles P. Sevigny, Jairus B. Bowne, Keenan J. Hellyer, Christian P. Fabris, Angelina Y. Fong, Yossi Rathner, Dawn Gleeson & Lynette O'Neill ( <i>MDHS</i> )	
1.00pm - 1.30pm	Using student self-assessment to promote self-reflection and improve academic judgement: A pilot study Amber Willems-Jones ( <i>MDHS</i> )	Ready to study: Incorporating student voices to support transition Morag Burnie & Logan Balavijendran ( <i>Uni Services</i> )	High tech AND high touch - Building academic and wellbeing capabilities in a high growth subject Rachel Colla & Gavin Slemp ( <i>MGSE</i> )	
1.30pm – 2.30pm		Lunch		

Assessment and feedback	Transition into university life	Effective pedagogy in large classes
Peer review of teaching	Transition out to employment	Innovation in virtual teaching environments

# Program day one – Tuesday 4 June 2019 – continued

2.30pm – 4.30pm				Concurrent session 3		
B117 Theatre		Singapore Theatre		Malaysian Theatre		
Chair: A/Prof Elizabeth Tudor/ Prof Gregor Kennedy		Chair: A/Prof Mike Prosser		Chair: Dr Stuart Palmer		
2.30pm - 3.00pm	<b>Featured presentation</b> Simulation and clinical skills acquisition: The transition from novice to expert <b>Professor Sarah Baillie (University of Bristol)</b>	Self-directed learning in large classes: how interaction influences agency and curiosity for first year MD students <b>Ben Symon (MGSE), Jan van Driel (MGSE) &amp; Odilia Wijburg (MDHS)</b>		The WIL to work: Designing non-placement WIL through authentic assessment <b>Lea Campbell (Arts) &amp; Kathryn Coleman (MGSE)</b>		
3.00pm - 3.30pm		From Lego to Bingo: Experience of increasing interactive learning in lectures <b>Lauren Sanders, Justin Tse &amp; Jayne Lysk (MDHS)</b>		Using data to inform transition to employment <b>Brett Quayle &amp; Naomi Evans (University Services)</b>		
3.30pm - 4.00pm	Design, produce, activate: What does innovation in educational video look like? <b>Jamie Morris (University Services)</b>	<del>Extended role-play exercises in large classes</del> <del>Barbara Keys (Arts)</del> <b>CANCELLED</b>		Job Ready: An employability short course for STEM students <b>Madeleine Yewers, Turlough Crowe &amp; Clayton Carner (Science)</b>		
4.00pm – 4.30pm	Melbourne InnovatEd Program – An incubation program for EdTech related innovations <b>Mim Ingvarson (FBE)</b>	Catch them all and catch them now...A live student participation tool that ticks all the boxes and draws new ones <b>Saw Hoon Lim (MDHS)</b>		Science and art adventures: Learning about work at uni <b>Kathryn Coleman (MGSE) &amp; Rose Hiscock (Science Gallery)</b>		
4.30pm - 5.30pm				Networking drinks (Foyer outside B117 theatre)		

Assessment and feedback	Transition into university life	Effective pedagogy in large classes
Peer review of teaching	Transition out to employment	Innovation in virtual teaching environments

# Program day two – Wednesday 5 June 2019

8.30am - 9.00am		Registration		
		Keynote presentation (B117 Theatre)		
9.00am – 10.15am		Shaping the student experience Professor Pip Pattison ( <i>Deputy Vice-Chancellor [Education], The University of Sydney</i> )		
10.20am – 11.20am		Concurrent session 4		
		B117 Theatre	Singapore Theatre	Malaysian Theatre
		Chair: A/Prof Kate Tregloan	Chair: A/Prof Kris Elliott	Chair: A/Prof Chi Baik
10.20am - 10.50am	A digital assessment and feedback resource for the School of Health Sciences and Melbourne Dental School <b>Kwang Cham, Anthea Cochrane, Megan Keage, Rebecca Wong &amp; Elaina Kefalianos (MDHS)</b>	Factors influencing retention in STEM majors <b>Deborah King &amp; Jennifer Palisse (Science)</b>	<b>SYMPOSIUM</b> <b>10.20-10.40:</b> Peer review of teaching in Australian higher education: A systematic review <b>Alexandra Johnston (FBE &amp; MGSE)</b> <b>10.40-11.00:</b> Peer reflections on peer review <b>Bianca Fileborn, Mark Wood &amp; Claire Loughnan (Arts)</b> <b>11.00-11.20:</b> Introduction to the Melbourne Peer Review of Teaching <b>Chi Baik (MGSE)</b>	
10.50am - 11.20am	Does veterinary curriculum promote the development of evaluative judgement skills? <b>Jennifer Carter (FVAS)</b>	Supporting Indigenous students' transition into the BSc <b>Mick Moylan, Syd Boydell (Science), David Collis (Arts), Lisa Godinho, Michelle Livett, Daniel Pyke, Kinjia Munkara-Murray &amp; Chelsie Davies (Science)</b>		
11.20am – 11.45am		Morning tea		
11.45pm – 1.15pm		Concurrent session 5		
		B117 Theatre	Singapore Theatre	Malaysian Theatre
		Chair: Dr Gavin Buskes	Chair: Dr Sarah French	Chair: Dr Gwilym Croucher
11.45am - 12.15pm	Communicating effectively with students about work: Revisiting the assessment-feedback loop <b>Steve Campitelli (University Services)</b>	Evolution of collaborative learning practice in the Faculty of Veterinary and Agricultural Sciences <b>Liz Tudor, Jennifer Carter &amp; Sarah Frankland (FVAS)</b>	Engaging students with experiential learning and gamification through the use of simulations <b>Matt Dyki &amp; Maggie Singorahardjo (FBE)</b>	
12.15pm - 12.45pm	Providing meaningful and useful feedback on assessment a pilot study <b>Ralph Hampson (MDHS) &amp; Morag Burnie (University Services)</b>	Large cohort teaching in the veterinary anatomy dissection lab: Ensuring the development of Day 1 skills <b>Christina Murray (FVAS)</b>	Making immersive worlds and learning experiences for virtual teaching environments in the Faculty of Arts <b>Meredith Hinze, Mitch Buzza, Daniel Hayward &amp; Grace Quason (Arts)</b>	
12.45pm – 1.15pm	“Why I failed”: Analysis of students’ responses to a self-assessment tool <b>Guido Ernst &amp; Logan Balavijendran (University Services)</b>	Thinking creatively, critically and collaboratively: how to teach these highly desired graduate attributes <b>Kwang Cham (MDHS), Heather Gaunt (Academic Services) &amp; Clare Delany (MDHS)</b>	Changes and opportunities: Transition to the new Canvas LMS <b>Bronwyn Disseldorp &amp; Fiona Broussard (University Services)</b>	
1.15pm – 1.20pm		Wrap-up and Close (B117 Theatre)		
1.15pm – 1.20pm		Wrap-up and Close Professor Sophie Arkoudis ( <i>Associate Director, Melbourne Centre for the Study of Higher Education</i> )		
1.20pm – 2.00pm		Lunch (Conclusion of conference)		

Assessment and feedback	Transition into university life	Effective pedagogy in large classes
Peer review of teaching	Transition out to employment	Innovation in virtual teaching environments

# Abstracts

## Concurrent session 1

---

### B117 Theatre

---

#### **When we don't know what we don't know: Supporting the rapid and dynamic development of online learning activities**

*Meredith Hinze (Arts) & Bronwyn Disseldorp (University Services)*

The development of learning activities commonly occurs within a fully structured and planned learning design, however a need for support to build or refine an individual activity can emerge just before or even during a teaching period. The considerations required to implement online activities involve multiple perspectives that need to come together. Alignment with the University's Flex AP framework and philosophy, the use of digital technologies to create higher quality and more flexible assessment delivery opportunities for both staff and students, together with the migration to Canvas LMS, provide impetus for an increased use of online assessments through the opportunity for subject renewal. Support for teaching staff in the design of online assessments is therefore, extremely timely. Recent research into Learning Design, identifies the need for effective support tools that provide flexibility, to enable educators to revise, refine and reflect before and during implementation. The study highlights there is opportunity encompassed in practical work to build on approaches. (Bennett, Agostinho & Lockyer, 2017). The very real context of designing and implementing online assessments that reflect/match pedagogical intent, involve multiple decision points. How can the information needed to set the conditions that are involved in the intended student experience, timing and sequencing of activities, assessment submission, marking and feedback, be navigated, when support staff and teaching staff do not know what each other do not know? We outline a framework of processes to rapidly share essential knowledge between various roles of teaching teams, learning designers and online learning platform experts. Drawing on examples from the Faculty of Arts, we propose a checklist of considerations for the design of online quizzes/tests, addressing both the student perspective and teaching staff interface. A model for handling practical workflow implementation and testing will also be shared.

#### **Team member feedback with Qualtrics**

*Natalie Courtman (FVAS), Bronwyn Disseldorp & Damian Sweeney (University Services)*

Group work forms an integral part of the curriculum of the Doctor of Veterinary Medicine (DVM) program to assist students with developing the skills required for veterinary practice. Academic staff of the Melbourne Veterinary School, in collaboration with Learning Environments, developed online resources for students to learn about improving group work, along with a survey tool to evaluate and provide feedback to students on their group work. Second year DVM students undertaking group work case studies were provided with resources outlining the benefits of group work, group dynamics, dealing with conflict, and provision of constructive feedback. Students were required to complete a formative survey after completion of three semester one case studies, encouraging them to reflect on their own contribution to the group activity, and to provide anonymous feedback to team members on their contribution. These surveys allowed input on multiple aspects of group dynamics and were customised to the group membership. The survey resulted in generation of a self and peer-evaluation score

against each of the aspects of group dynamics surveyed. Consolidated survey results were available for staff at the student, group, and subject level to allow staff to identify students requiring assistance with development of their teamwork skills, and to identify any dysfunctional groups. To evaluate the effect of this reflective practice and feedback on student performance, a research project was designed to assess changes in self and peer evaluation between individuals over time, and between cohorts given single or frequent feedback reports. This presentation will present the preliminary findings of the original research project into this survey process and its impact on group work, and demonstrate the system developed through the Qualtrics survey platform, which is available for wider use in the University.

---

## Singapore Theatre

---

### **Surveying the digital literacy landscape through the student lens**

*Kwang Cham, Mary-Louise Edwards, Andrea Philips & Lisa Kruesi (MDHS)*

Introduction/background: Students value and recognize the role digital literacy has in enhancing their employability. However, these digital competencies are often viewed as generalized expectations of students today. Without gaining a deeper understanding of students' digital capabilities, this will undermine the benefits of technology-enhanced educational activities. Aim/objectives: This study aims to evaluate the needs, practices and attitudes of students in the digital environment. We want to explore their online habits regarding their personal resources and software familiarity. Students' perceptions and preferences relating to digital technology ownership, usage, and computing experience will be studied. Methods: Undergraduate (Oral Health) and postgraduate (Optometry, Physiotherapy, Speech Pathology and Dental Surgery) students across all year levels attended a digital literacy workshop and completed pre- and post-surveys. Results: Of the students 72% (n=343) reported using online tools several times a day, with Facebook (95%) being most frequently used. Approximately 50% wanted to learn how to create applications, websites, and 3D printing. Most of the students (81%) reported that being digitally competent will enhance their career and professional development. Only 35% felt that this was achieved during their course of study, and 89% stated more University support and services is warranted. Discussion: Students regarded being digitally competent as relevant and important but wanted deeper discipline-relevant content. Pre-assessment or indication of student prior knowledge may assist in segmenting the audience for improved applicability. Conclusions: A stronger connection needs to be made between digital skills and employability outcomes. There is a need for Universities to increase awareness, training and support in digital literacy competency.

### **Building digital capabilities: What students want, what teaching staff need**

*Mary-Louise Edwards, Trent Hennessey & Andrea Phillips (Academic Services)*

As the digital transformation unfolds, digital capabilities are becoming increasingly important for students' employability and lifelong learning. Digital capability concerns the ability to identify and use information, data, and technology confidently, creatively, and critically to effectively meet the demands and challenges of living, learning, and working in a digital society. Recognising the leading role that academic libraries play in co-developing university-wide programs in this space, the University of Melbourne Library formed a working group to advance this initiative in 2018. With guidance from academic and professional staff, student representatives, and an international consultant (Helen Beetham), two research projects have

recently been completed which reveal clear, but surprising findings about what students want and what teaching staff need when it comes to building digital capabilities. First, a customer experience (Cx) methodology was used to understand the digital capability needs, preferences, and practices of both students and teaching staff. Strong themes emerged from student interviews about their discipline-specific needs, assessment-driven motivation, pragmatic and personalised selection and use of tools, and desire for experimentation and play in digital commons spaces. For academics, clarification of the institutional mandate for building students' digital capabilities and support for professional development were central concerns. Complementing this Cx research, surveys and a facilitated workshop were undertaken with learning and teaching staff within Scholarly Services. Interestingly, a perception-reality disjuncture was identified, with staff reporting low levels of confidence in building digital capabilities despite engaging in a wide range of digital teaching practices. Professional development needs were diverse and distinctive, but complexified by blind spots (staff being conscious of not knowing what they don't know). The findings support the value of digital capabilities frameworks to enable staff to reflexively self-select desired professional development and work collaboratively with academics to support curriculum and assessment innovation designed to build students' digital capabilities.

---

## Malaysian Theatre

---

### **Empowering students for group work: an integrated program of in-class real (face-to-face) and virtual reality activities**

*Angelina Y. Fong, Charles P. Sevigny, David A. Williams, Theresa Jones & Raoul A. Mulder (MDHS)*

Collaborative or group learning is recognised as an effective teaching and learning methodology; and is a key graduate attribute at the University of Melbourne. It is a major employability and transferrable skill sought by future employers. While this is highly valued by the university, many studies have found student perception of group work is poor. This perception of group work may be a reflection of the lack of resources to facilitate students in navigating the challenges of working in a group. Students are often placed into group work situations without guidance or resources and the instructors are not empowered to guide the students in how to work in a group due to lack of information. This project will develop a suite of online learning tools, and in class activities, to allow students to better manage the complex social interactions and group dynamics in team work. To date, we have deployed a series of in-class activities including face-to-face individual and group "survival" exercises. These activities are designed for the student to first work independently then as a group to come up with group 'survival' strategies to showcase the value of collective knowledge and experience. We have also used a virtual reality 'game' (Keep Talking and Nobody Explodes) that requires the team members to communicate clearly and plan collaboratively. We have successfully deployed both of these tools individually and in-series in subjects with enrolments from 30 – 300 students. The aim of these tools is to provide students with an opportunity to identify their individual skills and contribution to a group. The goal of these activities is to help alleviate some of the stressors and fear associated with group work and provide the students with a better learning experience. Funding: University Learning and Teaching Initiative Grant

## **Engaging students with experiential learning and gamification through the use of simulations**

*Matt Dyki & Maggie Singorahardjo (FBE)*

As in many areas accounting students universally have wrestled for many years with the challenge of contextualising their learning when they lack sufficient real-world experience. These challenges are inherent as students need to learn both detailed descriptive knowledge and complex reasoning to understand the intricacies of real-world problems. In conjunction with Smart Sparrow, a simulation of the revenue process has been created that entails 30 distinct decisions, which interactively influence revenue process outcomes. To enhance realism, elements of randomisation are also appropriately introduced, encouraging repeated play through to develop the vicarious experience of revenue process design in a dynamic real-world setting. Students can see the effect of their choices on a range of Key Performance Indicators, both financial and non-financial. Taking a practitioner focus this presentation will focus on the development of the simulation, funded as a result of a University Learning and Teaching Initiative grant, and the student outcomes. Included will be how the simulation was modelled, tested and rolled out, uses as a basis of class discussion as well as student feedback.

## **Concurrent session 2**

---

**B117 Theatre**

---

### **Integrating employability skills into a postgraduate accounting group assignment**

*Matt Dyki & Valerie Cotronei-Baird (FBE)*

The aim of this conference presentation is to demonstrate an assessment strategy for educating future accounting professionals with the employability skills required for the contemporary workplace. This assessment strategy is born out of the call by accounting professional bodies and industry for changes to accounting education to prepare accounting graduates for the changed accounting profession. One area of change is the integration of a set of complex employability skills required for the future accounting profession which are considered key to the successful employment outcomes of accounting graduates for the contemporary accounting workplace. Central to this call is the emphasis that that key employability skills should be included in the accounting curriculum alongside technical skills. The employability skills integrated into the assessment task discussed during this presentation are: communication (verbal and written), problem-solving, critical thinking, teamwork, adaptability, agility and resilience. Exemplars of the assignment, rubric and feedback are provided together with evidence of the impact of this new approach on the teaching and assessment experience for teaching academics and on student learning and acquisition of the skills will be presented. The participants will have the opportunity to discuss the call for integrating employability skills in university curriculum, evaluate the instructional assessment presented and begin to identify and plan for the integration of selected employability skills into their own subject curriculum.

### **Multiple Choice Questions for test-enhanced learning**

*Simone Elliott, Anna Ryan & David Swanson (MDHS)*

The role of feedback in test-enhanced learning is an understudied area that has potential for valuable impact in health professions education. Optimising feedback is an especially

promising approach to optimising formative assessment that supports transfer of learning. The Department of Medical Education is currently involved in a multi-institutional study (with University of Toronto) investigating the impact of different forms of post-test feedback on transfer of biomedical knowledge within test-enhanced learning framework. Our hypothesis is that transfer of knowledge will be significantly greater when feedback contains elaboration of conceptual knowledge necessary for building a diagnostic schema relative to re-presentation of test items with the correct responses, and relative to feedback containing a brief explanation of the distractors. Previous investigations of test-enhanced learning via Multiple Choice Questions (MCQs) show a robust benefit for the recall of knowledge. However, medical education must prepare students for more than recall. Especially important is the ability of students to transfer their learning beyond the classroom to other learning situations or clinical contexts. Therefore, testing to support transfer is likely to be ineffective unless the testing activity (and/or feedback) promotes greater elaboration of conceptual knowledge and schema building. This presentation draws on our experience in developing MCQ items for use in this experiment. Review of our existing multiple-choice question item bank revealed most of our questions were focused on recognition of a classical patient presentation. In order to proceed with our experiment, we needed to construct an entirely new bank of MCQ items with associated feedback. With a deliberate focus on overarching learning objectives, and avoidance of stereotypes, MCQ items can be created to require (and reward) use of conceptual knowledge. For this to occur, the concept being tested must be considered during construction of the components of the question (stem, lead-in, options) and related feedback.

### **Using student self-assessment to promote self-reflection and improve academic judgement: A pilot study**

*Amber Willems-Jones (MDHS)*

Effective communication is a fundamental graduate attribute that improves student employability for all university graduates. Unfortunately, in this current world of rapid communication through SMS, Facebook posts and Twitter feeds, writing skills appear to be steadily declining in the students enrolling in our courses. Writing paragraphs of text can be a daunting task (Defazio, 2010); with academic writing posing an even greater obstacle to students in STEM. In addition to academic writing being onerous due to inexperience, students often lack academic judgement and do not engage effectively in adequate self-reflection (i.e. critiquing their own work) as a result of being time poor or not knowing what to compare their work to. Formative assessments can be beneficial in these circumstances, providing students with constructive, tailored and informative feedback without the distraction of grades (Sadler, 1998). Students in BCMB20005 (a practical-based introductory biochemistry and molecular biology subject) are taught the 'how-to' of scientific writing before having to submit three formal scientific reports based on the experimental results they generate. In 2017 we introduced a formative assessment that students could use as a learning tool to benchmark their expectations and foster academic judgement. In 2018, students were asked to self-assess and submit an associated marking rubric. Here, I will highlight the findings from this pilot study illustrating that (a) many BCMB20005 students have low academic judgement at the outset of their assessments; (b) BCMB20005 students overestimate their achievements; and (c) BCMB20005 students who engage in self-reflection through the act of self-assessment (via this first formative assignment) have, on average, improved outcomes in future assessments compared to those who do not self-assess. In light of these results, a further study is being designed to examine improvements observed when students self-assess and academically judge their own work for all written assessments.

**From premise to practice: Culturally and linguistically diverse students in transition**

*Xia Cui, Dongmei Li, Megan McIntosh & Nira Rahman (Arts)*

The concept of internationalisation has made its way firmly into the discourses and realities of higher education, and the academic discussion around the concept of 'diversity' and its influence has also developed significantly in recent years. Consequently, innovative approaches to teaching and learning have been introduced to ensure efficacious transition into university life for all students. This presentation will provide an overview of a holistic approach to teaching innovations by describing four initiatives as part of Arts Teaching Innovation at the Faculty of Arts in response to its increasing student diversity. The four key initiatives include: An Integrated Academic Success model wherein academic skills including collaborative learning, critical thinking and research skills, are scaffolded in the curriculum, to address skill sets required in assessment tasks. This model is aimed at developing a formative and student-centred assessment structure to enhance learning experience and outcomes. Will, Skill and Thrill: Learning Together is a project working towards creating inclusive spaces for culturally and linguistically diverse participants by introducing concepts of positionality and intersectionality in recognising differences to build inclusive and active learning community. Building learning communities around different forms of diversities creates connections and collaborations among students, faculty, academic and professional staff to ensure overall academic success. Life in Oz Podcast Project wherein a team of students produces the podcast by sourcing stories from their peers of diverse sociocultural backgrounds, organising discussion of issues that are of interest to the students, making connections, and by doing so building a network to encourage students' engagement with one another, as well as with the university. The Global Leaders Program wherein international students act as leaders, translators and context experts to support their peers considering study abroad in their home country. This program privileges the immense knowledge (cultural, linguistic and academic) that international students contribute to the broader goals of internationalisation at the University of Melbourne.

**'I don't want to be erased': LGBTI+ Inclusion in Curriculum**

*Megan Sharp & Lee Hazel (MDHS)*

In 2016, the Trans Pathways study reported 78.9% of trans and gender-diverse young people had experienced issues with school, university or TAFE, and socially are at much greater risk of harm (79.7%) than their cisgender counterparts (10.9%). The Department of Physiotherapy, in collaboration with MDHS Equity, Diversity and Staff Development, and Learning and Teaching, has undertaken a project exploring how students, staff and clinical educators experience the interplay between curriculum and diverse genders and sexualities. Overwhelmingly, our research suggests that erasure is a key barrier to learning outcomes and student engagement. Physiotherapy students consider sexuality and gender to be critical components of health literacy regardless of their own identity, and yet do not see diverse genders or sexualities represented in course curriculum or professional health education settings. Staff and clinical educators are highly reflexive in this space, yet they require support in order to actively include these specific diversities in their pedagogical practice. Extending results to an interdisciplinary scope, this paper presents some of the practical ways teaching and learning staff might include diversity into their curriculum, without tokenism or fear of getting it wrong. Further, by addressing diversity and inclusion from an evidence-based perspective specific to discipline, we may assist in reducing rates of harm for trans and gender-

diverse people.

### **Ready to study: Incorporating student voices to support transition**

*Morag Burnie & Logan Balavijendran (University Services)*

This presentation reports enhancements to Ready to Study\*, an online adaptive diagnostic module developed by Academic Skills aiming to facilitate student transition into the University of Melbourne. The module presents learning scenarios and asks students to reflect on their behaviour in those situations (for example, note-taking during lectures). While preliminary results were promising, with students (n=1500) reporting greater awareness of study skills (47%), that the feedback was helpful (54%), and that they would be able to apply what they had learned in their studies (52%), refining and enhancing content was identified as a key area for development. The second iteration aimed to achieve this by incorporating students' experiences of transition. Participants who had completed Ready to Study were sent an online form mid-way through the semester and asked to submit short video reflections of their experiences, aligned to different sections of the module (e.g. tutorial participation). Integrating student voice directly provides authentic content from relatable sources and represents a shift from both "hierarchical models of expertise" (Boville, Cook-Sather, & Felten, 2011, p. 133) and deficit models of support, as it foregrounds students' experiences rather than highlighting potential skills gaps (Haggis, 2006). Moreover, these reflective videos showcase a range of different perspectives, helping to "support dialogue across differences" (Bovill, Cook-Sather & Felten, 2011, p. 140), and providing a range of models to support students in forming a new, individual learner identity (Biggs, 2012). The modular branching design of the module means students can filter video reflections by relevance to their course of study or interest. This approach presents an innovative, scalable and sustainable approach for gathering and incorporating student voice to create more authentic and engaging transition experiences. Future work aims to deepen student-staff partnership through co-creation. \*Preliminary findings were presented at ASCILITE 2018

---

## **Malaysian Theatre**

---

### **MuSHRoOm - Melbourne School of Health Science Research Methods platform**

*Betina Przybylak (MDHS)*

Within the School of Health Sciences there are ten research methods subjects taught within six entry-to-practice programs. The School is developing a research methods platform (MuSHRoOm = Melbourne School of Health Sciences Research Methods), that will provide best practice research methods content for these subjects, thus consolidating the teaching of research methods across the School. The platform will hold a repository of content that research methods subject coordinators can utilise to create their own unique wholly online subjects that are tailored to their specific discipline and teaching and learning requirements. Research methods coordinators will access MuSHRoOm, selecting modules of content to add to their own subject instances. Modules will include prerequisite knowledge that the subject coordinator must consider when mapping their own subject. For example, if the module 'Ethics' requires prior knowledge of research paradigms, the subject coordinator will not be able to include 'Ethics' in their subject instance without also including 'Paradigms' as a prior module. Each module will also include an indicative duration so that coordinators can ensure their subjects contain balanced levels of content. In their separate subject instance coordinators will add their existing assessment to the module content and add discipline specific activities

and content that contextualise the content appropriately. It is anticipated that once this platform is established within the School, cross Faculty and cross University collaboration will expand it into a truly interdisciplinary and collaborative virtual learning environment. This presentation will share the intent and design of the platform; seek participant input into the potential of the platform moving forward; and explore where a platform repository approach may be utilised in learning contexts beyond the initial research methods foci. Opportunities for collaboration and co-creation for future endeavours may well be a result of this dialogue.

### **Development and deployment of virtual reality (VR) learning tools at scale**

*Charles P. Sevigny, Jairus B. Bowne, Keenan J. Hellyer, Christian P. Fabris, Angelina Y. Fong, Yossi Rathner, Dawn Gleeson & Lynette O'Neill (MDHS)*

As VR technology becomes increasingly affordable and accessible to the general public, opportunities now exist to deploy this powerful tool in an educational setting. VR learning tools can accomplish outcomes previously impossible or prohibitive, such as distance learning, immersion in otherwise hazardous environments, visualisation of 3D structures, and simulated empathic experiences. While the value of VR in education is well recognised, it has often been criticised for its lack of scalability in large student cohorts, and a slowly growing library of educational resources. The Virtual Reality Learning Studio (VRLS) within the School of Biomedical Sciences is developing VR learning tools to be deployed to undergraduate and graduate students in the Biomedical Sciences: most notably, an animated VR human heart thanks to MDHS Learning and Teaching Seed Funding, and a University Learning and Teaching Initiatives Grant. The VR Human Heart is a modular application with incremental, scaffolded learning experiences designed for deployment to cohorts ranging from first-year Biology students through to graduate medicine and reflects clinically accurate detail thanks to collaboration with cardiologists at the Royal Melbourne Hospital. Within the program, students can hold a beating human heart in their hand, make structures transparent to see inside, learn anatomical features in a 3D interactive environment, observe the flow of blood through the chambers, and use a virtual mechanical pump to understand the relationship between pressure and volume, and the need for valves to prevent backflow. This study will describe the large-scale deployment of the VR Human Heart application to over 2500 first-year Biology students using the 16 Oculus Rift VR interfaces available in the VRLS over a 14-day period. We will describe 1) deployment strategies, challenges, and outcomes, 2) data regarding students' self-perceived learning experience, and 3) a brief overview of the software development process.

### **High tech AND high touch - Building academic and wellbeing capabilities in a high growth subject**

*Rachel Colla & Gavin Slemp (MGSE)*

Wellbeing, Motivation and Performance is an undergraduate breadth subject that has grown from 90 enrolments in 2013 to 650 in 2019, representing growth of over 700% in 5 years. This subject consistently rates very high on SES results and was ranked in the top 10 subjects recommended by students. With a core focus on building personal academic and wellbeing capabilities, this subject has been highly successful in supporting the often-challenging transition into university life. This presentation will outline the evolution of pedagogy and systems to maintain the high level of student experience and outcomes through significant and sustained growth. We will outline our experience and learning in shifting to a blended approach to incorporate virtual teaching practices and assessment, while growing the experiential learning model in tutorials. We will also outline the more recent strategic focus to

enhance the academic skills of students through both implicit and explicit curriculum. The results of a thematic analysis of student feedback will be presented to demonstrate some of the impact of these teaching practices on the development of core graduate capabilities such as integrity and self-awareness, active citizenship and academic distinction. This session will conclude by highlighting the dual impact on enhanced student experience and efficient resourcing that have resulted, enabling a scalable solution to support ongoing growth; a model that can be replicated across a broad range of subjects.

## Concurrent session 3

---

### B117 Theatre

---

#### **Simulation and clinical skills acquisition: The transition from novice to expert**

*Professor Sarah Baillie (University of Bristol)*

Sarah led a major curriculum review at Bristol Vet School and is particularly interested in curriculum design, outcomes assessment, educational quality assurance and clinical skills. She is a National Teaching Fellow and the Times Higher Education 'Most Innovative Teacher of the Year' (2009). She received the BSAVA Amoroso Award in 2017 for contributions to small animal medicine in particular for innovation in clinical skills, models and simulations and the University of Bristol Vice Chancellor's Award for Educational Excellence. She became the University of Bristol's first Principal Fellow of the Higher Education Academy in 2014. Sarah and the Haptic Cow participated in the BBC Christmas Lectures at the Royal Institution in 2014. This presentation will be of considerable interest to anyone engaged in teaching of clinical skills to health professional students. Sarah will share her vast experience in the use of simulation to teach clinical skills to health professionals. Her presentation will encompass effective teaching methods that employ a range of high and low fidelity models and simulations. She will describe effective methods for assessment of skill acquisition, and explain how cognitive task analysis principles can be applied to teaching of clinical skills, and better understanding how students learn.

#### **Design, produce, activate: What does innovation in educational video look like?**

*Jamie Morris (University Services)*

Melbourne is currently embarking on an ambitious program of work to enhance the quality of its teaching, learning and assessment. This Flexible Academic Programming initiative will place videos into some of the university's largest subjects, while also supporting the use of video in wholly online offerings and redesigned face-to-face curricula. But what constitutes innovation in educational video? In an environment where most lectures are already captured on video and published automatically through the lecture capture system, what are we hoping to gain by replacing lectures with video presentations? In order to lift the experience of students across the university, we need to think much more critically about what we record, how we design it and where we deliver it. Drawing on practical examples from among the last five years of Melbourne Learning and Teaching initiative video grants, this presentation will focus on the design decisions, production approaches, and video delivery decisions that can set up a project for success, while highlighting some of the most common pitfalls that still plague most university-designed video content.

## **Melbourne InnovatEd Program – An incubation program for EdTech related innovations**

*Mim Ingvarson (InnovatEd Project Manager, Melbourne Entrepreneurial Centre, FBE)*

The Melbourne InnovatEd addresses the FlexAP enabling recommendation to provide a coordinated and systematic approach to incentivising, supporting, recognising, triaging and driving the uptake of educational technology (EdTech) innovations within the University. Melbourne InnovatEd will be launched at the Melbourne Teaching and Learning Conference. The program will call for nominations and ideas of EduTech mediated teaching, learning and assessment innovations developed by staff and/or students and/or alumni of the University. A judging panel will review the applications and shortlist those that meet selection criteria. A workshop will be held to help the shortlisted projects prepare their best case for support in the next phase of the process. Shortlisted projects will then develop a presentation in a “pitch” format. Pitching to a judging panel including external EdTech industry experts, selected teams will then move forward with project seed-funding to support their development. The projects will also be provided with mentoring and support from T&L innovation experts and innovation expertise from the Melbourne Entrepreneurial Centre ([MEC](#)), and its constituent parts including: the Melbourne Accelerator Program ([MAP](#)), Translating Research @ Melbourne ([TRaM](#)) and the [Wade Institute](#).

---

## **Singapore Theatre**

---

### **Self-directed learning in large classes: how interaction influences agency and curiosity for first year MD students**

*Ben Symon (MGSE), Jan van Driel (MGSE) & Odilia Wijburg (MDHS)*

As part of the first year MD course, problem-based learning hybrids aim to promote self-directed learning (SDL) skills, encouraging students to become more autonomous, independent learners. Groups of up to sixty students undertake a series of large-scale workshops on microbiology and immunology, merging lectures with inquiry-based cases. Working in small groups while aided by roaming tutors, these workshops are designed to foster SDL growth, but students perceive less development of this skill-set than desired. We set out to understand the reasons behind student perceptions, considering how interactions with peers and tutors influence students' SDL behaviours, and how students view their learning within this context. Employing a qualitative approach, one researcher observed small groups over a series of workshops; students were also invited to participate in composing short reflections after two successive workshops. The data were used to create descriptive narratives and to thematise student perceptions. This revealed the presence of destructive frictions, particularly in the unintentional silencing of student contributions, as well as elements of dependency and avoidance. When working on their own, group behaviours varied significantly: students often balanced competing tensions, including expectations of performative competence against the curiosity of inquiring further or revealing their lack of understanding. These findings were mirrored in student reflections, suggesting discrepant levels of readiness for more autonomous learning: some participants were keen to adopt passive roles, while others were frustrated when inquiry was foreclosed. This research aids in understanding the factors that impede students from acting in a self-directed manner. Our goal is to provide tutors with training to help make their interactions with students more effective in promoting a space for student SDL within a large classroom.

## **From Lego to Bingo: Experience of increasing interactive learning in lectures**

*Lauren Sanders, Justin Tse & Jayne Lysk (MDHS)*

Background: Promoting and facilitating interactive learning in large group teaching settings, such as lectures, can be challenging. However, there are a number of low-cost activities that can be introduced into the lecture setting to enhance active participation and learning. At St Vincent's Clinical School, we aimed to increase the amount of interactive learning activities in large group lectures with activities grounded in educational theory. Methods: The activities were introduced into the lectures for MD2 and MD4 medical students. Activities included using Lego for feedback, a pyramid activity to demonstrate principles of effective teamwork, dermatome bingo for neurology revision, celebrity heads of differential diagnoses, interactive development of concepts using a whiteboard, audience polling technology and a new spin on communication role plays. Student feedback was sought following the feedback activity as both a learning and evaluation activity and sessions were frequently peer reviewed with focus areas determined in advance. Outcomes: Although not formally evaluated, we observed high engagement and attention and minimal laptop usage from students during the interactive lectures. Student feedback was positive with requests for more use of Lego. Importantly, at the end of the Lego feedback lecture the majority of students were able to provide written feedback to the lecturer using the model that had been the focus of the learning session. Most of the lecture activities were peer reviewed with discussion and revision of the activities for following years. Interactive sessions took more planning but were also more rewarding to deliver. We additionally found that the majority of activities could be introduced with minimal to no cost. Conclusion: With a modest amount of planning, a number of interactive activities were effectively introduced to large group teaching with minimal cost. A valuable part of this process is peer review and revision of the activities from year to year.

## **Extended role-play exercises in large classes PRESENTATION CANCELLED**

*Barbara Keys (Arts)*

~~The presentation focuses on two outcomes of extended role-play exercises used in my large lecture class on U.S. history: an increase in empathy and friendship-building. The capacity to understand the viewpoints of others is a valuable life skill, and studies have shown that certain kinds of role-play exercises result in demonstrable increases in student capacity for empathetic understanding. Extended role-play exercises also have special utility in large first-year classes in fostering an environment that encourages students to work outside of class in ways that promote bonding and long-term friendships. This bonding is one reason why students who take a class with extended role-play in first year are more likely to complete their degrees. The presentation surveys some of the practicalities and challenges in implementing extended exercises alongside traditional elements (lectures, tutorials), including how to mark oral presentations and how to manage intra-group communications, and presents some of the measures of success from my own class and from other studies.~~

## **Catch them all and catch them now...A live student participation tool that ticks all the boxes and draws new ones**

*Saw Hoon Lim (MDHS)*

We have less than 50 minutes to capture a student's attention, deliver impactful content and hold their interest while providing an avenue for discussion and fostering inclusivity. Compound this with an audience of 2000 students: A big ask? Well, challenge accepted! Holding court need no longer be a singular task when supported by the correct technology to increase student engagement and accomplish a vibrant learning environment. There is a

plethora of tools to encourage active student participation, so the ever-present question is which one to use and why. As instructors, we require technology that is easy to operate, low in cost and convenient to use and supports large teaching teams. As students, it needs to be free, fast, and fun, facilitating student conversation amongst our diverse student cohort while giving students a democratic voice by upvoting options. Combining the best of all worlds, we have demonstrated that FLUX, a locally-developed audience response system for effective pedagogy in large classes outstrips the usage of PollEv by four times due to its simplicity of use in a Go8 university. There, FLUX also had three times more student responses and those who answered FLUX questions performed 10% better (possibly reaching the next grade level) on the final exams in seven Information Technology and Engineering subjects. FLUX is designed by academics for academics and is currently being rolled out in UoM subjects where we hope to demonstrate its advantages including its ability to stay open for extended periods of time to facilitate alternative assessments and delayed participation especially in blended courses. We will also discuss developments in the pipeline like automated attendance, countdown timers, sharing of student work and other new tools in collaboration with stakeholders.

---

## Malaysian Theatre

---

### **The WIL to work: designing non-placement WIL through authentic assessment**

*Lea Campbell (Arts) & Kathryn Coleman (MGSE)*

Why does learning about work matter in higher education? How do we create opportunities for students to develop the attributes required “on the journey from prospective student to graduate” (Chancellery Academic, 2019)? Work-related skills, career development learning (Watts, 2006), and integrated graduate attributes are desired capabilities. It is our belief that through inter-related and work integrated learning (WIL) our students can build and consolidate life-wide skills needed for an unknown future. But how do we do this at University without sending everyone off campus? Authentic learning and assessment has been raised as a pedagogical solution to this wicked problem of connecting and mirroring the complexities and ambiguities of work in the workplace for decades. In this session we explore how designing non-placement WIL as authentic experiential learning applies disciplinary knowledge and skills in diverse contexts to work-based scenarios. We will look across the AQF qualification learning outcomes, presenting cases that serve as opportunities for developing work readiness through: exploring ways to create opportunities for engagement in real world problems and simulations in non-placement WIL; undertaking authentic experiential projects non-placement WIL; engaging experienced practitioners in feedback in non-placement project-based WIL. The design of authentic, real world complex tasks (Herrington, Reeves & Oliver, 2010) holds the potential for building real or simulated learning experiences and integrated problem-oriented learning within the curriculum. Learning about work through inter-related and WIL authentic task design presents real world relevance, bringing the world of work into the disciplinary ecology. Authentic assessment is sustainable (Boud, 2000) for learners and continues to reverberate onwards through future learning. This type of assessment as learning is deep, engaged learning and is investigated over a sustained period of time and provides opportunities to examine what practitioners in their field do, developed by practicing within an inquiry.

### **Using data to inform transition to employment**

*Brett Quayle & Naomi Evans (University Services)*

Background: The labour market is complex and hard to define, where students may find it challenging to link studies to the employment market. Furthermore, university courses may not always include up-to-date information on the relevant skills required by the job market. The University of Melbourne Careers & Employability team within Student Success have developed industry reports based on current trends utilising data from job advertisements. The rationale for producing these reports was based on a need from students who were unsure of where and how to apply the skills developed in their chosen area of study. Staff also requested to have relevant reports made as they pertained to their discipline areas.

Methodology: This project was an initial scoping of linking skills developed in coursework and how this translates to advertised jobs. An analysis of curriculum was conducted of course programs and a list of salient skills was compiled. Using the software program Burning Glass, a range of relevant search terms were employed to capture industry trends.

Outcomes: 100 reports based on the 50 most attended undergraduate and 50 most attended graduate courses were produced. Reports were also produced for faculty-specific courses as requested. Preliminary feedback from students and staff has been positive regarding these reports.

Next steps: This project was the first step in examining job market data as it relates to student coursework. Student Success aims to work further with faculties to produce reports that contain relevant job market data with the aim of informing transition out to employment.

### **Job Ready: An employability short course for STEM students**

*Madeleine Yewers, Turlough Crowe & Clayton Carner (Science)*

Job Ready is a free, extra-curricular employability course for undergraduate and postgraduate students in the Faculty of Science at The University of Melbourne. It provides a relaxed, fun and interactive environment where students develop their soft skills and career management tools through short lectures, exercises and personal reflection in weekly session over 8 weeks. There is increasing demand for the course and the retention rate is high despite not contributing to course credit or university transcripts. Student feedback is very positive. 92% of students would recommend the program to their friends and 92% of students agreed that Job Ready covered all the topics that they wanted. 83% of students agreed that their approach to job seeking changed after completing the course. Students especially appreciated the cohort experience and feedback from peers. The outcomes indicate that students want more informal, relaxed ways to work on their employability such as the Job Ready model.

### **Science and art adventures: Learning about work at uni**

*Kathryn Coleman (MGSE) & Rose Hiscock (Science Gallery)*

As universities in Australia continue to design place-based programs for students to complete as internships and work integrated learning, this presentation seeks to highlight how collaborative cross-faculty approaches can meet the same outcomes on campus. This presentation will explore the role of non-placement work-integrated learning (WIL) using an authentic inquiry model. Teaching a curriculum of the future requires skills and capabilities necessary in the 'fourth industrial revolution' (Farrell & Corbel, 2017) such as problem solving, creative thinking, collaboration and digital skills. This non-placement WIL was designed to build entrepreneurial future focused skills for learners' transferable employability skills in the arts and sciences. These transferable employability skills include a range of multimodal literacies (Walsh, 2010) and capabilities often referred to as 'soft skills'. In late January 2019

we co-facilitated a transnational non-credit transdisciplinary summer school in studioFive at the Melbourne Graduate School of Education. Together academic and curatorial staff co-designed an intensive summer inquiry-based learning-experience for University of Melbourne students associated with Science Gallery Melbourne (SGM), and a group of visiting Paris 8 University graduate students and Professor Agnès Henry. This ten-day intensive non-award subject explored disciplinary approaches to art/science programs and processes. With a focus on developing transdisciplinary cultural practice and creative problem-solving using Science Gallery Melbourne's exhibitions and educational programs as data for their team-based inquiries. The program included a sensory immersion workshop at the Victorian College of the Arts, with the aim to stimulate discussion of the embodied experience of environments, architecture and exhibitions. Participants worked within a 'living lab' environment with artists, scientists and curators in studioFive to curate hypothetical exhibitions using real time data from the SGM open call process and scientist/artist submissions. This data informed the creation and curation of an exhibition in partnership with Science Gallery team and academic staff from MGSE, Arts, VCA and Science. Whilst the program enabled students from different disciplines and universities to work together in a shared learning environment, it also provided a valid contribution to the Science Gallery process and exhibition. We will showcase the projects that participants created and the knowledge we gained in designing authentic non-placement learning experiences through collaborative cross-faculty approaches.

## Concurrent session 4

---

### B117 Theatre

---

#### **A digital assessment and feedback resource for the School of Health Sciences and Melbourne Dental School**

*Kwang Cham, Anthea Cochrane, Megan Keage, Rebecca Wong & Elaina Kefalianos (MDHS)*  
Introduction/background: Objective Structured Clinical Examinations (OSCEs) are integral to assess students' clinical competencies. Traditional paper-based OSCEs are time-consuming and not conducive to providing personalised feedback. An iPad-based assessment and feedback resource was developed in Optometry to provide personalised written feedback following OSCEs. This resource was recently adapted for use in Speech Pathology and Melbourne Dental School. Methods: Examiners used the digital resource to assess students during OSCEs. Feedback was emailed to students. A week later, students completed a survey and participated in focus groups to evaluate their perceptions about feedback quality and assessment resource satisfaction. Examiners were surveyed regarding use of the digital resource. Results/Findings: 70 out of 116 Optometry and Speech Pathology students (60%) were surveyed. 90% of respondents reported that the feedback received was timely and facilitated self-reflection. The digital resource was considered appropriate for assessing clinical skills and was reported to have a positive impact on their skill development. All examiners reported that the assessment resource was easy to use. Overall, they were satisfied with the resource and would use it for future OSCEs. Discussion: This innovation has enabled timely written feedback to be provided in a time- and resource-constrained environment. Future studies will evaluate changes to student performance following feedback.

## **Does veterinary curriculum promote the development of evaluative judgement skills?**

*Jennifer Carter (FVAS)*

Background: Evaluative judgement allows individuals to assess the quality of their work and the work of others. It is critical for allowing unsupervised work in professional practice, and requires that professionals consider both self-assessment and external information to make judgments about their work. Inconsistencies between self and expert evaluation have been described in the medical literature, but reports in the veterinary literature are sparse. Methods: A mixed-methods approach was utilised. Final year veterinary students rated their self-confidence at the start and conclusion of their anaesthesia rotation. Nurses rated the competence for each student at the rotation completion. Final marks were determined by the rotation academics. Participants answered the open-ended question: "In your own mind, how can you tell whether you are confident or not?". Quantitative data were analysed using descriptive statistics, correlations, regression. Qualitative data were coded and thematically analysed. Evaluation: Student confidence ratings at the end of the rotation and those at the start were positively correlated. There was no correlation between confidence ratings at the end of the rotation and either the expert competence ratings or final rotation marks, with overconfidence demonstrated frequently. Five themes emerged relating to students' own descriptions of their capacity for evaluative judgement: emotion as a proxy for judgement confidence, using the automaticity of an action or the anticipatory reaction, using outcomes or cues, appearing confident when you aren't, and the belief that independence equates to confidence. Discussion: This research demonstrated the gap between student self-confidence and expert-evaluated competence in veterinary students. Inappropriate personal gauges of confidence, most notably the belief that one must be completely independent to practice as a confident professional may help explain the gap. Educators should provide curricular opportunities that promote student evaluative judgement development and reinforce that professional practice requires seeking and sense-making of internal and external cues.

---

## **Singapore Theatre**

---

### **Factors influencing retention in STEM majors**

*Deborah King & Jennifer Palisse (Science)*

Female under-representation in STEM fields has been in the spotlight nationally and internationally for decades. This abiding phenomenon is a wicked problem that many argue starts way back in primary school, with the so-called leaky pipeline describing the loss of female students from mathematics through all levels of education, and consequent impact on the number of women in STEM careers. In an increasingly quantitative world, low levels of mathematics skills have been shown to negatively impact on employability, standard of living and wellbeing. It is therefore a critical issue to address if real gender equality is to be achieved. Although the longstanding myth about disparities in mathematics ability due to gender was debunked long ago, it is still frequently cited as an explanation for the low female participation rates in STEM. A chance encounter with a Dean of Engineering, who jokingly claimed that "we lose women in engineering because they can't pass mathematics", provided the impetus for this study. We aimed to investigate if women were more likely than men to make decisions about their major based on their mathematics results. The study involved administering two surveys to undergraduate mathematics students, one during semester, the other after final release of results. The surveys were designed to tease out factors influencing students' attitudes to mathematics and commitment to their chosen STEM major. Questions spanned

demographic (e.g. gender, year-level) and affective (e.g. enjoyment, sense of belonging) domains. Structural equation modelling allowed us to explore how these factors combine with student's performance expectations to influence persistence with their major. Our findings show a positive correlation between persistence and grades, especially for women. This was particularly pronounced for students in transition from secondary school, with first-year female students reporting significant negative impact on their intentions to continue with their major if grade expectations are not met.

### **Supporting Indigenous students' transition into the BSc**

*Mick Moylan, Syd Boydell, David Collis, Lisa Godinho, Michelle Livett, Daniel Pyke, Kinjia Munkara-Murray & Chelsie Davies (Science)*

The Bachelor of Science (Extended) is a four-year degree at the University of Melbourne that is only available to Aboriginal or Torres Strait Islander students. It was offered for the first time in 2015. The extension component of the degree comprises eight subjects taken during the first three semesters, in mathematics, interdisciplinary science, communication, and Indigenous studies. These subjects have been designed to develop students' academic skills, as well as their science- and mathematics-specific knowledge and skills, to provide a foundation for success and further study in students' chosen Science, Technology, Engineering or Mathematics (STEM) specialisation. The session contains an overview of the considerations and research that influenced the program's design, particularly the interdisciplinary nature and embedded skill development in compulsory subjects. With case studies of the thematic approach to the science subjects, we summarise our approach, which primarily examines science through lenses of chemistry, physics, biology and Indigenous Knowledges. We will report on external evaluations of student perceptions of the course and its effectiveness in supporting student success.

---

## **Malaysian Theatre**

---

### **Peer review of teaching in Australian higher education: A systematic review**

*Alexandra Johnston (FBE & MGSE)*

This systematic literature review investigated the attributes of peer review of teaching program practices that influence teaching development in the Australian higher education context. Despite differences in program efficacy, evidence suggests academics' engagement in peer review of teaching results in wide-ranging benefits. These benefits are evidenced at organisational, program and individual levels. Petticrew and Roberts' (2006) modified review criteria was used to synthesise 21 articles, including 11 qualitative, 8 mixed method and 2 quantitative studies. Qualitative study sample sizes ranged from 2 to 125 participants. Sample sizes of the mixed method studies varied from 6 to 221, while the quantitative studies included sample sizes of 20 and 221. Of the 21 articles, 20 studies were conducted within Australia, and 1 study included Australian and UK participants. The scale of the studies extended from single discipline to whole of institution. Participants included sessional tutors, teaching and research academics and university leaders. Findings indicate teaching development outcomes gained through peer review of teaching may be reliant on various organisational, program and individual factors specific to institutional contexts and discipline-based requirements. Factors at the organisational level include disciplinary context, academic collegiality and program sustainability. Program factors include efficacy of framework, purpose, program design, basis of participation, reflective practice and elements of

observation and feedback. Factors at the individual level include prior experience and participants' perceived development requirements. Limited information was found regarding the influence of peer review of teaching outcomes on student learning. Similarly, participant perceptions of program practices that influence teaching development remains largely unexplored. Notwithstanding the need to address the issue of ambiguity concerning terminology related to peer review of teaching, the emergence of peer review of teaching within the Australian higher education sector may present an opportunity for further research to advance our understanding of the factors influencing teaching development.

### **Peer reflections on peer review**

*Bianca Fileborn, Mark Wood & Claire Loughnan (Arts)*

Peer review is acknowledged as an important avenue for improving teaching and learning in our universities, yet it is typically under-utilised (Harris et al, 2008). In an attempt to address this gap, we undertook peer review of our teaching across three subjects currently taught in the School of Social and Political Sciences: From Graffiti to Terrorism (first-year undergraduate), Qualitative Research Methods (postgraduate), and Crime and Culture (third-year undergraduate). What we found was that peer review illustrates the benefits of learning through participation and observation. While there is substantial literature on how to teach well and on the merits of good pedagogical practice, learning at the coalface - by watching and observing what others do - offered important insights both into our own teaching, and the teaching practices of our peers. We tend to know what others are teaching, but not how. This exercise helped to 'demystify' the teaching and learning practices of others. Although the aim was to gain feedback from others on our own teaching, a collateral benefit was the insights we gained into how our peers teach, across a range of teaching and learning contexts.

### **Introduction to the Melbourne Peer Review of Teaching**

*Chi Baik (MGSE)*

Associate Professor Chi Baik will give an overview of the Melbourne Peer Review of Teaching Program (MPRT). The MPRT supports and complements faculty-based programs, and provides opportunities for formal assessment and recognition of teaching performance. The program involves a holistic review of individual teaching practice that includes a review of curriculum design, assessment practices and observation of teaching. The MPRT program is a voluntary program for academic staff electing to have their teaching reviewed by a member of the Melbourne College of Reviewers, comprising highly experienced academics with a demonstrated track record in teaching excellence. In 2019, the program will be piloted with academic staff in two faculties: the Faculty of Medicine, Dentistry and Health Sciences, and the Faculty of Business and Economics.

## Concurrent session 5

---

### B117 Theatre

---

#### **Communicating effectively with students about work: Revisiting the assessment-feedback loop**

*Stephen Campitelli (University Services)*

There is increasing acknowledgement of the importance of robust communication and feedback practices in educational contexts; indeed, “feedback is one of the most powerful influences on learning and achievement” (Hattie & Timperley, 2007, p. 81). In a complex tertiary context, providing clear communication on students’ work and being able to do so in ways that help them learn is vital. This importance is underscored by the 2017 National Student Experience Survey where the question asking whether teachers provided clear explanations of coursework and assessment met with a 65% positive response, while teacher commentary on work in ways that helps students learn was at 52%. At UoM, the corresponding 2017 SES figures were 64.8% and 49.7% for Undergraduate and 70.1% and 56.7% for Graduate levels. These figures provide a very clear message that there is a need for educators – and an opportunity – to improve performance in their communication with students about work. Using Hattie and Timperley’s (2007) Feed Up – Feedback – Feed Forward model as its frame of reference, this presentation examines the key components required for communicating effectively with students on assessment. Highlighting practical examples of how UoM Faculties have collaborated with Academic Skills to achieve this, it presents a model for clear and effective communication between teachers and students that incorporates three elements: 1) the initial establishment of expectations and goals around assessment and how teachers can address these effectively (Feed up); 2) the provision of clear, layered post-performance Feedback to students and the conditions needed for this to be effective; and 3) closing the gap between expectation, performance and goal (Feed forward), so that the communication process becomes developmental and valued by both students and teachers.

#### **Providing meaningful and useful feedback on assessment a pilot study**

*Ralph Hampson & Morag Burnie (MDHS)*

The 2017 University of Melbourne Student Experience Survey indicated only 49.7% of students believed teacher commentary helped them learn ‘quite a bit’ or ‘very much’, and only 56.5% thought their course had developed their writing skills. One explanation for this is that while students value feedback they often do not understand how to act on it (Nicol & MacFarlane-Dick, 2006; Boud & Molloy, 2013). This presentation reports on the impact of a pilot project which aimed to understand students’ perceptions of the importance and usefulness of feedback and how it can be used to improve writing skills and confidence. The research was conducted in a Graduate Online subject Ageing Health and Human Services focusing on two individual written assignments submitted in week 3 (T1) and week 8 (T2). Links to writing resources were embedded in Turnitin Quickmark comments and used in the marking of both papers. This approach was used as the evidence suggests that providing direct links to ‘where next?’ feeds forward, offering significant potential for development (Hattie & Timperley, 2007). Changes in students’ perceptions of the impact of feedback, self-evaluation of writing skills, and confidence were evaluated using two surveys, the first pre T1 and the second post T2. Comparisons between the written assessments will report on changes in both individual and cohort grades for the assessment tasks. The findings will

highlight the potential for this approach to signal to students the importance of acting on feedback in their learning process while also providing valuable data to inform teaching and assessment.

### **“Why I failed”: Analysis of students’ responses to a self-assessment tool**

*Guido Ernst & Logan Balavijendran (University Services)*

Every year, hundreds of students are identified as having unsatisfactory progress in their course of study. In the past, many of these students (1,601 in 2018) were recommended or required to attend certain Academic Skills workshops or to meet with an Academic Skills adviser. Attendance at these workshops was often low and Academic Skills advisers reported that they frequently gave the same advice to these students. To increase efficiency and ensure that students receive the support most suitable to them, Academic Skills introduced an online module at the end of last year that helps students to self-assess their skills and identify areas for development. This presentation analyses the responses of more than 400 students who used the self-assessment tool. There are clear trends for the reasons that students identify as to why they failed. These trends allow Academic Skills to develop more targeted support options for students while at the same reducing time spent in ineffective consultations. They also generate wider questions on how students can be supported in completing their assessments.

---

## **Singapore Theatre**

---

### **Evolution of collaborative learning practice in the Faculty of Veterinary and Agricultural Sciences**

*Liz Tudor, Jennifer Carter & Sarah Frankland (FVAS)*

Learning is a social construct- it happens when people come together, sharing ideas and building a common understanding. Collaborative learning activities enable students to test their knowledge, to apply it to new and different scenarios, and to benefit from the perspectives and experiences of peers. The capacity to collaborate is a core generic attribute of every university graduate and forms one of the learning outcomes of the Melbourne Way model. Collaborative learning also directly aligns with the University’s FlexAP recommendation to shift away from dependence on traditional lecture formats in favour of more interactive and engaging activities. Although collaborative learning has long been present in the Faculty, the practice has undergone continual review and revision. Examples of collaborative learning activities in our Faculty include small group laboratory and practical work throughout the DVM and B Ag degrees, and laboratory and whole of class case-based activities aiming to promote active learning and self-regulation. This presentation will describe the evolution of collaborative learning practices in our Faculty and discuss, in particular, how creation of appropriate spaces for learning has helped to drive collaborative learning. In particular, the presentation will describe the development over time of the pedagogy underlying collaborative learning approaches, factors that have facilitated enhancement of collaborative learning activities, in particular online learning platforms and creation of new learning spaces and the challenges faced in meeting competing drivers of student learning outcome and teaching at scale.

## **Large cohort teaching in the veterinary anatomy dissection lab: Ensuring the development of Day 1 skills**

*Christina Murray (FVAS)*

Veterinary students in the Melbourne Veterinary School learn gross anatomy throughout the first two years of their studies, contemporaneously studying the associated histology in another teaching laboratory. First year students have 31 timetabled hours in the dissection lab and this increases to 63 hours in the second year of the program. These hours exclude substantial preparation and revision time. The level of complexity of these studies progressively increases over the two years. Ultimately the students must develop a high level of practical ability and anatomical knowledge, to underpin their education in the clinical years of the DVM and ultimately, their skills as veterinary clinicians and surgeons. At the same time there are curricular requirements to promote the attributes of collaborative learning, communication, leadership and teamwork, with the major goal of ensuring our students emerge from the program as self-directed, life-long learners. The current cohort size is 130 students and the dissection lab is a very large space. Coupled with these factors is the very limited number of suitably qualified staff available to teach in these classes. As a result, the student to staff ratios are high (13-32:1). We have therefore adopted a range of strategies to fulfil our teaching goals within these limitations. These include an emphasis on a flipped classroom approach to encourage preparation and self-directed learning, use of group contracts to promote improved interpersonal interaction within the class and in-class formative assessments to help develop communication skills and provide timely feedback. Technology is not only used to provide appropriate teaching materials for preparation and revision, but the laboratory audiovisual system has also been custom-designed to facilitate large group engagement, reduce the teaching burden and permit delivery of material in an equitable and timely manner.

## **Thinking creatively, critically and collaboratively: how to teach these highly desired graduate attributes**

*Kwang Cham (MDHS), Heather Gaunt (Academic Services) & Clare Delany (MDHS)*

Introduction/background: Scholarship on teaching health ethics is limited in Optometry. There is no existing research focussing on the key conceptual content for an optometric curriculum. Aim/objectives: This project aims to provide inter-disciplinary learning and engagement for students in Optometry, Arts Management/Curatorship and Animation. Focused on the physical environment of the Grainger Museum, students experienced object-based learning opportunities in group contexts, designed to promote personal and professional learning and reflection in the areas of ethical dilemmas, communication and collaboration across different disciplines. Methods: Optometry students experienced activities that focused on ethical dilemmas, including dealing with present or future 'moral distress' in health professional contexts. Arts Management/Curatorship students provided insights and ways of connecting to the selected objects, and Animation students assisted in the video production. Results: Together, 84% of the students (n=70, 100% response rate) reported that this task increased their understanding and awareness in professionalism and health ethics. 86% believed that their communication and inter-personal skills will improve after this activity. 89% found group work more enjoyable compared to previous experiences. Discussion: The project has enhanced students' awareness in professionalism and ethical dilemmas. All students have an increased understanding and awareness of professionalism, teamwork, communication and collaboration across different professions and perspectives. Conclusions: This project has provided specific supported learning opportunities for students across disciplines to engage in

unique ways. It has encouraged them to consider and appreciate the perspectives and skills of students from other disciplines, and how to communicate and work effectively in team-based settings.

---

## Malaysian Theatre

---

### **Creating belonging at scale: An online quest-based approach**

*Logan Balavijendran & Imran Zaveer (University Services)*

Healthy social networks substantially impact a student's university experience, but research shows it is increasingly difficult for students to form connections (Baik, Naylor, & Arkoudis, 2015). This is especially true for international students – research at the University of Melbourne reports that only 22% made local friends and 35% felt connected to the community (Arkoudis, Dollinger, Baik et al, 2018). This presentation discusses the Orientation Challenge, an online program designed to help students form meaningful connections at scale. Embodying the notion that “transition is a process” (Kift, Nelson, & Clarke, 2010), students sign up in groups of four and complete short quests over four consecutive days (examples of quests include designing a flag, locating a place on campus or completing a survey). Developed in-house on Qualtrics, the system is automated, scalable, cost-effective and easily adaptable. The program piloted with commencing students (Semester 1 2019) and early results are very promising. 418 students (75% born outside Australia) participated in 126 teams and completed 1190 quests (approximately 595 hours of active engagement). 90% (n=108) of students say it helped them create a network of friends, and 77% agree it helped them prepare for university. Student feedback included “I really love the concept of this challenge, it's a good way to get to know more people and the uni as well!!”, “While we are of different faculties, I believe the connections we made through the program will prevail to be long successful friendships”, and “We are now the best of friends”. Further research is underway to measure the stickiness of these relationships over the semester and understand the factors that influence friend forming. Outside of orientation into university, this approach could be easily extended into large subjects or courses to support forming connections within the cohort and improve readiness for study.

### **Making immersive worlds and learning experiences for virtual teaching environments in the Faculty of Arts**

*Meredith Hinze, Mitch Buzza, Daniel Hayward & Grace Quiason (Arts)*

Augmented and virtual realities can provide opportunities for immersive learning spaces for students and opportunities to interact with objects. The eTeaching team in the Faculty of Arts have been working with various tools to create annotated, embeddable and downloadable collections of 360 images and models, and authoring VR 'experiences' for application in teaching and learning. These learning experiences and learning materials have application in a range of teaching contexts – online, blended and face to face. This session addresses both process and pedagogy. It will demonstrate and explore application of this approach in a range of teaching contexts, using middle level production options. The extension of these approaches is something that students could do themselves, opening up alternative platforms for presentations and forms of assessment. The 2019 Higher Education Edition, Horizon Report Preview, highlights that the increased use of augmented reality (AR) has enabled mobile learning to become more active and collaborative. AR in education increases student motivation (Acosta, Navarro, Gesa, Kinshuk AJET, 2019). Therefore, harnessing 'virtual'

teaching environments and the use of digital technologies, offers exciting potential for innovative and impactful pedagogy as well as student engagement more broadly.

### **Changes and opportunities: Transition to the new Canvas LMS**

*Bronwyn Disseldorp & Fiona Broussard (University Services)*

Preparations for the university-wide transition to the new Canvas LMS are well underway. A growing number of staff have begun their explorations into the opportunities to create flexible, interactive, and engaging learning spaces, incorporating a growing suite of digital tools to support innovation in pedagogy and curriculum. This exciting work to guide the preparation and transition to the new LMS is known as Project Evolve, and is led by Learning Environments and Infrastructure Services, working closely with academic divisions. Personal and shared explorations of Canvas using playpen subjects and communities are already enriching our understanding of the affordances of the new learning platform. In addition to this, formal subject and community spaces are being actively developed by selected pilot groups in each Faculty and Graduate School, to be ready for student use in Semester 2, 2019. Early participation and professional development in the use of Canvas is supported through a suite of workshops and online resources offered by Learning Environments. All staff are welcome to join these early explorations as they prepare for university-wide use of Canvas in 2020. In this presentation we will share some of the experiences of designing and building subject spaces in Canvas, exploring opportunities for new ways to structure content, build learning and assessment activities, and facilitate communication and collaboration between staff and students.

Hosted by  
Melbourne Centre for the Study of Higher  
Education

