

2019 WATTLE FORUM

Date: Thursday, 14th February

Time: 8.55 – 2.30pm

Venue: University of Wollongong Building 20

Title: Hybrid Learning @ UOW

Forum Agenda

8.30 – 8.55	Registration and coffee (Building 20 Foyer)	
8.55 – 9.00	Welcome (20.2)	
9.00 – 10.00	KEYNOTE: Reimagining university education in a digital world, A/Prof Margaret Bearman, CRADLE, Deakin University (20.2)	
10.00 – 10.40	STUDENT PANEL (See student names on p.2) (20.2)	
10.40 – 11.00	Morning Tea (Building 20 Foyer)	
Presentations	Room 20.2	Room 20.4
11.00 – 11.20	Employing learning analytics to transform course delivery to a slow release student participatory design Michelle Eady, David Fulcher, Tim Boniface, Flynn Hill & Corinne Green (SOC/LTC)	Hybrid Team-Based Learning for Epidemiology Tam Ha (SOC)
11.20 – 11.40	Hybrid, Blended and Active: Practice-based Pedagogic Strategies – a proposal Jo Law & Agnieszka Golda (LHA)	Transforming 1st year Anatomy and Physiology into a blended online/inlab practical format Sue Downie (SMAH)
11.40 – 12.00	Creative multimodal assessment in Accounting Celeste Rossetto & Sandra Chapple (BUS/LTC)	Teaching programming and modelling skills to first-year earth & environmental science students Jenny Fisher (SMAH)
12.20 – 12.50	Lunch (Building 20 Foyer)	
12.50 – 1.10	Interactive virtual landscapes in the earth and environmental sciences to support field-based learning Laurie Chisholm (SMAH)	Teaching Teachers how to Teach Pronunciation: A Blended Online and On-Campus Design Amanda Baker and Michael Burri (SOC)
1.10 – 1.30	Online quizzes and active learning in economics Silvia Mendolia (BUS)	Open case for review: using technology to integrate language education into curricula Emily Purser (LTC)
1.30 – 2.00	Reflections and Close (20.2)	



KEYNOTE



Associate Professor Margaret Bearman

Centre for Research in Assessment and Digital Learning (CRADLE)
Deakin University

Reimagining university education in a digital world

The digital era we are living in has been called the 'Fourth industrial revolution'. At the same time, university pedagogies and administrative structures are often bound by the natural tendency to reinforce the status quo. This means that technology tends to replicate what we already do rather than open us up to new possibilities, even as the world changes around us. This keynote explores what educators might need to reimagine in order to support our learners into a digital future.



STUDENT PANEL

Haydn Andrews	Bachelor of Arts, Philosophy Major
Rebekah Manning	
Scott Rooney	Bachelor of Commerce (Dean's Scholar), Accounting Major
Joshua Sorensen	Bachelor of Arts (Deans Scholar), Double Major in International Relations and Digital Media & Communications
Koko Woolley	Bachelor of Arts - Bachelor of International Studies (Dean's Scholar)
Syed Zaidi	Bachelor of Commerce (Dean's Scholar), Accounting Major



PRESENTATIONS

11.00 – 12.00 Room 20.2

Employing learning analytics to transform course delivery to a slow release student participatory design

Michelle Eady, David Fulcher, Tim Boniface, Flynn Hill

Recent studies have shown significant links between lecture attendance and students' academic achievement (Alzhanova-Ericsson, Bergman, & Dinnézt, 2017; Credé, Roch, & Kieszczyńska, 2010). Conflicts between lecture schedules and students' employment and lifestyle choices threaten attendance at lectures (Yeung, Raju, & Sharma, 2016). Provision of online lecture recordings has also been widely feared to negatively influence lecture attendance and student achievement (Bos, Groeneveld, van Bruggen, & Brand-Gruwel, 2016; Dolnicar, Kaiser, Matus, & Vialle, 2009). This presentation will share the process followed to address these issues through adjustments to the learning design informed by learning analytics for the subject EDPD202, a second year Professional Development subject offered within the Bachelor of Education (Primary) degree at the UOW. Up until 2018, students attended weekly lectures on campus and visited a local school for three hours each fortnight for additional content delivery and classroom observations. By collecting data from the 2017 implementation of EDPD202, the Learning Analytics team determined the extent of the correlation between attendance at certain lectures (in person and/or online), and achievement in related assessment tasks. The primary purpose of this work was to examine the relationships between student attendance, student utilisation of online learning and academic achievement. The information gathered informed a transformation in the delivery of this subject to a blended learning approach (Garner & Rouse, 2016). While no treatment was tightly controlled, this still facilitated the online delivery of some course content in an evidence-based and pedagogically sound manner, complimented by face-to-face content delivery (Gosper et al., 2010; Yeung et al., 2016). Through this presentation, we

will show how technological advances can provide opportunities for enhanced learning experiences that are relevant, flexible and authentic.

Hybrid, Blended and Active: Practice-based Pedagogic Strategies– a proposal

Jo Law, Agnieszka Golda

The School of the Arts, English and Media has a strong record in high-quality studio practice-based teaching and learning. The project builds on our previous ESDF seed project *Maker Artefact Portfolio Scoping Study* (2016), which provides an overview of technology-enhanced learning in degree programs offered at TEAM, to align with the priority areas identified by our Faculty. This present project aims to develop blended learning models and resources, informed by our previous research, that will allow more efficient delivery of our programs across UOW main campus, regional campuses and South Western Sydney campus.

Creative accounting: creative multimodal assessment in Accounting

Celeste Rossetto and Sandra Chapple

Accounting education in higher education typically develops the technical skills that students require to enter into the world of commerce. However, in the context of the rapidly changing socioeconomic environment, and a proliferation of corporate and financial collapses, there have been calls for educators to provide a more contextual appreciation of accounting practice. The changing nature of work has also generated calls for the development of generic skills in students, such as creativity and critical thinking. We outline our efforts to offer third-year university students the opportunity to use creativity in response to their major assessment task. This task required students to explore the ethical dimension of a recent corporate collapse and present their understanding in a modality of their choice. Our analysis of the creative experience of students suggests that such a creative approach to assessment opens up possibilities for a transformative educational experience. This work has potential application for other disciplines.

11.00 – 12.00 Room 20.4

Hybrid Team-Based Learning for Epidemiology

Tam Ha

Are we teaching the way students learn that maximises their chances of success? If students do not learn the way we teach, we must teach the way they learn. Lecturing (or learning via osmosis) is not the most effective way to teach; does not allow sufficient interaction with students in order to identify and sufficiently address learning gaps. It also does not allow students to teach each other (much deeper and more enriching way to learn). With all this in mind, I set about creating my own teaching strategy which is a hybrid of Team Based Learning and personalised education, delivered in an innovative and fun way to provide students with a superior learning experience at UOW. The strategy is based on several teaching theories: that of Vygotsky where content and assessments are continuously and deliberately scaffolded each week, social learning theory, Bloom's taxonomy, Team Based Learning, independent lifelong learning skills and facilitation strategies I developed along my teaching journey. This strategy was applied to teaching epidemiology to the masters and bachelors of public health and no student has thus far failed using this method. Students have fed back that the teaching strategy is fun, innovative, unique, and allowed for much deeper learning. This short presentation is an entrance of the hybrid Team Based Learning teaching strategy.

Transforming 1st year Anatomy and Physiology into a blended online/inlab practical format

Dr Sue Downie

In Autumn 2017, a 1st year undergraduate Anatomy and Physiology subject at the University of Wollongong was restructured into a blended practical class format, to cater for increasingly large student cohorts in finite anatomy and physiology laboratory teaching spaces. Students were streamed into 2 groups, with a fortnightly rotating cycle of in-lab and online practicals. Online activities and assessments were facilitated by the PhysioEx Pearson physiology simulations and videos, in combination with lecture and practical material. Benefits of this structure included self-paced learning in combination with on-campus community participation and support, and flexible options for missed practical classes due to illness etc. Delivery of this subject in this format could be made more inclusive by incorporating freely accessible online anatomy activities, and building a resource of cadaveric learning material from body donors who have given digital consent. Livestreaming of cadaveric learning material between the anatomy and physiology laboratories using the Microsoft HoloLens and Skype may further benefit student learning. We are investigating technology that could enhance the understanding of anatomical structures and their positioning within 3D space, adding a greater depth of learning for students unable to access the cadaver laboratory.

Teaching programming and modelling skills to first-year earth & environmental science students

Dr Jenny Fisher

Computing and programming are rapidly becoming necessary skills for earth and environmental scientists. Scientists in both academia and industry must be able to manipulate increasingly large datasets, create plots and 3-D visualisations of observations, and interpret outputs from complex numerical models, among other tasks. However, these skills are rarely taught as a compulsory part of undergraduate earth science curricula. In 2016, we began a pilot program to integrate introductory programming and modelling skills into the required first-year core curriculum for all students enrolled in earth and environmental science degrees. A set of guided exercises was developed using Python, a popular teaching language also widely used by earth science professionals. Our implementation relies on a variety of teaching strategies, including (1) in-classroom learning via exercises completed individually with assistance from teaching staff, (2) low-stakes open-book online review quizzes that provide further practice with no time pressure, (3) online peer review activities that expose students to the multitude of "correct" ways to solve computing problems, and (4) groupwork that allows students to creatively adapt new-found skills to selected problems in earth system science. In this presentation, I will focus on our implementation of this new curriculum (including the diverse Moodle and online tools that made it possible), as well as preliminary outcomes from delivering the new curriculum to the first cohorts of students.

12.50 – 1.30 Room 20.2

Interactive virtual landscapes in the earth and environmental sciences to support field-based learning

Laurie Chisholm

This presentation will focus on the use of the Virtual Illawarra (VI), an interactive model of the earth's surface, to help students visualise a range of landscape elements in the earth and environmental sciences. Students can engage with multiple views in the model to interrogate and interpret spatial data layers such as topography, contours and soils. The ability to open a "cross-section" of the earth's interior is particularly helpful in fostering student understanding of earth's dimensionality. Students use the VI to learn basic principles, often prior to engaging with actual fieldwork, and for later review. Overwhelming positive student feedback received across several subjects indicates the tool is interesting, easy to use and valuable towards furthering their learning of earth processes and landscape elements. The VI has proved a beneficial development to foster student engagement and to improve the student's learning experience.

Online quizzes and active learning in economics

Silvia Mendolia

This presentation will focus on the use of Moodle real time quizzes in lectures as a tool to verify learning in first year economic classes. Real time quizzes allow the students to use their own devices to actively participate in the class in an anonymous form. In our first year economics class, lectures are organised with at least two or three online real time quizzes in a two hours lecture, allowing some effective interaction between lecturers and students. Real time quizzes are a fantastic tool to show the lecturer the level of understanding in the class. The results are in real time and allow the lecturer to reinforce particularly hard concepts or congratulate the students on their level of understanding on certain topics. They also are a great tool to encourage students' participation and improve the understanding of the effective learning in the classroom.

12.50 – 1.30 Room 20.2

Teaching Teachers how to Teach Pronunciation: A Blended Online and On-Campus Design

Amanda Baker and Michael Burri

This presentation explores the development of a blended delivery system for teaching L2 pronunciation pedagogy in a TESOL teacher education program at the postgraduate level (EDGT934). A single Moodle platform was designed to be shared between the two cohorts of students: on-campus and online. The Moodle site consists of a series of "learning books" which integrate both text-based and audio/video material along with analyses of learner speech as well as online discussions of lesson content. The on-campus cohort also attended face-to-face lectures that were aligned with the books' content. As part of this presentation, there will be a brief discussion of the overall effectiveness of this design based on data collected from students' online quiz results, students' final assignments, discussion forum postings, Moodle participation analytics and open-ended questionnaire responses.

Open case for review: using technology to integrate language education into curricula

Emily Purser

The presentation shows how one subject makes use of various digital resources and educational strategies. After briefly overviewing the subject, it explains why part of it has been developed into an open online course, and how the MOOC has been incorporated back into the classroom-based teaching. It's a tale of two agendas in learning design: to blend digital and face-to-face education, and to integrate language education into students' regular curriculum. The basic purpose of the subject is to ensure international students entering a research program have opportunity to discuss and develop key aspects of literacy on which their research and academic success depend. As an integral part of several HDR courses across campus, it represents a way for faculties to implement UOW policy on English language education, but also introduces students to the world of open education, and the enormous potential in collaborative online spaces for peer learning and personal development of writing fluency. The open online part of the subject focuses on doing a literature review, and uses a blog to demonstrate the process. The Moodle-based environment provides instruction as well as opportunities for peer review and collaboration during key stages of the pedagogy, which would otherwise be impossible to implement in teaching such a complex genre. As well as enabling me to implement, and research, a particular language development pedagogy, this technology-enhanced learning environment allows me to enact several dimensions of the Curriculum Model: hybrid learning, focus on the experience of students in their first year at UOW, engaging connections across disciplines and professions, and the curriculum-integration of language development.