

Australia's Global University

# SCIENTIA EDUCATION ACADEMY

**Annual Report** 2017

Inspiring Educational Excellence

### Welcome

Welcome to the Scientia Education Academy's 2017 Report!

The purpose of this document is to provide insight into the Academy and its Fellows. What have we been doing this year? How does this all connect with UNSW's educational strategies? What are our plans for the future?

This document is organised as follows: first we outline the nature of the Academy, including its values and structure. We then explore key initiatives and exciting future directions of the Academy through summaries of projects that the Fellows are engaged with, and we link these to the four pillars of UNSW's Scientia Educational Experience.

Next, we summarise the various elements of educational leadership from Fellows at the School, Faculty, University and national levels.

We also outline the significant outreach from Fellows this year through synopses of the Scientia Education Academy Lecture Series. Finally, we outline some future initiatives.

# Acknowledgements

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The support provided by Dorota Wierzbica to all the activities of the Academy in general and to this publication in particular, is greatly appreciated. The input provided by Sanishka Balasooriya to the design aspects of this publication is gratefully acknowledged.

The work of Christina Kingen and Rosie Shaw, who supported the early work of the academy, is very much appreciated.

This report is based on the contributions made by the foundation Fellows of the Scientia Education Academy. The compilation of the report was led by Chinthaka Balasooriya with major contributions from Michelle Langford, Chris Tisdell and Alex Steel.



## Contents

Welcome	2
What is the Scientia Education Academy?	5
Structure of the Academy	6
Foundation Fellows	7
Key priorities: Educational scholarship, practice and policy	8
Key initiatives and the Scientia Education Experience	10
Overarching project of the Scientia Education Academy	
Portfolio for UNSW	11
Theme 1: Inspired learning through inspiring teaching	14
Theme 2: Building educational communities	24
Exemplar project: Faculty of Engineering Industry Engagement	24
SEIF#2: Learning Hubs - An adaptive, personalised, community centric education model	26
Exemplar project: Strengthening and Extending the UNSW Japanese Communities of Practice	31
Exemplar Projects: Culture, Diversity and Community Engagement in Learning and Teaching	36
Exemplar Projects: Art and Nature – Antidotes to Anxiety: A Public Exhibition and Workshops	38
Theme 3: Being digital	40
Exemplar project: Electronic Textbook Report	40
Exemplar project: 'Flippin' Film Studies: Adaptation and Transformation in the Age of Digital Uplift	42
Theme 4: Feedback and assessment	44
Exemplar project: Mentoring Models	44
Exemplar project: P2P Platform (SEIF Project)	45
Scientia Fellows' wider contributions to educational leadership	46
Synopses of Scientia Education Academy Lectures	
Lecture 1: Enhancing the Scientia of Science	49
Lecture 2: Can Technology Facilitate Learning on a Level Playing Field?	50
Lecture 3: A Conversation with Richard Buckland Richard Buckland, School of Computer Science	
and Engineering, Faculty of Engineering	51
Lecture 4: The Scientia Educational Experience: Roles of Assessment, Feedback (and Humour)	52
Lecture 5: All the World's a Stage	53
Lecture 6: Great Teaching: That Indefinable, indescribable but identifiable thing	54
Lecture 7: Fifteen years with first-year students and still learning	55
Welcoming the new Scientia Education Fellows	56
Scientia Fellows appointed in November 2017	56
Reflection on 2017 and roadmap for 2018	57

# What is the Scientia Education Academy?

The Scientia Education Academy gives UNSW and its outstanding academics a platform to showcase excellent teaching. The Academy recognises inspiring educators - the Scientia Education Fellows - and harnesses their drive and enthusiasm to enhance learning and teaching across UNSW.

The UNSW Scientia Education Academy champions, inspires and celebrates excellence in education. Its strategic vision for education is to:

Promote a scholarly, evidence-based approach

- > Champion innovation
- > Enhance the student experience
- > Advise on policies and strategies
- > Model a collegial community of mentoring

To achieve the above, Scientia Education Fellows are expected to:

- Provide leadership and vision in learning and teaching across UNSW and in the higher education sector;
- Enhance the profile and quality of learning and teaching within UNSW, including innovation in curriculum design and delivery, in face-to-face, blended and online education;
- Contribute to the overall UNSW learning and teaching strategy, the Scientia Education Model and improvements in educational practice;
- Contribute to positioning UNSW as an exemplar institution for student experience and outcomes;
- > Contribute to scholarly outputs in learning



# Structure of the Academy

The Academy was formed in 2016 under UNSW's Inspired Learning Initiative, driven by UNSW's 2025 Strategic Plan of supporting and valuing teaching excellence.

The Academy is not a committee and features a non-hierarchical structure. However, to assist with operations, the Fellows have created four leadership roles and elected the following Fellows therein:

- > Director: Chris Tisdell
- > Deputy Director (Educational Scholarship): Chinthaka Balasooriya
- > Deputy Director (Teaching Practice): Michelle Langford
- > Deputy Director (Educational Policy): Alex Steel.

These roles include duties such as:

- > Providing vision for the Academy
- > Leading the mission, strategic intent and innovation of the Academy
- > Advocating for the Academy and the Fellows
- > Acting as a spokesperson for the Academy.

Further details of the Scientia Education Academy are available at:

education.unsw.edu.au/teaching/scientiaeducation-academy

# **Foundation Fellows**

The first group of Scientia Education Fellows were appointed in September 2016.

Name	Faculty	School
Chinthaka Balasooriya	Medicine	Public Health & Community Medicine
Richard Buckland	Engineering	Computer Science
Gigi Foster	Business	Economics
Sami Kara	Engineering	Mechanical & Manufacturing Engineering
Michelle Langford	Arts & Social Sciences	Arts & Media
Benson Lim	Built Environment	
Louise Lutze-Mann	Science	Biotechnology & Biomolecular Sciences
Simon McIntyre	Art & Design	
Emma Robertson	Art & Design	
Cathy Sherry	Law	
Alex Steel	Law	
Chihiro Thomson	Arts & Social Sciences	Humanities & Languages
Chris Tisdell	Science	Mathematics & Statistics
Gary Velan	Medicine	Medical Sciences

Further information about the Fellows can be found below: education.unsw.edu.au/teaching/scientia-education-academy/fellows



# Key priorities: Educational scholarship, practice and policy

Three priority areas have been identified as focus areas for the Scientia Education Academy. Three Deputy Directors have been elected to lead each of these areas:



### Michelle Langford - Deputy Director (Teaching Practice)

Educational practice, including the design and delivery of teaching, is a key priority area of the Academy. The Academy is committed to discussing, sharing and promoting excellence in educational practice taking place at UNSW. With representatives from every faculty at UNSW, the Academy provides a forum for SEA Fellows to share their experiences of teaching practice across disciplinary boundaries. These discussions are an integral part of the SEA monthly meetings and are showcased in the Scientia Education Academy Lecture Series. In 2018, Michelle will lead SEA Fellows in creating further opportunities for practice sharing both within UNSW and more broadly and is working on a proposal to establish a podcast series. It is also hoped that SEA Fellows will engage with some of the communities of practice recently established among Education Focused staff.



### Chinthaka Balasooriya - Deputy Director (Educational Scholarship)

The Academy is committed to an evidence-based approach to educational design and delivery, accompanied by a robust system of evaluation. We recognize the need for scholarly approaches to education that question conventional wisdom but are based on sound educational theory, as we move towards a new era in education. The Academy will continue to encourage a culture of critical evaluation and continuous improvement of educational design and delivery at UNSW.

The scope of educational scholarship extends beyond educational research, and will include strategies to disseminate innovative practices in education. As a first step, we will be compiling a range of innovative educational practices that are being led by the inaugural Scientia Fellows. Through this we aim to exemplify a range of best practice at UNSW and also illustrate the principles of the Scientia Education Experience. Publications that arise from this initiative could contribute to important debates in the wider higher education sector.



### Alex Steel – Deputy Director (Educational Policy)

Where appropriate, committee members are encouraged to seek informal feedback from SEA Fellows on proposals. This facilitates broader understandings of the impact of policy decisions, and awareness of similar initiatives elsewhere. Through this broadening and pooling of experience, SEA Fellows are able to enhance their contribution to policy discussions. Similarly, those appointing SEA Fellows to working parties or committees, particularly at university level, are aware that Fellows have access to an informal network that can test ideas and provide suggestions, and that the SEA Fellow's approach to policy development has been influenced by that broader network.

The rapid transitions that are taking place in education at UNSW are accompanied by a series of policy initiatives. While the Academy does not intend to directly involve itself in policy-making, there is an important role for SEA Fellows to play in influencing the policy decisions that are being made. SEA Fellows sit on education related committees at School, Faculty, University and national levels and individually contribute significantly to the improvement of teaching and learning at UNSW. A list of those memberships can be found in the section titled "Scientia Fellows' wider contributions to educational leadership". SEA Fellows' contributions to committee discussions and policy formulation are enhanced by the sharing of knowledge and experience within the Scientia Education Academy.

# Key initiatives and the Scientia Education Experience

This section provides an overview of the wide range of activities that are being led by the Foundation Fellows of the Scientia Education Academy. The summaries of these activities illustrate the rich diversity that exists within this group, with the one common theme of absolute commitment to enhancing the quality of student learning. These projects exemplify how the Scientia Education Academy is contributing to the overall effort to enhance the quality of education at UNSW in line with the 2025 Strategy. The projects are presented under the themes of the Scientia Education Experience:

- 1. Inspired learning through inspiring teaching
- 2. Communities
- 3. Being digital
- 4. Feedback and assessment

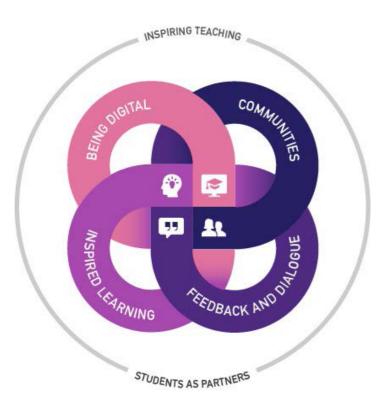
# Overarching Project of the Scientia Education Academy: Developing an Educational Portfolio for UNSW

### Project lead: Gary Velan

### Project members:

All foundation Fellows Research has traditionally been rewarded and recognised more than teaching at leading universities such as UNSW. One reason for this disparity is that measures of research excellence are widely used and accepted. In contrast, there are no generally accepted measures of teaching excellence.

This project aims to build on existing literature and evaluation tools to develop measures of educational excellence at UNSW that can be used to provide essential feedback to staff about their teaching performance. These can then be used to evaluate and reward excellence via teaching awards and academic promotion. Members of the Scientia Education Academy are collaborating with national and international experts in educational evaluation to develop appropriate measures for use at UNSW. Such measures will be standards-based, thereby providing transparency regarding the level required at UNSW to achieve educational excellence across a number of criteria. The measures and associated performance standards, guidelines and exemplars across a variety of disciplines will be refined following feedback from students and staff, including Heads of School and Associate Deans Education, in all Faculties at UNSW. The measures will then be piloted to support reflective practice in education and its recognition in teaching awards and academic promotion.



An overarching project that spans the elements of the Scientia Education Experience is being conducted through a grant from the Scientia Education Investment Fund. All Foundation Fellows of the Academy are members of this project and the project is led by Professor Gary Velan. This project intends to deliver the following outcomes:

- m. Development of performance standards, guidelines and exemplars for an education portfolio for UNSW staff;
- n. Development of **guidelines for the evaluation** of education portfolios, useful for reviewing applications for teaching awards and academic promotion.
- o. An **integrated measure** of educational excellence at UNSW, with the education portfolio incorporating outcomes of student surveys of teaching quality and peer review of educational practice.
- p. Establishment of a **community of practice** that enables and supports academic staff in standard-based evaluation of educational excellence at UNSW.

Commencing in July 2017, the project team consulted with higher education experts in Australia and overseas, using a Delphi process to determine the dimensions of teaching practice to be incorporated in a UNSW education portfolio.

This Delphi process incorporated academics (n=tu) from a variety of disciplines at UNSW, across Australia and internationally, to ensure that institutional and disciplinary differences in conceptions of educational excellence are acknowledged and incorporated into design of the UNSW education portfolio.

The first round of the Delphi process identified 13 dimensions of effective teaching practice in higher education. Respondents in the second round of the Delphi process (n=uv) prioritised v of those dimensions for incorporation into an education portfolio. Already, a community of practice has been established by this process.

Once consensus is achieved among the project team and advisory group, performance standards and exemplars of excellence across a wide range of disciplines and types of teaching activities will be developed. These will be associated with guidelines regarding potential sources of evidence for each dimension, tailored as needed for each discipline.

#### **Outcomes and impact**

The first round of the Delphi process identified the following 13 dimensions of effective teaching practice in higher education:

- Demonstrates up to date disciplinary knowledge, and applies teaching methods that display an understanding of how that knowledge can be effectively learned
- 2. Designs and plans effective curricula and learning activities
- Designs and sequences appropriate assessment tasks together with constructive, actionable feedback
- 4. Inspires and engages students in learning
- 5. Promotes collaboration, active learning and critical thinking
- Communicates effectively with students (listening, answering questions and explaining concepts)
- 7. Promotes reflection and self-regulation in learners
- 8. Creates in clusive, safe and positive learning environments
- 9. Uses technology innovatively and effectively to promote learning
- 10. Demonstrates educational scholarship
- 11. Demonstrates commitment to professional development in education
- 12. Demonstrates professional and ethical conduct in education
- 13. Demonstrates educational leadership

These dimensions have been benchmarked against existing institutional (UNSW Academic Expectations), national (Australian University Teaching Criteria and Standards – AUTCAS; Australian Professional Tertiary Teaching Standards - APTTS) and international (UK Higher Education Academy Professional Standards frameworks for evaluating teaching effectiveness. The highlighted dimensions in the list above were prioritised by respondents in the second round of the Delphi process.

Once consensus is achieved among the project team and advisory group, performance standards and exemplars of excellence across a wide range of disciplines and types of teaching activities will be developed. These will be associated with guidelines regarding potential sources of evidence for each dimension, tailored as needed for each discipline. Focus groups of stakeholders, including students, academic staff, Heads of Schools and Associate Deans of Education will then be consulted about the appropriateness and utility of the portfolio, standards and exemplars. Subsequently, the education portfolio will be piloted in evaluating applications for teaching awards. If pilot studies are successful, the intention is to incorporate education portfolios into the academic promotion process.

# Theme I: Inspired learning through inspiring teaching

### **Exemplar project:**

SEIF#2 Blended transactional learning: a sustainable feedback model for developing teaching capabilities of sessional staff

**Project members:** Louise Lutze-Mann, Kim Snepvangers, Nirmani Wijenayake Gamachchige, Lucy Jo, Kyle Thomson, John Wilson, Vivian Yeung, Dean Lovett

*Key themes:* Inspired learning through inspiring teaching, Feedback and assessment

Sessional staff are frequently an institution's direct interface with students and, as such, are a key demographic of university educators. They require training and support to deliver quality educational outcomes for our students. Consequently, we have been working on a SEIF 2 project to create a blended physical and online program for the technology-enhanced development and support of our sessional staff. This program combines innovative mixed media educational modules, a peer-driven support forum, and face-toface workshops to provide a comprehensive training and support package for staff.

This program should lead to the development of learning communities for the next generation of UNSW educators and improve the educational experience of students. The overall deliverable from this project will the production of an integrated fully developed suite of virtual and face-to-face resources for inducting, training and supporting sessional staff. The program has potential to serve as a scalable pilot for an adaptive, cross-institutional education and support platform. The integrated feedback and background data capture/analysis aspects of this program are aimed at providing ongoing dynamic program refinement, and may support further program design.

#### Initial workshop to introduce peers, provide elements on good teaching practice and HSE training. Induction Training Continuous feedback from Peer-directed learning and students for self reflection continuous support, helping to and improvement to build a community of practice enhance student learning. Moodle site Targeted feedback with peer discussion forum Smart Sparrow adaptive Regular workshops on lessons containing topics such as diversity animations that showcase awareness, academic integrity, mental health, commonly encountered educational issues. and marking. Professional Scenario-based Development animations Workshops

#### The program involves:



The development of an online platform for peer-directed learning, support and discussion and has involved the adaptation of an existing secure e-resource platform (Moodle) to host a discussion forum that provides participants with the opportunity to communicate in an anonymous peerto-peer forum, and allows uninhibited development of critical thinking and problem solving in peer based teaching scenarios. The discussion forum forms a critical tool in the self-assessment of the project as a whole. Background data collection/ analysis and passive moderation provide the opportunity for educators to identify critical fields/areas for improvement, allow pre-emptive development of formalised education material to improve outcomes related to the teaching, development, consistency and support of sessional staff.



**Professional development workshops** to increase the skills and overall well-being of sessional staff members. Special guest speakers from different areas of the university were invited to provide insight on specific topics such as Cultural Diversity, Stress and Anxiety (mental health awareness, from the Black Dog Institute), LGBTIQ and Student Engagement. These were incorporated to ensure that the sessional staff are equipped with knowledge and insight to provide students with the best learning experience.



### The production of animations to showcase

**'typical' interactions** between staff and students have been developed following two student/staff focus groups. These are designed to distil 'typical' teaching scenarios, organised around teaching capabilities, consistency in grading, quality of feedback, diversity awareness, communication skills, and professional development skills and should be able to be customised across different Schools.



The development of an interactive resource using the Smart Sparrow Adaptive eLearning Platform to gather feedback from students on sessional staff teaching performance during Weeks 6 and 12 of the semester. All the details of the survey are confidential: known only to the staff member and the course coordinator. The initial survey provides sessional staff with sufficient time to reflect and improve their performance during the semester, while the second survey provides them with feedback on the effectiveness of their strategies to moderate and improve their teaching, thereby enhancing the student experience.

SEIF#2 - Formative Peer Review of Teaching

**Project team**: Chinthaka Balasooriya, Reema Harrison, Patrick Rawstorne, Lois Meyer, Husna Razee

Advisory committee: Gary Velan, Anthony O'Sullivan, Nalini Pather, Richard Vickery, Peter Harris

*Key themes:* Inspired learning, Feedback and assessment

### Introduction

Formative peer review of teaching (FPRT) is an ongoing process of professional development that aims to continually develop the individual and collective quality of teaching (Bell, 2001; Gosling 2014; Harris, Bell, Farrell, Devlin & James 2008). It is a collaborative and collegial process that aims to support academic development.

A systematic FPRT process is currently being piloted at UNSW Medicine, funded by a grant from the Scientia Education Investment Fund.

### Theoretical background

There is clear evidence from the higher education sector that collegial and supportive FPRT processes are critical for the effective implementation of summative peer-review of teaching. FPRT provides an opportunity for academics to self-assess against clear criteria and share ideas related to teaching practice thereby supporting professional development and preparedness for the more formal institutional expectations of summative peer review of teaching

### Aims

The overall aim of the project is to enhance student learning by enhancing the quality of teaching. The specific aims of the project are to:

- 1. Design a process to conduct formative peer review of teaching (FPRT)
- 2. Evaluate the impact of the FPRT process on reviewees' perceptions of improvement in teaching skills (self-efficacy).
- Evaluate the feasibility, usefulness and limitations (if any) of the current UNSW peerreview of teaching instrument
- 4. To explore both the reviewers' and reviewees' experience of the FPRT process.
- To develop a toolkit of exemplars of 'best practice' of teaching in relation to each FPRT dimension

The FPRT process is independent of the summative process being run by UNSW and is intended to help academics become familiar with and prepared for the summative process. In addition, the optional research component of the formative peer review project may help to develop recommendations to refine the summative process. The research findings could also inform the sector more broadly on the perceptions and impact of formative peer review on teaching practices and notions of self-efficacy.

### Progress

The project commenced in August 2017 and the following has been achieved:

- 1. The FPRT process has been developed and piloted
- 2. A reviewer training package has been developed
- 3. The initial cohort of reviewers (20) have been trained
- 4. The first formal reviews have been conducted
- 5. A webpage has been developed
- 6. A publication has been submitted

### Next steps

- 1. Build further awareness of the project across the faculty
- 2. Consult with other faculties and introduce more widely across UNSW (with faculty/discipline specific adaptations as required)
- Conduct the research component and develop recommendations to inform improvements to both the formative and summative processes
- 4. Disseminate findings within and beyond INSW including in the higher education research literature

Case Studies and Golden Threads in STEM

Project lead: Richard Buckland

*Key themes*: Feedback and assessment, Communities, Inspired Learning

The Harvard Case Method (HCM) is used widely and successfully in some disciplines, such as business and social sciences, but has not been widely used in STEM disciplines such as computer science and engineering. I am interested in capability of case studies, and in particular HCM, to help STEM students acquire and develop high level cognitive and affective skills and capabilities (analysis, synthesis, communication, team work, reflection, professional and ethical behaviour).

I am hoping that using cases will be a simple and sustainable way of incorporating these high level skills as "Golden Threads" throughout the entire sequence of existing courses a student takes in a programme of study - rather than compartmentalising the teaching and learning of the skills, where it happens at all, into a small number of specialist courses taken in isolation such as "Ethics" "Professional Practice" etc.

### Background

The potential use of case studies is students study and analyse cases which are often based on data from real situations, and make decisions based on their analysis. Students typically discuss, collaborate and communicate their reasoning and analysis while striving to decide how they themselves would behave in a particular, often compelling, often interesting, scenario.

Cases are like lab simulations for professional behaviour. At their best they are compelling and stick. Harvard students often report continuing to think about some of their cases for the rest of their professional life, often devising new and improved responses to case problems they thought they had "solved" when they first encountered them. Cases are low cost to deliver, requiring no hardware or special equipment. As they involve reading and discussing they have great potential for online education and work at scale. The main cost is the cost, mainly in time, of developing the cases initially. Cases can be reused from year to year. They are typically used as formative rather than summative assessment, although this year I have been trialling them as a small part of the final invigilated examination to reinforce the motivation for students to participate fully in the formative weekly case study tutorial sessions.

### Questions

- What high level skills can be effectively taught and developed using HCM in STEM disciplines?
- 2. Scope for introducing cases and HCM in large first year STEM courses.
- 3. What types of cases are possible and what are their relative strengths and weaknesses for each of these high level skills?
- 4. What are low cost ways of integrating cases into existing teaching practice and the design of existing STEM courses?
- 5. How to write / buy / find / adapt effective cases for the requirements of particular STEM disciplines?
- 6. What training is required for STEM teachers and tutors to effectively run cases?

How can (at least some of, if not all, if not additional) benefits of cases be achieved in blended and fully digital delivery?

### Progress and future work

This year I have reviewed the use of cases at a number of institutions and in a range of disciplines. I have piloted in a security engineering course the use of cases for professional analysis and decision making and also to use and reinforce high level skills taught elsewhere in the course. I have also had a few of trials of using gripping cases for short sessions with high school and first year students and in public talks – using cases as an introduction to a field for outsiders.

Next year I am collaborating with my students from this year to improve and refine the way we use cases and to adjust the individual cases we used this year in security engineering. I would like to reach out to and work with other UNSW practitioners already using cases - there are a few-including in engineering! - and to join overseas networks of case practitioners. There are three large and active networks I know of so far - the HCM network out of Harvard Business School, a case studies in science community centred around Buffalo, and some European work looking at interdisciplinary case studies. There has also be some ALTC work on cases. I expect there will be other networks connected to these networks which will become apparent once I am engaged with them.

Writing case studies is extremely time consuming and it makes sense to reuse and share cases which is already happening in these networks. This is not work we should reinvent, where possible we should benefit from existing work.

### New work will be in:

- adapting for particular disciplines in STEM with no current resources or established experience in the use of cases – for example in my own field of Security Engineering
- working out low effort ways of integrating cases into our existing courses
- working out how to use cases well for first year and novice students
- working out effective approaches for blended and fully digital delivery

Encouraging students to read critically

Project lead: Alex Steel

Key theme: Inspired learning

### Introduction

Teaching law in an interactive, modified socratic method, seminar style (Steel, Laurens, and Huggins 2013) requires that students prepare for class by reading set materials. This is an expectation of students at UNSW, and one that is largely complied with, though the degree to which this occurs appears to drop in later years of the degree (Steel and Huggins 2016). Concerns have been expressed that students are less inclined to read carefully than in previous generations (Baron 2015; and see the review of the literature in Steel et al. 2016). This current work builds on an interactive online professional development module Reading Law that was part of the OLT funded Smart Casual project: *smartlawteacher.org/* 

### Literature review

Together with my Smart Casual colleagues, we reviewed the literature how to read critically both generally and as applied to law. This has resulted in the publication of the paper Critical Legal Reading: The Elements, Strategies and Dispositions Needed to Master this Essential Skill (Steel et al. 2016). That provided the basis for understanding the importance of pushing students to reflect on their reading in classroom discussion. But to enable that to happen students need to have read the materials. Further research suggests that low-stakes guizzing before class can improve levels of preparation and learning outcomes (Heiner, Banet, and Wieman 2014; Narloch, Garbin, and Turnage 2006). Further, asking students to write quiz questions themselves is an effective method of deepening learning (Parker, Manuguerra, and Schaefer 2013). This suggested that pre-class multiple choices quizzes drafted by the students themselves might enhance reading.

#### Trialling pre-class quizzes in Criminal Law

Two class cohorts of Semester 2 2017 Criminal Law students (n=92) attending 22 content based classes required to:

- > draft 3 multiple choice questions for one class (and submit to me to upload to Moodle)
- > answer 6-9 of those questions on the 20-25 pages of textbook reading set for each contentbased class (n=22).

Students received 5 marks for class preparation if they attempted most of the quizzes. The questions were not graded. The collected quizzes were also made available for exam revision.

### Successful outcomes

Students when surveyed (59% response rate) on the quizzes were strongly positive.

- > only 4% found the quizzes were never useful in testing understanding of the readings
- only 11% reported that the quizzes did not make them read the materials more diligently
- > 87% thought the quizzes should be used again in future classes.

The extent to which the task of writing the questions improved learning outcomes was uncertain. It was clear to me, as I edited submitted questions, that some students had misunderstood the materials and others had not really attempted to craft nuanced alternatives using their critical thinking skills.

#### Next steps

The quizzes will be revisited next year with three issues in mind:

*Drafting the questions*: Asking students to write quiz questions significantly lessens the burden for the teacher of drafting questions, but it is not clear that this leads to optimal question choice, nor an individual learning benefit for the students. There may be a benefit of collaborative learning. When questions are drafted by the teacher it may be an effective way to highlight particular issues in the text, which can be explored in class.

Uploading the quiz: no efficient software was found for this task and instead students emailed questions in a set format to me and I manually uploaded to 44 individual quizzes (two cohorts each class). This took on average 30 minutes for each class because many questions needed redrafting, plus initial time in setting up the quizzes (which faculty LT staff assisted with). Ongoing use will need a more efficient approach.

*Encouraging reading*: this appears to be a clear success of the trial, on the basis of the student survey responses. Not only was there an increase in attention to reading, but students have recommended that it continue next year.

### Further research

Allied to the effort to increase reading levels I am also interested in the scope and complexity of reading students are being asked to undertake. With a colleague we are beginning a comparative analysis of the complexity of set reading in our criminal law courses and those at other universities, and the changes to the requirements over time.

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# Theme 2: Building Educational Communities

### Exemplar project:

Faculty of Engineering Industry Engagement

Project lead: Sami Kara

Key theme: Communities

### Introduction

Industry has been the main employer of engineering graduates; therefore, employability of engineering graduates is a key concern. Training for technical skills required in industry has evolved over the years from an apprentice style to a structured university education system, which has created two separate worlds, as a result, university graduates, taught about fundamental knowledge during their university education, need to be retrained in industry so that they can function in industry. This separation has been further widened with the increased student numbers in the last decade, as a result industry readiness of university graduates is relatively poor. Therefore, there is a need to introduce a structured program across the faculty to increase the industry readiness of UNSW Engineering faculty graduates.

### Background

UNSW Engineering currently has ongoing activities to increase the industry engagement of its students. This project will complement the existing activities in order to develop a structured program across the faculty to increase the industry readiness of UNSW Engineering faculty graduates. Therefore, the aim of this project is to develop such a program based on worldwide university best practices and industry feedback to increase industry readiness of graduates by mapping out industry requirements in a structured manner along with the degree requirements into four years. The proposed program will be developed based on national and international best practices.

### Progress:

The project has started in 2017. A survey-based approach will be used determine the best practices:

- 1. A draft project plan was submitted to the Deputy Dean Education (DDE), which was approved in June 2017.
- 2. A project team has been set up in consultation with the DDE.
- 3. Key universities and the industry have been determined as a target survey group. This will be carried out in two parts; surveying the internal best practices in the university and the external institutions. For the first part, it is well known that there are best practices in different schools and faculties. After discussion in the UNSW SEA, it is agreed that there is a wider interest in UNSW, therefore Academy will be used to reach out different practices.
- 4. For the international best practices, it has been decided to use the membership of professionalbodies. International Academy of Production Engineering (CIRP) can be used for this purpose. The Academy has more than 500 members from top higher degree institutions in 40 different countries and from the words leading industrial organisations. These participants will be surveyed in order to identify structured and/or unstructured industry engagement programs around the world. The main emphasis will be on those with a scale in terms of student numbers.
- 5. An industry engagement project framework has been developed.

Currently, a survey is being developed to collect the data.

### Next Steps:

- Ethics approval will be sought as soon as the survey is ready
- A pilot group will be surveyed to test the questionnaire
- The main survey will be conducted after revising the questionnaire based on the pilot survey.
- A tailored program will be developed based on the survey findings
- The developed program will be implemented as a pilot project in a selected school in collaboration with the school admin. This will allow the identification of any logistics and administration issues that may rise during the practice, which will then lead to further development of the program
- The program will be rolled out to the entire faculty

SEIF#2: Learning Hubs - An adaptive, personalised, community centric education model

### Project lead: Simon McIntyre

### Key themes: Communities, Being digital

### Introduction

The Learning Hub idea underpins and supports key aspects of the student learning experience by creating centralised, active learning communities to support creative skills development across the entire Art & Design curriculum. This project aims to establish two learning hubs and a learning analytics system to support, track and advise students on their development of digital and analogue creative skills.

Learning Hubs will provide three interconnected elements of learning support:

### 1. Intensive skills development masterclasses.

Curriculum integrated, intensive sessions in core creative skills to prepare all students for undertaking related elective, stream, and studio courses. Masterclasses can also run on demand to extend and consolidate students' skills development in specific areas.

# 2. On-demand online resource packages for cf/h self-help.

Flexible, personalised np/r online learning support for a range of digital and analogue skills development across creative disciplines. These include inductions and proficiencies and are related to masterclasses, but are always open to any student.

### 3. Drop-in learning communities.

Physical spaces on campus where knowledgeable staff are always present. Students from any year, discipline or course may come together to work on assessments, drop in to get expert help at any time, and continue to develop advanced skills from the support and cross-pollination of ideas of peers and hub staff. The Learning Hubs concept deals with the question of how all students' individual learning needs can be supported across a program or faculty so that they can receive meaningful, personalised guidance and feedback about their learning. The main foundational learning concepts supporting this idea are differentiation and personalisation. As students progress through a program of learning, they start to develop and apply knowledge and skills in ways suited to their own unique practice. Standard curriculum design that does not allow students to assess their capabilities and adjust their learning pathways in support of their individual learning needs, can potentially limit a student's potential. The Learning Hubs idea synthesises formalised curriculum, data analytics, and personal community based learning approaches. This enables students to vary their focus based upon their own needs between structured classes, private np/r online tutoring, and large mixed cohort communities working informally in dedicated spaces on campus.

### Background

UNSW Sydney Art & is currently facing several challenges impacting the student learning experience Design (and perhaps many other studio based classes in other faculties):

- Feedback and the quality of student projects has revealed students are coming into specialist studio or elective classes with different levels of knowledge or skills.
- Lecturers often spend disproportionate time helping poorly skilled students understand basics, leaving others without the support they need to excel. Academics also have to teach to the curriculum, leaving some unskilled students with less support.
- There is repetition and inefficiency in teaching skill sets repeatedly in different individual courses. This can limit scope to teach higher level skills.

- > Creative processes and technical skills in art and design are constantly evolving, and lecturers cannot be expected to be across them all. The Hubs allow for flexibility and responsiveness enabling a range of experts to mentor students in emergent skills.
- Current support structures and limited staff support cannot be scaled to meet the increasing demand for workshops, digital fabrication computer training, etc.
- Students mostly interact with the same cohort during their career. Hubs offers the chance to collaborate with peers from different years and program groups.
- Support for developing creative skills outside of university operating hours is currently unavailable.
  The Learning Hubs concept has been designed to provide the following benefits to students:
- Students would commence courses with more equitable skills levels so that there is more time in class allowing greater opportunity for deeper intellectual exploration of concepts and application of skills.
- Students complete a course with the relevant skills (from masterclasses), the theory and knowledge of how to apply those skills (from their course) and ongoing support (from online resources and learning communities) for them to continue to learn beyond the class and curriculum structure.
- More flexible learning opportunities catering to students who need more or less support in developing critical creative skills. Students can vary the level of support they require to use their time more effectively.
- It creates physical spaces of constant activity where informal learning can occur, crossdisciplinary relationships can be built, and collaborations can take place when students gather to work on campus.

> The online system will enable management, tracking, and recommendation of health and safety requirements, skills proficiency and training for all students. It also enables learning analytics to be used to identify areas of most need or confusion that can be additionally supported in learning communities.

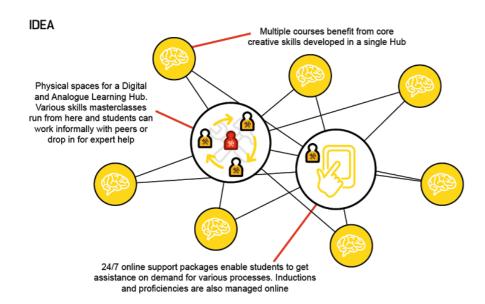
### Progress:

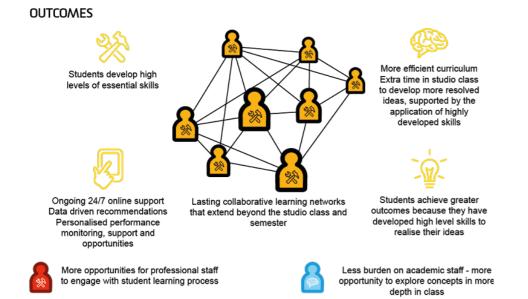
The concept of Learning Hubs has garnered widespread support and commitment from faculty leadership, academics, and professional staff. In addition, across 2016 and 2017, several internal reviews and evaluation activities were undertaken identifying areas for improvement in the current curriculum. These included:

- > Extensive curriculum mapping.
- > An Education Working Party comprised of a 20 academics, professional staff, and students.
- > Student surveys.
- > A series of staff consultation meetings.
- Industry and alumni focus groups about the job readiness of graduates.

These reviews revealed extensive duplication of skills development courses, with an emphasis on breadth at the expense of depth. A common theme also emerging from these reviews was that students are not currently well enough supported in skills development, nor do they have structured opportunities to develop depth of skills in conjunction with theory and application.

The first six months of the project was dedicated to: hiring personnel (project manager, educational developer, programmer, media production); defining roles and responsibilities of the project team; auditing curriculum to determine most required skills; establishing project critical success factors and evaluation rubrics; designing Learning Hubs system frameworks; locating on-campus spaces; designing templates for masterclass and online resource packages; augmenting existing digital infrastructure to facilitate delivery and management of online content; undertaking review of progress against critical success factors.





### Next steps:

- Discussions about cross-faculty adoption are underway with the Michael Crouch Innovation Centre (MCIC), Engineering, and Built Environment faculties. Each have shown great interest in the concept, as they see how it can help create a 'one campus' experience for students in terms of skills development, proficiencies and inductions, WHS management, access to making spaces, workshops and professional support.
- Scaling the development. The next 12-18 months will be dedicated to the development of ten initial masterclasses, sequences of related online resource packages, and management of physical spaces and casual community drop in support to service between 50-80 courses in the faculty. In addition, the following activities will occur in parallel: development and testing of digital infrastructure will continue; evaluation of pilot masterclasses and online packages with student and staff focus groups/ questionnaires; review of progress against critical success factors.

Synthesising data analytics and personal community based learning approaches can increase operational efficiencies for the faculty, and for students; maximise the potential of integrated formal and informal learning opportunities, give clearer personalised guided learning pathways with maximum flexibility, provide opportunities for meaningful collaboration, and exposure to different types of learning environments. Once implemented at faculty level, the it is hoped that the model will be **adopted and adapted by the entire university** where skills development is required (Science labs, the Michael Crouch Innovation Centre (MCIC), workshops or computing skills in Arts and Social Sciences, Engineering, Built Environment etc).



Strengthening and Extending the UNSW Japanese Communities of Practice

Project lead: Chihiro Thomson

Key theme: Communities

### **Communities of Practise**

Communities of Practice or CoP (Wenger 1998) are groups where members gather to regularly participate in community-specific practices in shared domains or for shared purposes. Increasingly intense participation by the members will move them from the fringe of the community to the core, whereby they become the experts in the community. CoPs also offer a place to belong.

At UNSW, the Japanese program operates as a network of course and classroom CoPs, which interact with each other as they offer our students access to all levels of Japanese, as well as to Japanese speaking communities beyond UNSW. Our students find people to use Japanese with, and purposes to use Japanese within and beyond our CoP. Their engagement with a variety of practices enhances their capacity as intercultural speakers of Japanese. Our CoP is not only where they practice Japanese, but where they express themselves using Japanese.

The concept of CoP works in two ways in our Japanese program. One is within a course, for example, ARTS1630 Introductory Japanese. Students in the course regularly interact with each other in pairs and groups to achieve common goals of introductory proficiency in Japanese. The other involves our entire program, where a number of courses network with each other. For example, select students from the professional level become regular members of introductory seminars and act as mentors. Another example is that some of the advanced level students participate in intermediate level lectures as study buddies. By participating in these cross-course activities, upper level students gain points towards their enrolled courses, while lower level students gain role models and partners with whom they can use Japanese (Thomson & Mori 2015). The UNSW Japanese CoP was featured in an edited monograph, Foreign Language Learning Communities of Practice: Mechanisms for

*Participatory Learning* (Thomson Ed. 2017, Coco Publishing, Tokyo).

The key to a successful implementation of a CoPled program is a sound and functioning CoP of participating teaching team members, which becomes the brain of the program CoP. If anyone is thinking about rebuilding their program based on the concept of CoP, the first step is to talk to their colleagues to establish common goals.

### Strengthening our CoPs:

One of the key features of our Japanese CoP is our student Capstone conference. Capstone courses in the Faculty of Arts and Social Sciences at UNSW are the final course within a major. Capstone courses allow students to integrate what they have learned through their major, and find connections between their learning and their future career. In our Japanese Capstone course, our final year students deliver their group research in Japanese on a variety of aspects of Japanese studies in front of audience members from the Sydney Japanese community. Our students not only deliver their research presentations, but also organise the conference. They issue invitations to guests and manage guest relations, run announcements in local Japanese media, and create a professionally printed conference booklet. In our UNSW Japanese CoP, the conference connects different course communities where, for example, students from junior levels work as reception desk staff, senior level students act as the masters of ceremonies on the conference day, and future capstone students join in as audience members (Thomson 2016).

This year, we ran our 8th Capstone conference which, in my personal assessment, was the best conference, and the audience feedback echoed my assessment. We strengthened our CoP by participation of non-Capstone students at the conference. Many of them will be taking the course next year and their peripheral participation this year will have a positive influence on them when they fully participate in their conference. We also had a very strong participation by the members of the Sydney Japanese Community, including the Consul General of Japan, and the president of the Japanese Chamber of Commerce and Industry. The lecture theatre of 150 plus capacity was filled. The Capstone conference received favourable evaluations by the members of the Japanese

community, not only due to our students' high proficiency in Japanese, but their in-depth research. Every year, the students choose topics of immense diversity, including socially engaging topics such as an Australia-Japan comparison of LGBTQI issues; Japanese migrants to Brazil and their return to Japan; Japanese Yakuza, past and present; deaths by over work; media images of Hiroshima. They always relate the topic to themselves and present their research as their own. This year, the group researching the Japanese migrants to Brazil related their own migrant status to the research findings and were able to deliver a moving discussion, touching upon their hybrid identities and issues arising from them. Presentations are followed by engaging Q&As. Some of the questions posed by Japanese professionals are very technical and the students have to admit that they did not research into the particular area. This serves as a reality check for their research that the students learn from. The Japanese audience members regularly comment that they learn much, unexpectedly, from the student presentations.

The final year students taking the Capstone course are at a critical turning point where they move from study to work. Capstone courses should support such students in this transition between these two worlds. Our Capstone conference provides this support by immersing the students in real life interactions with Japanese professionals both in the preparatory process and on the conference day with ample scaffolding provided by the teaching team.

This year's Capstone conference was video recorded and a 1-minute video and a 5-minute video that capture the essence of the conference are being created using the Scientia Education Academy (SEA) Fund. This will be used in promoting our Capstone course and the UNSW Japanese program.



#### Extending our CoP:

Another feature of our CoP is the inclusion of the Higher Degree Research (HDR) students' community (e.g., Thomson and Chan 2014). The HDR community supports the undergraduate Japanese program and supports their own members in their pursuit of completing HDR degrees. They meet for 2 hours every week and mutually offer help in various aspects of conducting HD research. I am a regular member of the community. This practice was presented as a poster at the UNSW's Learning and Teaching Forum in November 2017 (Thomson and Kojima 2017).

This year, we have significantly extended our HDR community by proactively including HDR students of neighbouring universities, eg. Macquarie, UTS, Sydney, and WSU. The field of Japanese studies is small, and each university has only one or two, and at most 4 HDR students in the discipline, which does not provide a critical mass to enable creative and vital discussion. By gathering HDR students from neighbouring universities and welcoming them into our CoP, the members now have colleagues to work with and are able exchange meaningful feedback with each other.

We have further extended our HDR CoP by hosting a HDR student workshop which utilised ZOOM. ZOOM offers internet meeting capacity so that up to 50 people in remote sites can participate at the same time. Our workshop was accessed via ZOOM from many locations including Melbourne (University of Melbourne), Kyoto (Ritsumeikan University) and Tokyo (Waseda University). The participants shared their research and received comments from multiple supervisors and their Fellow HDR students. In total, 33 (including prospective) HDR students and supervisors participated in the workshop, which is a big success for a small discipline of Japanese studies. I am funding the ZOOM subscription fee out of the SEA fund.

### Next steps:

Both the Capstone CoP and HDR CoP will further extend their capacity next year. We are planning to invite high school students to the Capstone conference. High school students with HSC Japanese under their belt come into our advanced Japanese stream and they constitute an important upper level cohort. By inviting them to our Capstone conference, we can showcase our students' language proficiency, research and presentation skills, and knowledge of Japan. Our students will become role models for the high school students and encourage them to major in Japanese studies upon commencing their university career.

The HDR CoP will expand by offering more diverse membership via ZOOM. A postdoc from ANU has recently joined the community and she will regularly participate in the meeting via ZOOM. I am meeting with some Japanese academics who supervise HDR students in Japan in December and we will discuss their remote participation.

The concept of the HDR CoP will be exported to the International Conference of Japanese Language Education (ICJLE), which is held in various parts of the world. Venice-ICJLE2018 will hold a HDR workshop, led collaboratively by the UNSW HDR team and the European HDR team.

### In summary:

Using the concept of CoP, I am continuously developing the UNSW Japanese program. The UNSW Japanese CoP is strengthening and extending their reach to other universities, both local and international, to the Sydney Japanese speaking professional community, and to high school students. It has become the basis to expand our belief of Japanese language education, that is, we learn languages to be able to express ourselves, to hear others express themselves, and to understand each other and socially engage in diverse activities offered in different languages. This is at the core of practicing equity and inclusion of diversity.

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### Culture, Diversity and Community Engagement in Learning and Teaching

### Project lead: Benson Lim

### Key theme: Communities

Culture and diversity are necessary considerations in the developmental processes of university learning and teaching; particularly with the increasing gender and ethnic diversity of staff and students in academia. In recognising these, several projects and initiatives have been undertaken in 2017.

### Project 1: An Investigation of Early Career Women in the Construction Industry: Career Choice, Expectation and Barriers

# Siyu Feng (student assistant), Dr. Bee Oo and Dr. Benson Lim

The construction industry frequently displays an unwelcoming environment for women whether in attracting or retaining them in the industry, especially for early career women. The aim of this study is to identify the career choice factors, job expectation and barriers from the perspective of early career women in the construction industry. Self-administered questionnaires were distributed to female graduates in Construction Management (CM) programs from the past 5 years between 2012 and 2016, and 30 early career women responded to the survey. The results show that factors affecting early career women's career choice decisions are: career opportunities, better pay and high level of selfconfidence. Although the career expectation gaps exist to some extent, the early career experience of the respondents is generally positive. The key barriers faced by respondents during different stages of their career include: difficult to integrate into a male dominated culture, a stressful working environment and lack of informal networks. This study provides an insight into women's early career development in the construction industry. It will benefit women who are going to choose or graduate from the Construction Management program, helping them to build up their career expectations and get prepared to overcome barriers that may hinder their career development.

### Project 2: Tradeswomen in the Australian Construction Industry

# Xiaoyun Liu (student assistant), Dr. Bee Oo and Dr. Benson Lim

The construction industry is one of the most maledominated industrial sectors. Women remain underrepresented in the industry, especially for those tradeswomen who are doing manual jobs. This study explored the current working situation of Australian tradeswomen. The specific objectives are: (i) to determine the major types of trades and businesses of tradeswomen; (ii) to examine the factors influencing tradeswomen's career choice; (iii) to explore the barriers faced by tradeswomen and provide relevant strategies; and (iv) to address their overall job satisfaction. An online survey guestionnaire was distributed to tradeswomen via the Supporting and Linking Tradeswomen (SALT) and The Lady Tradies Australia organisations. Both descriptive and inferential statistical tests were used to analyse the responses from 85 tradeswomen in construction. The results found that the most common trades types are electrician and carpentry with 65.9% respondents employed by a company. The most significant factor influencing career choice is the opportunity to develop new skills and abilities in trades jobs. Although they are facing barriers in their career development due to male-dominated culture and discrimination in hiring in the industry, 87% of them are generally satisfied with their trades career. This study benefits women who are wishing to embark on a trades career, helping them to get prepared to overcome barriers that may hinder their career development.

### Initiative 1: Peer Mentoring Program

### Dr. Benson Lim

The findings above will help to inform the peer mentoring program in the Construction Management Program (CMP) in Built Environment. At present, the peer mentoring guidelines have been developed and is under review. Also, 15 alumni have already accepted an invitation to become mentors for current and prospective construction management students. To reinforce the excellence of our CMP mentoring program, senior industry practitioners will be invited to join the management committee. The management committee will liaise and work closely with the CMP social and industry ambassador to look after the well-being of all mentors and mentees. This will also offer an opportunity for mentors to seek advice from those senior people.

We aim to launch the inaugural CMP mentoring program in mid-2018. For the preparation of this meaningful program, successful mentors will be invited to film their inspirational speech in an interview setting and the interview will be scheduled in a mutually convenient timeslot. All interviews will be uploaded onto the CMP website or respective mentoring webpage for viewing. Events (similar to "Speed dating") will be organised to facilitate the matching process between thinking-alike mentors and mentees.

At times, mentors will be invited to deliver seminars or workshops for current students and high schoolers. Particularly, for 2018, our strategic goal is to promote built environment and construction to female students and students from low socioeconomic status backgrounds and indigenous communities. For this, we will work closely with respective high schools, UNSW ASPIRE *aspire.unsw. edu.au*/ and Nura Gili *nuragili.unsw.edu.au*/

# Initiative 2: Cultural Food Charity Event (dated 10 May 2017)

# Dr. Benson Lim, and 23 other students and staff members

A cultural food charity event was held on 10 May 2017 and a total amount of \$1,566 was raised. This event was well-received and acknowledged by management and student participants. Many student participants had also expressed their interest to be involved in the 2018 charity event. Indeed, the purposes of this event are to: (1) acknowledge the importance of multi-culturalism in our current workplace and life; (2) develop our students' social responsibility and teamwork skills; and (3) most importantly, do our little parts for disadvantaged people.

Half of the proceeds was donated to The Smith Family and the rest was kept by CMP for establishing a scholarship scheme for our Low SES and disadvantaged students. A short video clip has been produced: youtube.com/watch?v= OeK4ttYEBU&feature=youtu.

### youtube.com/watch?v=\_OeK4ttYEBU&feature=youtu. be

The plan for 2018 is to organise a charity event, which will be aligned with International Women's Day. Relevant charity organisations will be contacted for possible collaboration.

Art and Nature – Antidotes to Anxiety: A Public Exhibition and Workshops

Project lead: Emma Robertson

### Key theme: Communities

Statistics show an increase in reported cases of anxiety by individuals in our communities, and this mental health issue has prompted more research, and collaborative and interdisciplinary projects. Utilising SEA funding, several initiatives have been undertaken in 2017, and the aim of these new projects has been to increase public awareness of the impact of anxiety, while at the same time suggesting that biophilia – our need to be in nature – can be considered as a positive antidote to feelings of anxiety.

### Project 1: An Exhibition at the Fisher Library, Sydney University as part of The Big Anxiety Festival

The exhibition Art and Nature: Antidotes to Anxiety was created and designed using the funding provided by the SEA. It was produced in collaboration with The Big Anxiety Festival, whose remit was to engage the public in broader understandings of the increasing anxiety that has been experienced within our communities, and within individuals over the last few years. Related to this, ecopsychology and ecoanxiety are new terms referring to the impact of climate change stress on human health. The exhibition was displayed in five large vitrine glass cases across three floors of the Fisher Library at Sydney University 20 September - 14 October 2017, and it featured drawings of endangered plants, created through a lens of beauty, to enhance mindfulness, and an associated sense of calm.

thebiganxiety.org/events/art-nature-antidotes-anxiety/

### Project 2: Free Workshops for the Public at the Royal Botanic Garden, Sydney as part of The Big Anxiety Festival

Two workshops were designed and offered free to the public – Drawing for the Mind on Sunday 8 October, and Making with Mindfulness on Sunday 22 October. Both workshops were supported by SEA funding, and were hosted by the Community and Education Programs at the Royal Botanic Gardens, Sydney. Both workshops were fully subscribed, and both achieved a 100% approval rating from all the participants.

thebiganxiety.org/events/art-nature-drawing-mind/

# Project 3: Two films on the themes of Biophilia and Beauty as Antidotes to Anxiety

Two films were concurrently developed and designed, using the drawings which appeared in the Project 1 exhibition, and which also utilised drawing techniques taught to the public, in the two workshops described in Project 2: MICROGRAPHIA - *vimeo.com*/222003403 DEPOSITION LINES - *vimeo.com*/222012367

### Next steps

An article on the exhibited work has been peer reviewed and accepted for Journal publication in January 2018, and a conference paper related to the three projects described above has been peer reviewed and accepted for the international Trans Image conference at Edinburgh University in April 2018.



Artwork by Emma Robertson.

# Theme 3: Being Digital

# Exemplar project:

### Electronic Textbook Report

### Project lead: Cathy Sherry

### Key themes: Being digital

With part of my Scientia Education Academy Fellow funding, I employed a Computer Science/Law student, experienced in technology in law firms, to investigate the potential of an electronic textbook and write a report. Traditional textbooks are no longer optimal in law, lacking the quality of material and activities that can be given to students with platforms like Moodle. However, Moodle is universityspecific and does not allow academics to enhance our own and the University's reputation by publishing teaching materials available for purchase by other universities and their students. Part of UNSW Law's strong reputation is based on the number of our staff's textbooks that are set in law schools around the country. These textbooks put us at the forefront of legal education.

The Report set out the problem to be addressed, as well as the criteria that any solution would need to meet. It considered four options: an open Moodle site; a subscription site (eg WordPress or Drupal); an online video and lecture site (eg Udemy or Udacity); and an eBook. It identified a number of challenges that would need to be addressed.

More research needed on this issue, in particular discussions with the University and legal publishers. However, we are in the middle of a teaching material revolution, and despite the challenges, it does not make sense for universities not to attempt to take advantage of the historic changes that are occurring.

Below is a snippet from one of my Moodle sites and indicates the kind of material that we can provide students if we are using online platforms as opposed to hard copy books:

Clos Farming Estates concerned a failed viticulture venture on the banks of the Hastings River in northern New South Wales. The development, Le Clos Verdun, was created by Gerard Cassegrain & Co Pty Ltd, (the company we met previously in the fraud case, Cassegrain v Gerard Cassegrain & Co Pty Ltd [2015] HCA 2), and was presumably planned to increase the sale price of otherwise unremarkable rural land (see picture above). The idea was for a purchaser to buy a lot which included a section on which to build a house (Part A) and a section of a working vineyard (Part B). Part A and Part B of a purchaser's lot were not contiguous, Part B being very much a portion of working farmland elsewhere on the Estate. There were 80 lots in the subdivision and the First Defendant had purchased Lot 27.



Lot 86 DP791199 Le Clos Verdun, 2017 Google Maps

'Flippin' Film Studies: Adaptation and Transformation in the Age of Digital Uplift

Project lead: Michelle Langford

Key themes: Being digital, Inspired learning

### Introduction

The drive towards greater digitisation of education has raised the question of the ongoing relevance of the traditional face to face lecture. But can lectures be simply recorded and placed online, or do we need to re-think and radically transform the lecture in the age of digital uplift? This project investigates some of the challenges and affordances offered by the audio-visual medium for adapting and transforming the very idea of the 'lecture' for the online learning environment in such a way that draws on fundamental questions of both medium and discipline specificity.

### **Theoretical Background**

The project draws together practice and theory. It develops out of my experience of developing online 'lecture' materials for my third-year Film Studies course, Issues in Film Styles and Aesthetics and brings together a range of theoretical perspectives from the discipline of film studies. My practice is deeply informed by the emergence of audiovisual criticism, a relatively new form of scholarly engagement in which film scholars produce audiovisual essays using film clips, text and voice-over. More broadly, however, this project looks to theories of adaptation to investigate ways in which the shift from one medium (face-to-face delivery) to another (audio-visual) requires us to re-think and transform the way that our content is presented in the new medium. Just as a successful adaptation of a novel to film requires much more than someone reading the words of the book, so too, our audio-visual lectures need to radically re-think our approach. Beyond this, we can look to older theories of cinema to remind us to look for ways of taking advantage of the affordances of the audio-visual medium in order to illuminate details of our disciplines that may not be possible in the face-to-face lecture. The early twentieth-century German cultural critic Walter Benjamin once observed that the new medium

of film provides the opportunity to extend the capacities of human perception to reveal 'hidden details in familiar objects,' 'new structures of matter' and 'unknown aspects' of the world around us.1 It is this capacity for revealing the normally unseen, together with its capacity for estrangement – showing new dimensions of things from numerous angles - that the audio-visual medium potentially offers to education in the age of digital uplift.

### Aims

The project aims to ask how film studies as a discipline can aid in the development of discipline-specific and medium relevant audio-visual materials in ways that enhance learning and teaching in the age of digital uplift.

### Progress

The practical stage of the project is complete. In 2017 I produced 16 short video 'lectures' for my course ARTS3064 Issues in Film Styles and Aesthetics. I have also conducted a preliminary literature search on the topic of the audio-visual essay (including reviewing a range of exemplars). I am in the process of collecting exemplars of online lectures from different disciplines, focussing mainly on UNSW. I hope to develop a taxonomy of these exemplars. I am already familiar with key scholarship on adaptation theory and the writings of Walter Benjamin.

I have presented on the practical developments at the UNSW L&T Forum and at a School of the Arts & Media digital teaching showcase.

Next steps: I will present my Scientia Education Fellow Lecture on this topic in the first half of 2018 and will write up the findings for the Scientia Education Academy publication.

### Reference:

1 Walter Benjamin, 'The Work of Art in the Age of its Technological Reproducibility' (second version, 1936), in M. W. Jennings, B. Doherty & T. Y. Levin (eds.) *The Work of Art in the Age of Its Technological Reproducibility* (Cambridge, MA: The Belknap Press of Harvard University Press, 2008): p. 37.



# Theme 4: Feedback and Assessment

### **Exemplar project:**

### **Mentoring Models**

Project lead: Chris Tisdell

*Key themes:* Feedback and assessment, Communities

### Introduction

Effective mentoring brings positive outcomes for mentees, mentors and their organizations. In this work, we introduce and critically examine a model for mentor-mentee engagement. In particular, our model is designed to foster a cycle of reflection and growth in their developmental journey. We theoretically ground our proposed model in Kolb's experiential learning cycle. We then illustrate how our suggested model can be applied in an e-mentoring environment. In particular, we link our theory to practice through discussion of a concrete e-mentoring case study, showing how technology can be utilized to facilitate the process.

### Background

Although it is recognized that there are a wide range of definitions in the literature, mentoring is essentially a relationship where a more experienced person (the mentor) acts as a guide, role model, teacher and sponsor of a less experienced person (the mentee) (Johnson and Ridley, 2004).

We define e-mentoring as a relationship where technology and technologically-underpinned communications are employed to enable a more experienced person to act as a guide, role model, teacher and sponsor of a less experienced person.

### Questions

- > What design principles can support reflection and growth in a model for the mentoring journey?
- > How can technology facilitate this model in an e-mentoring environment?

### **Method and Progress**

- The project commenced in 2017 under the Fellowship scheme of HERDSA. The mentor is at UNSW and the mentee is at the University of Auckland.
- 2. We have devised a model designed to foster a cycle of reflection and growth in the developmental journey.
- 3. We theoretically ground our proposed model in Kolb's experiential learning cycle.
- 4. We have been undertaking fortnightly communication sessions to test and inform the model.

### Next steps

- We anticipate the initial phase of the project will end in 2018 when the mentee submits their FHERDSA portfolio
- > Finalization and sharing of results
- > The model may be a helpful guide for others
- Some reflections may assist others to set up effective mentoring relationships.

### **References:**

JOHNSON, W. B. (2018). ELEMENTS OF MENTORING. S.I.: ST MARTINS PRESS.

# **Exemplar project:**

### P2P Platform (SEIF Project)

**Grant team:** Ang Liu, Sami Kara, Stephen Lu, Judith Green

Key themes: Feedback and assessment

### Introduction:

This project aims to develop and deploy a peer to peer (P2P) Platform to promote peer-to-peer learning within large classes, where a flipped classroom model is implemented. Through the P2P platform, student feedback is converted into a valuable resource for teaching and learning.

### Theoretical Background:

The P2P Platform is designed to facilitate the flipped classroom. Specifically, before every class, the lecturer will publish modularized learning content on the platform based on what he/she thinks students need to learn, together with a set of content-related questions designed to solicit students' feedback. Next, individual students will separately study the learning content and then provide their individual feedback. Next, based on students' diversified feedbacks, the P2P platform will automatically create multiple small study groups, in which, students are guided to learn from each other through peer-topeer interactions. Afterwards, students can revise their feedback according to their co-constructed new understandings of the learning content. Finally, based on aggregated student feedback indicated by the P2P indices, the lecturer will adjust in-class teaching content, priority, and strategy accordingly to focus on what students really want to learn. The ability to synthesize what students need to learn (i.e., learning content published online without student feedback) with what they want to learn (i.e., teaching content delivered in class driven by student feedback) is a key feature of the P2P platform.

### **Project Aims:**

Aim 1: Develop a fully functional P2P Platform that can be accessed via laptops, tablets and smartphone

Aim 2: Pilot the P2P Platform within different types of large engineering courses

Aim 3: Promote peer to peer learning at UNSW by introducing the Platform to other lecturers

### **Project Progress:**

- a. The project is in line with the proposed schedule. Below is a list of progress highlights: Major functionalities of the P2P platform have been successfully realized. In particular, some BlockChain-related thinking and techniques are included in platform development.
- b. The P2P platform is being piloted within a global innovation course that involved 150 students from 10 global universities, including a group of UNSW students in S2, 2017.
- An extended abstract has been accepted by the ASEE Annual Conference. A journal paper is currently being drafted for the International Journal of Engineering Education

### Next Steps:

- Based on lecturer feedback that will be collected by December, the computing algorithms of the set of P2P indexes (i.e., pain index, diversity index, inclusion index, popularity index, and clarity index) will be formalised during the summer.
- b. The P2P platform will be piloted within ENGG1000 in S1, 2018.
- c. The conference paper will be completed by December 2017, which will focus on introducing the Platform's functionalities without student data. The journal paper will be completed in S1, 2018. An application for ethics approval will be submitted during the summer prior to the collection of student data and submission of journal paper.
- d. The P2P Platform together with some lessons learned and best practices will be introduced to other UNSW lecturers via the Engineering Education Innovation Committee.

Scientia Fellows' wider contributions to educational leadership

Scientia Fellows provide significant leadership through their involvement in education related committees across UNSW, nationally and internationally. The list below captures Fellows' formal involvement in committees in 2017. The extent of involvement in these committees provides a "tip of the iceberg" sense of the informal influence that Scientia Fellows have in education both inside and outside of UNSW.

#### School level contributions

School of Biotechnology and Biomolecular Sciences Teaching committee, Chair – Louise Lutze-Mann School of Biotechnology and Biomolecular Sciences Executive Committee – Louise Lutze-Mann School of Economics Teaching and Learning Committee – Gigi Foster

School of Economics Undergraduate Coordinator – Gigi Foster

School of Humanities and Languages Research Committee - Chihiro Thomson

School of Humanities and Languages MyCareer Conversation Partners Team - Chihiro Thomson School of Mechanical and Manufacturing Engineering Design Working Groups- Sami Kara School of Public Health and Community Medicine Academic Quality Committee -

Chinthaka Balasooriya

School of Medical Sciences Learning and Teaching Development, Director- Gary Velan

### **Faculty level contributions**

Business, Behavioural Insights for Business and Policy Network, Member – Gigi Foster Art & Design, Quality Committee – Simon McIntyre Art & Design, Academic Board – Simon McIntyre Art & Design, Faculty Leadership Forum (FLF) – Simon McIntyre

Arts & Social Sciences, Teaching Awards Selection Committees – Chihiro Thomson Arts & Social Sciences, VCATE Committee – Michelle Langford Engineering, Excellence in Education Champions Group- Sami Kara Engineering, PLUS Alliance Advisory Panel – Louise Lutze-Mann Law, Criminal Law and Criminology Research Cluster – Alex Steel Law, Legal Education Research Cluster – Alex Steel Law, Legal Education Conference, Organising committee - Alex Steel Law, UNSW VCATE Committee – Alex Steel Law, LAT (Law Aptitude Test) Working Party - Alex Steel Law, Faculty Board – Alex Steel Law, Faculty Board – Cathy Sherry Law, Qualifying Degrees Committee – Cathy Sherry Medicine, Assessment Development and Evaluation Committee - Chinthaka Balasooriya Medicine, Program Evaluations and Improvement Group - Chinthaka Balasooriya Medicine, MedTELT Committee – Chinthaka Balasooriya Medicine, Inspired Learning Initiative Committee -Chinthaka Balasooriya Medicine, Phase 1 Committee – Chinthaka Balasooriya Medicine, Education Committee, Chair - Gary Velan Medicine, Education Committee - Louise Lutze-Mann

Medicine, Program Evaluation and Improvement Group, Chair – Gary Velan Medicine, Professionalism Working Party, Chair – Gary Velan Medicine, Indigenous Health Education Working

Party, Chair – Gary Velan Medicine, Biomedical Sciences Working Party, Chair – Gary Velan Medicine, Assessment Development and Evaluation Committee – Gary Velan Medicine, Faculty Board – Gary Velan

Medicine, Faculty Governance Committee – Gary Velan Medicine, Curriculum Development Committee – Gary Velan Medicine, Phase 1 Committee – Gary Velan

Medicine, Phase 2 Committee – Gary Velan Medicine, Phase 3 Committee – Gary Velan Science, Education Committee – Louise Lutze-Mann Science, Teaching and Quality Committee, Chair – Chris Tisdell Science, Academic Program Review Group, Chair – Chris Tisdell

### **UNSW** level contributions

3+ Academic Reference Group – Simon McIntyre AAUT Citation Selection Committee- Alex Steel AAUT Citation Selection Committee – Chinthaka Balasooriya AAUT Citation Selection Committee – Michelle Langford Academic Board – Alex Steel Academic Board – Richard Buckland Academic Board (representing Dean of Medicine) – Gary Velan

Academic Curriculum Information and Services Business Advisory Board – Simon McIntyre Academic Quality Committee – Alex Steel Academic Quality Committee – Richard Buckland Academic Quality Committee – Chris Tisdell Academic Quality Committee –s Gary Velan Academic Quality Committee – Simon McIntyre Academic Reference Group 3+: Education Stream – Chris Tisdell Cultural Diversity Advisory Board – Chris Tisdell

Digital Assessment Working Group - Gary Velan Digital Assessment Working Party – Alex Steel Disability Advisory Board – Chris Tisdell Echo360 Upgrade Project Board – Gary Velan Education Focused Champion – Simon McIntyre Education Focused Champion – Louise Lutze-Mann Global Learning Planning Group - Chris Tisdell Graduate Certificate in University Learning and Teaching program (GCULT) Redevelopment Advisory Board – Simon McIntyre Inspired Learning Initiative Steering Committee -Chris Tisdell Iranian Studies Research Network, Coconvener – Michelle Langford Learning & Teaching Forum, 2017 Advisory committee – Michelle Langford Learning & Teaching Forum, 2017 Advisory committee - Chris Tisdell NUW Alliance Healthcare Systems Working Group -Gary Velan Peer Review of Online Teaching Working Group -Gary Velan Peer Review of Teaching -Chihiro Thomson Peer Review of Teaching – Michelle Langford Peer Assessment Review Group – Louise Lutze-Mann Program Design and Delivery Steering Group -Simon McIntyre Program Design & Delivery, Delivery Subject Matter Group – Alex Steel Program Design & Delivery, Delivery Subject Matter Group – Chinthaka Balasooriya UNSW Program Design & Delivery, Delivery Subject Matter Group - Louise Lutze-Mann Program Design & Delivery, Design Working Group – Simon McIntyre Program Design & Delivery, Design Working Group -Gary Velan VCATE Selection Committee – Richard Buckland VCATE Selection Committee – Louise Lutze-Mann OLT/AAUT Citation Awards. Panel Member -Chris Tisdell

### External contributions

Administration Committee of the Japanese Language Proficiency Test, Chair – Chihiro Thomson Australasian Law Teachers Association, Executive Member – Alex Steel Australia and New Zealand Association for Health Professional Education, Committee of Management and Fellow – Chinthaka Balasooriya Australian and New Zealand Associate of Health Professional Educators, Fellow – Gary Velan Australian Law Schools Standards Committee, Consultant – Alex Steel Global Network of Japanese Language Education (International), Australian Member -Chihiro Thomson Iranica Forum (Encyclopedia Iranica), Advisory Committee – Michelle Langford Japan Foundation Sydney, Advisory Committee – Chihiro Thomson Japanese Studies Association of Australia, Executive Committee – Chihiro Thomson Japanese Studies, Editorial Board – Chihiro Thomson Journal of Biomedical Education, Editorial Committee - Gary Velan La Trobe University Academic Promotion committee – Chihiro Thomson Legal Education Review, Editorial Committee -Alex Steel Medical Education Leads, Australia and New Zealand, Member – Gary Velan Nihongo Kyouiku Reviewing Committee – Chihiro Thomson NSW Bar Association Criminal Law Committee -Alex Steel NSW Japanese speech contest Steering committee – Chihiro Thomson Society for Teaching Japanese as a Foreign Language (Japan) Election Committee -Chihiro Thomson Tertiary Education Quality Standards Agency (TEQSA), Expert Online Learning Consultant -Simon McIntyre The Japan Journal of Multilingualism and Multiculturalism, Editorial Board – Chihiro Thomson University of Malaya, Programme External Assessor for the Bachelor of Languages and Linguistics -Chihiro Thomson Australian Mathematical Society, Fellow -Chris Tisdell

Higher Education Research and Development Society of Australasia, Fellow – Chris Tisdell Institute of Mathematics and its Applications, Chartered Mathematics Teacher - Chris Tisdell Royal Society of NSW, Member – Chris Tisdell

Conference of the Asian and Australasian Society of Labour Economics, Scientific Committee – Gigi Foster Australian Conference of Economists, Program Committee – Gigi Foster

Society for the Advancement of Behavioral Economics Conference, Organizing and Program Committee -Gigi Foster

Economic Society of Australia New South Wales Branch, Central Council – Gigi Foster Economic Society of Australia's National Economic Panel -Gigi Foster

Society for the Advancement of Behavioral Economics, Board and Country Representative - Gigi Foster Yale University Alumni Schools Committee Australia, Director – Gigi Foster

# Synopses of Scientia Education Academy Lectures

The Scientia Education Academy lecture series is supported by the PVC (Education) Portfolio. Each month, one of the Foundation Fellows has made a presentation, addressing a range of educational issues of contemporary significance. Brief synopses of these presentations are provided in this section.

The full lecture recordings are available at: unsw.to/sea-lectures

# Lecture 1: Enhancing the Scientia of Science

Louise Lutze-Mann, Deputy Head of School and Director of Teaching, School of Biotechnology and **Biomolecular Sciences** 

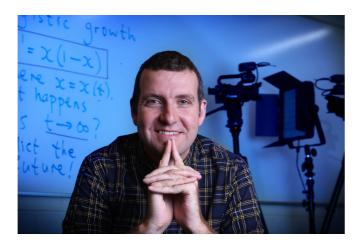
Technology is changing our world - how we live, learn and communicate. Next year, we will admit the first students to university who have never known a world without computers, who were only one-year-olds when Wikipedia began, four when Facebook was launched and seven when the first iPhone was released. How has this impacted the way they think and learn? How do we utilise this to enhance the acquisition of the Scientia (knowledge) of science amongst our students and the general community in a world where it is increasingly important to be able to distinguish the false from the factual?



# Lecture 2: Can Technology Facilitate Learning on a Level Playing Field?

**Chris Tisdell,** Associate Dean (Education), UNSW Science

Education is changing. Rather than traditional classrooms in schools and universities, we now have classrooms in "clouds." In this presentation Chris provides some critical perspectives on technology in education, including the ideas of openness, scale and inclusion. Is technology really the answer to challenges in education?



### Lecture 3:

A Conversation with Richard Buckland Richard Buckland, School of Computer Science and Engineering, Faculty of Engineering

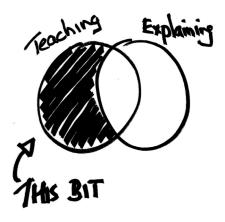
Richard Buckland is renowned for creating powerful learning communities. In this conversation, he contemplates teaching and the future of education. Education is the basis of society and its impact is made through teachers, one's peers and the transformational experiences that surround students. But, is learning today no more than videos, quizzes, testing, or recalling facts? Is education something more?

Richard wants to help students develop how they think, how they approach life, how they approach problems, build character, resilience and happiness.

What does Richard actually do?

How does he engage with his students?

How does he cultivate the passion within his students, and translate that passion into measurable outcomes and achievement?



# Lecture 4: The Scientia Educational Experience: Roles of Assessment, Feedback (and Humour)

**Gary Velan,** Associate Dean (Education), UNSW Medicine

The pillars of the Scientia Educational Experience are 'Communities', 'Inspired learning though inspiring teaching', 'Feedback and dialogue', and 'Being digital'. No matter how well academics design curricula, we know that assessment and feedback will play crucial roles in students' learning, as well as their educational experience. In this lecture, examples of how assessment and feedback are currently implemented to benefit students' learning in Medicine are explored, as well as their potential applicability in other disciplines. The underappreciated positive impact of humour on learning is also addressed (with utmost seriousness).



# Lecture 5: All the World's a Stage

**Chinthaka Balasooriya**, Director of Medical Education Development, School of Public Health & Community Medicine, UNSW Medicine

The world is changing. We know that the needs of the future could be radically different, but we don't know how different they will be. Higher education faces an enormous challenge. How do we anticipate these needs and prepare our graduates for this uncertain future?

We have options. What could help us to make the best choices? Could collaborative approaches – between institutions, between disciplines and between students and teachers – be a crucial part of the answer? Should we place an increased emphasis on professional skills such as critical thinking, decision-making, communication and teamwork, so that we prepare graduates who can adapt to a range of contexts? How could we best help students develop such skills? This lecture opens up a discussion around these important issues that will shape our future. It explores examples from a range of disciplines and discusses what would define success.



# Lecture 6: Great Teaching: That Indefinable, indescribable but identifiable thing

### Cathy Sherry, Faculty of Law

This lecture argues that while good teaching can be defined and described, great teaching is more elusive. Great teaching is the ability to hold people's attention and to explain complex concepts in comprehensible ways. While we can help people to be better teachers, to a degree teaching ability is innate and people fall on a spectrum of ability. The key for universities is to ensure that through employment and promotion policies, their teaching staff predominantly fall on the higher end of the spectrum of teaching ability. Traditional, researchfocussed employment and promotion practices have not done this, and universities have lost countless great teachers as a result.

While great teaching is hard to define and describe, it is not hard to identify. Students do that every day. Despite flaws in student surveys, it is not the case that students are unable to recognise good or bad teaching when they see it. Students want to learn and be taught well. Despite the frequently heard assertion that student surveys are 'popularity polls' or reward 'spoon feeding', there is little evidence to substantiate this.

There is no doubt that critical student surveys are personally distressing for academics, but the appropriate response is not wholesale dismissal of surveys. If bad surveys do not matter, then good and outstanding surveys, obtained by many academics, particularly sessional academics, do not matter either. The result is that unlike high achieving researchers, who are routinely rewarded through employment and promotion, high achieving teachers frequently do not even have job security. If universities are going to deliver high quality education to students, we must take student opinions expressed through surveys much more seriously, by rewarding good teachers through employment and promotion. There were many valuable comments made during questions and discussion at the lecture. It was suggested that a cultural shift towards academics voluntarily publishing survey results on their staff webpages would be beneficial in recognising and valuing good teaching. Critical comments included the suggestion that characterising teaching as innate discourages people from striving to be better teachers, and that the difference between good teaching and great teaching is immaterial in comparison to the difference between bad teaching and good teaching.

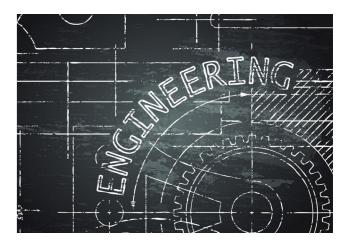


# Lecture 7: Fifteen years with first-year students and still learning

**Sami Kara**, School of Mechanical & Manufacturing Engineering

In industry, engineering graduates face real-life problems on a daily basis and they are expected to solve these problems by using the knowledge they acquired during their education. Students require specific engineering skills as well as graduate capabilities, including problem solving skills, critical thinking, teamwork, discipline-oriented communication, research, and the ability to learn independently. Yet teaching is traditionally very didactic and encourages rote learning. Thus, students can be unprepared for the workforce, and unable to integrate and apply their knowledge in an industrial setting. The first year of university study is particularly challenging for students as they go through the transition from high school to university learning styles. It is therefore critical that they contextualise the relevance of their learning in a disciplinary context.

In this lecture, Professor Kara talks about his experience with first-year engineering students over the last mu years and about his attempts to engage them in the learning process. He explores how using and implementing various concepts, such as blended learning, project-based learning, role playing, research in teaching, and industry engagement can help students contextualise the relevance of their learning with a continuous improvement process in relation to their profession and industry.



# Welcoming the new Scientia Education Fellows

The second group of Scientia Education Fellows were appointed in November 2017. The Academy extends a warm welcome to the new Fellows and invites them to partner in this journey of enhancing the quality of education at UNSW.

# Scientia Fellows appointed in November 2017

Name	Faculty	School
Tania Bucic	Business	Marketing
Jacquelyn Cranney	Science	Psychology
Terry Cumming	Arts and Social	Education
Isabella Dobrescu	Business	Economics
Julien Epps	Engineering	Electrical Engineering and Telecommunications
Luke Hunter	Science	Chemistry
Lauren Kark	Engineering	Graduate School of Biomedical Engineering
Alberto Motta	Business	Economics
Philip Oldfield	Built Environment	
Nalini Pather	Medicine	Medical Sciences
Patsie Polly	Medicine	Medical Sciences
Arianne Rourke	Art & Design	
Shirley Scott	Canberra	Humanities and Social Sciences
Leesa Sidhu	Canberra	Physical Environmental and Mathematical Sciences
Prue Vines	Law	
Stephen Ward	Built Environment	
Karin Watson	Art & Design	
Kate Wilson	Canberra	Engineering and Information

# Reflection on 2017 and roadmap for 2018

It has been an exciting and significant opening year for the Academy and its inaugural SEA Fellows. The formation of the Academy has led to a number of important outcomes:

- > Through the Academy, Fellows have formed a community of practice. The Academy links all Faculties at UNSW through monthly meetings, sharing and debating hot topics in education.
- The Academy successfully won competitive grant funding. The funds will enable Fellows to work on a new and important project aimed at identifying dimensions of effective teaching practice. Fellow Gary Velan's leadership on this has been exemplary and has further solidified the connections of the Academy, both internally and external to the university.
- > The Academy has successfully reached out externally to other academies to learn and collaborate. For example, under the NUW Alliance, the Academy hosted Sarah O'Shea, Chair of University of Wollongong's WATTLE (Wollongong Academy of Tertiary Teaching and Learning Excellence) at UNSW's Learning and Teaching Forum. In addition, Fellow Chris Tisdell was an invited speaker at one of WATTLE's events.
- > Raising the profile of education across UNSW and externally. A number of Fellows have given invited public lectures through the Scientia Education Academy Lecture Series. Through this, many hundreds of people have discovered Fellows' approaches to enhancing the educational experiences and outcomes of students as well as their personal career journey.

The key initiatives of the Academy and its future plans were outlined in this report. These initiatives form the basis for the work of the Academy in 2018. The range of projects will be expanded, and existing ones enhanced by the new incoming Fellows. The SEIF grant funded project to develop a UNSW educational portfolio will remain as an overarching priority of the Academy. A number of other SEIF grants that are being led by SEA Fellows will inform aspects of this overarching project.

The Academy aims to develop a publication based on the projects outlined in this report. This publication will illustrate the scholarly approaches to education that are being undertaken at UNSW. The project will be led by Chinthaka Balasooriya with input from all SEA Fellows.

We also aim to develop some audio-visual content that will help to promote the activities of the Academy and champion educational inspiration, innovation and excellence. There are plans to produce a series of short videos entitled 'Sixty Seconds with the Scientia Education Academy.' These will enable individual Fellows to discuss their vision for the Academy and their passion for learning and teaching. In addition, Michelle Langford is leading a proposal to establish a monthly podcast series in which SEA Fellows will discuss various aspects of teaching practice in conversation with each other and leaders in the field. The proposal also includes engagement with students via the Students as Partners initiative. The videos and the podcasts will help to raise the profile of the SEA throughout UNSW, across Australia and the world.

The SEA Fellows will continue to actively engage with the process of educational policy development, through the representation of Fellows on key policy-making bodies. SEA Fellows look forward to engaging with the newly appointed Education-Focused staff and the related Communities of Practice.

In summary, the Academy has developed a clear plan for 2018 with the above initiatives as key priorities. We expect this to be a continuous cycle, with new projects being added by incoming Scientia Fellows each year, which in turn would inform the priorities for the following year. We look forward to an exciting year ahead!

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