Office of the PVC (Education)

2018 Learning and Teaching Forum

Poster eBooklet

- Partners in Learning: Connecting Communities
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Introduction

The 2018 Learning and Teaching Forum theme of Partners in Learning: Connecting Communities explored how we can bring together students and staff to create a great learning environment that makes a positive difference to the lives of all who work and study at UNSW. The three streams of Being Courageous, Being Employable, and Being Inclusive, challenges and inspires us to think big about how we can redesign our courses and programs, how we can foster great career outcomes for our graduates and how we can promote an environment that allows everyone to be an active participant in our community.

The Forum provides an opportunity to showcase the imaginative work of staff and students who have applied their talents to making a difference to students and colleagues. We will all take something useful away from the Forum that we can apply to our own educational practices. Enjoy the day, discuss and debate your ideas with colleagues and make sure you challenge yourself to make UNSW the best university in the world.

Professor Geoff Crisp
Pro Vice-Chancellor (Education)
As part of the 2018 Learning and Teaching Forum, staff were invited to develop a poster around the theme *Partners in Learning: Connecting Communities*. The posters were on display at the Forum on 26 October, 2018 and are contained within this publication.

The posters on pages 9 - 28, provoked discussions on one of the three stream themes:

* **Being Courageous**: Exploring new approaches to improve and expand learning experiences

* **Being Employable**: Providing authentic learning experiences for workplace readiness

* **Being Inclusive**: Designing and developing curriculum to support inclusion

Criteria for Poster Presentations:
- The poster provokes discussion on a stream theme
- The poster is visually appealing; the text and images complement each other to communicate and inform the audience
- The focus of the poster is novel in the context and applicable outside of the context
- The poster includes the student voice (i.e. student feedback or evaluation)
- The poster should be of appropriate publication quality including appropriate referencing and free of copyright material

Visit the forum webpage for further details about the 2018 Learning and Teaching Forum: teaching.unsw.edu.au/forum18
The posters on pages 29 - 46 were compiled by the Communities of Practice (CoPs) which were formed out of the Education Focussed Foundation Funding (EFFF) scheme which was established in 2017 by the Division of the Deputy Vice-Chancellor, Academic (DVCA). The EFFF provides a one-off pool of funding for initiatives led by the first cohort of academics appointed into EF roles. EFs were encouraged to pool their individual allocation to form larger group projects or Communities of Practice (CoPs).

The Education Focussed (EF) career model offers a new career path for academics who are talented and passionate teachers. The EF career model will help deliver our UNSW 2025 Strategy by fostering educational excellence.

Funding was provided for the design, development and delivery of initiatives that support the success of EF academics as well as educational excellence at School, Faculty or University level in line with the 2025 Strategy and the principles of the Scientia Educational Experience.

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Jessie Copper1, Allison Lennon1, Merlindre Kay1, Alberto Motta2, Isabella Dobrescu2, Krishanth Sivanathan3, Danni Maguire3
1Photovoltaic and Renewable Energy Engineering, Engineering, 2UNSW Business School, 3Office of the Pro Vice-Chancellor

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Blended Learning: Best Practice for a Dynamic World? Preparing for the new school syllabus
Elizabeth Angstmann1, Krystyna Wilk1, Richard Newbury1, Jessica Budden1, Bryony Lanigan1
1Faculty of Science

A UNSW Community-Driven Portal for Online Education Resources
Leads: Socrates Dokos1, Iwan Kelaiah1
Henar Vicente Cristobal2, Valerie Combe-Germes2, Mark Duffy3, Phillip Howlin4, Lesley Ulman5, Gavin Mount6, Patrick de Permentier5, Gi-Hyun Shin2, Sumiko lida2, Nicole Marden5, Debbie Lackerstein6, Agyem E1i7, Nicolaas Warouw6
1Graduate School of Biomedical Engineering, 2Humanities and Languages, 3Law, 4Mechanical Engineering, 5Medical Sciences, 6UNSW Canberra, 7Arts and Social Sciences

Establishment of a Rural Pathology Teaching Museum on the Mid North Coast
Leads: Julianne Weatherley, Linda Ferrington, S Singh, Alveen Bannan
Ned Abraham, Karen Chia, Patricia Collie, Lesley Forster, John Gan, Jenine Griffiths, Mark Henschke, Meredith Hinds, Dubravka Jankovic, Matthew Kinchington, Fateh Ladhani, Janet McLachlan, Michael Prowse, John Roberts, Gonasagarad Ruthnam, Marie Shaw
UNSW Rural Clinical School

Digital assessment: empowering students and supporting teachers through innovative student-oriented educational practices
Louise Lutze-Mann1,6, Mengistu Amberer2, Jose Bilbao3, Trudie Binder4, Shirley Carlon5, Zhixi Chen3, Steven Davis3, Irina Dedova4, Ray Eaton3, Robert Holdom3, Philip Jones6, Kana Kanapathipillai3, Kim Lapere7, Kevin Liu5, Chi Mak1, Peter Neal3, Carol Oliver1, Nalini Pather4, Felicity Smith4, Scott Sulway1, Silas Taylor4, Gary Velan6, Karin Watson7
1Science; 2Arts and Social Sciences, 3Engineering, 4Medicine; 5UNSW Business School, 6Office of the Pro Vice-Chancellor (Education); 7UNSW Art and Design.

The Evaluation of Teaching and Learning Resource
Leads: Adrienne Torda1, Rebecca Le Bard2, Sarah Jane Moore1
Barbara-Ann Adelstein1, Patricia Arthur2, Chinthaka Balasooriya1, Melvin Chin1, Orin Chisholm1, Kar Ming Chong3, Jacquelyn Cranney2, Arvin Damodaran1, Nagisa Fukui4, Anne Galea2, Miriam Neigert4, Anthony O’Sullivan1, Husna Razee1, Iain Skinner5, Silas Taylor1
1Medicine, 2Science, 3UNSW Business School, 4Arts and Social Sciences, 5Engineering
WIL@UNSW – Developing skilled graduates, providing best practice for staff, and meeting employability standards
Leads: Leanne Piggott, Theresa Winchester-Seeto
Juan Pablo Alvarez Gaitan, Andrew Blance, Kevin Clarke, Sing D’Arcy, Shannan Maisey, Diane Mayorga, Patsie Polly, Jayashri Ravishankar, Mirra van der Ley, Sean Xiang Cheng, Bruce Edward Watson, Steve Weymouth, Lisa Zamberlan
1UNSW Business School, 2Engineering, 3Medicine, 4Built Environment, 5Science, 6Arts and Social Sciences, 7Arts & Design

Sustainability Education in the Built Environment through Problem/Project Based Learning (PBL)
Sarath Mataraarachchi
Built Environment

Supporting students in their transition to university studies by building learning communities
Leesa Sidhu, Kate Wilson, Warren Smith, Charles Hoke, Toby Boyson, Heather Neilson, Natalie Cujes, Mona Bahri, Jacquelyn Cranney
1UNSW Canberra, 2Psychology, Science

Improving the learning experience of part-time, postgraduate, off-campus students.
James Hanson, Keiran Sharpe
School of Business, NSW Canberra
This poster visualises a project that investigates Teaching International Students (TIS) through the lens of government policy, theories and practice. It provides a scaffolded ecological system for building practice-based architecture to inform educators’ career development learning. The focus is on providing a “Distributed Facilitator Framework” (DFF) for empowering educators to embark on situational-based learning activities to engage International students in the tertiary learning environment. Through a visualisation process, staged professional learning activities and an established theoretical premise, the core elements behind providing professional learning are shown. An ecologies of practice lens has been used to envisage a TIS Community of Practice (CoP) as an integral component of global outreach as expressed in the UNSW 2025 Strategy. The ‘National Strategy for International Education’ underpinned by Leask and Carroll’s (2013) guide to: ‘Good practice principles of teaching across cultures’ will be linked to the colourful bricolage of student and educator experience. The aim is to enhance International student engagement through educator driven mentoring, events and Students as Partners. Firstly, through portraying ways that a DFF can be educator-led to promote transformative practice to address quality outcomes through ‘Inspired learning through Inspired teaching’. Secondly, to develop a deeper understanding of TIS in the techno-driven environment of higher education.
A Distributed Facilitator Framework (DFF) for Teaching International Students (TIS)

Theoretical Framework:
- Iceberg Model: surface & deep culture (Krüger, 2013)
- Ecologies of Practice, DFF, Rourke & Snepvangers (2017)
- Kemmis & Heikkinen (2011)

Action Practitioner Research:
- One year cycle, follow up reflective practice activities

Changing mindsets → Building consciousness of TIS perspectives
Importance of IS views → Valuing IS perspectives (plan for activities)
Gov. Policy UNSW 2025 → 3 Key Gov. Pillars & Good Practice Guidelines
IS informing Curriculum → Improve Curriculum: Intergenerational/Interfaculty
TIS & WIL → Investigating partnerships, mentoring

Collaboration
- Empathy
- Multi-Socialisation
- Inter-Culturalisation
Connectedness
- Real-world relevance
English Language skills

Outcomes of authentic artifacts for TIS
- Bite size, online & on demand

Core Elements of TIS Planning:
- Attitudes
- Perspectives
- Gov. & Institutional Policies
- Curriculum
- Professional Practice
- Pedagogies – Theory & Practice
- English Language Proficiencies

Dr Kim Snepvangers, Dr Arianne Rourke, Vivien Sung; Student as Partners:
Jason Jiang & Iain MacDonald
Faculty of Art & Design
Improving students’ practical learning experience through digital intervention

Gee Chong Ling, Bianca Lawrence, Tammy Tang
Biotechnology and Biomolecular Science (BABS), Science

UNSW 2025 strategy aims to improve student learning experience through the delivery of Scientia Education Experience. The aspiration is to see the UNSW program produce global citizens who can apply themselves professionally in local, national and international communities. To achieve the goal, the learning and teaching team at the School of Biotechnology and Biomolecular Sciences (BABS) calls for a multidisciplinary collaborative effort amongst the teaching academics, student as partner, and not to forget – the technical delivery and support team.

The BABS Technical Teaching team has recently instilled digitally inspired teaching-oriented practices. The team has initiated, designed, developed and employed digitally driven teaching tools to improve overall efficiency of the technical delivery services, promoting sustainable solutions via enhanced feedback and dialogue with the teaching team. These include pre-class preparation, in-class delivery and student support as well as continual improvement through feedback practices. These initiatives will assist in the alignment of BABS Teaching practices to the UNSW 2025 strategy.

1. “Interactive equipment checklist” is a semi-automated solution designed to improve pre-class preparation tasks, complimenting traditional class notes which are elaborative but laborious. The design allows the preparation work to transition between teaching sessions by readily taking into account and adjusting for changes should the curriculum design remain unchanged or have minor changes. The tool streamlined current processes, allowing better use of resources in terms of labor and materials.

2. “Lab plans and electronic lab note” have been introduced as an in-class delivery and support tool to guide students through complex laboratory setup, reducing health and safety risk, and improve learning experience by eliminating disruption of the workflow or class progress through a flipped classroom approach. The tool outlines basic information of equipment, chemicals and reagents as well as the spatial distribution of learning resources, which improves logistics and student workflow during practical sessions. This is achieved through the collaborative effort of the technical and teaching team where expert knowledge and experience is shared to improve students learning experience.

3. “Feedback tracker” has been introduced as a tool allowing non-conformances or problems to be reported accurately and addressed in real-time, reducing impact on the student learning experience. An evaluation practice is implemented to promote sustainable practices within the technical team, maintaining overall effectiveness of the team in delivering great teaching and support services.
Improving Students' Practical Learning Experience through Digital Intervention

An initiative driven, designed, developed, implemented, and evaluated **BY & FOR** the technical community within the School of Biotechnology and Biomolecular Sciences.

Interactive Equipment Checklist

Improved efficiency of the workflow through semi-automated update via interactive settings on the laboratory materials and class preparation.

Pre-class Preparation

Students' Practical Learning

Post-class Evaluation

Lab Plan & Electronic Lab Notebook

Diagrammatic assistance for the technical staff, teaching team & students through pre-lab exposure to the lab setup.

Enhanced overall learning experience through guided experimental results.

Feedback Tracker

Improved communication between the technical staff, teaching team and students via interactive feedback loop.

Improved traceability of issues and challenges during the teaching session, allowing effective follow-up action to be taken to improve future offering.
Creating a Living Book: Reading natures in the Anthropocene

Sigi Jottkandt
Arts and Media, Arts and Social Sciences

This semester I am teaching an English and Creative Writing course called Reading Natures. This course engages students with ecological thinking, which seeks to "join the dots". As part of their assessment, students and I are creating a Living Book using an online book publishing platform called "Scalar". Built on the principles of flat ontology, Scalar enables text, image and other media to co-exist on the same non-hierarchical "level" as notes, annotations, and other commenting functions. It is, in other words, an "ecological" software platform.

This poster explains my theoretical and practical motivations for this approach to assessment, which seeks to put into practice at every step the principles of "eco-thought". The Living Book will be freely available on the web and open to public commenting, representing a collaborative, authentic and inclusive learning experience.
LIVING BOOKS
FOR ENGLISH AND CREATIVE WRITING
JOIN US FOR A MULTISPECIES TEA PARTY...

Reading Natures engages ecological thinking, which seeks to ‘join the dots.’

Our Living Book is written on the Scalar book publishing platform. Built on the principles of flat ontology, Scalar enables text, image and other media to co-exist on the same non-hierarchical “level” as notes, annotations, and other commenting functions. It is, in other words, an “ecological” software platform.

Micro-landscapes of the Anthropocene is freely available on the web. Open to public commenting, the Living Book is collaborative, authentic and inclusive.

Sigi Jöttkandt, Senior Lecturer in English
School of the Arts and Media, Arts & Social Sciences Faculty
Designing a mixed reality learning experience for Interior Architecture

Tracy Huang, Dean Utian
Faculty of Built Environment

The advent of virtual reality (VR) and augmented reality (AR) technologies in the past decade has enabled new and enhanced opportunities for learning. They expand the possibilities of how we engage students with knowledge and skills through the facilitation of immersive and authentic learning experience. This project investigates the integration of web based virtual reality (VR) as a design decision tool for 2nd year undergraduate Interior Architecture students in the Faculty of Built Environment. The aim of the project is to improve student learning through direct and authentic experiences of technical systems, particularly natural lighting and artificial lighting. The connection between theoretical knowledge and practical applications are crucial to the course learning outcomes and graduate capabilities. Through the use of VR and AR technologies, the project aims to enhance the learning experiences by reinforcing the relevance and engagement of students. In addition, the goal is that attainment of the learning outcomes is improved as the system provides more meaningful syntheses of theoretical underpinning and practical application in the students’ major project, a design of a bar typology.

The poster presents the VR and AR design and preliminary feedback of students. It celebrates the partnership of learning with collaboration with academic and professional staff, to produce a meaningful and technically strong product. It has students as the focus of the user experience, drawing on feedback and reflections of past course experiences. In this respect, the project that is presented is both being courageous as well as being employable.
MIXED REALITY

Immersive Spatial Design for Deep Learning

**DESIGN DECISION TOOL**

An accessible immersive design decision tool for 2nd year undergraduate Interior Architecture students in the Faculty of Built Environment.

**DEEP LEARNING**

The aim of the project is to improve student learning through direct and authentic experiences of technical systems, such as natural lighting. Through the use of VR technologies, we are able to provide a more meaningful synthesis of theoretical underpinning and practical application in the students’ design project.

Students model their design proposal in VR, which allows them to express and communicate their design for tutor, peer, and self critique. Currently they either show the design digitally via their computer or have printed hard copies, this traditional process is very limited in terms of interaction or engagement. VR technologies enable students to explore and communicate their designs in a much more engaging and dynamic way.

**Workflow**

1. Capture existing site using Stereoscopic 360° Camera
2. Upload stereoscopic images onto web-based VR platform
3. Site model link is uploaded onto middle for student access 24/7.

**Deep Learning**

Rich feedback faster = Better Design Iterations

"Wow, I forgot how big the openings were, and how dark some of the spaces are."

"This doesn't replace the experience of the site visit but it's great that I can look at the site in detail again whenever I need to."

"This would be better if we could change the materials and proportions of components whilst we were in the VR environment. This would enable a better design iteration."

"I can really see how the light enters the building and interacts with the buildings I've selected. It looks better than I imagined or on the computer screen."

"Wow, I didn't realize my form was this big and that how it's situated was coming through. This is great to understand scale."

"This is great, but the model has quite a few caveats that we need to work out during testing. It's quite straightforward."

"I love it! I wish we had a model like this for the previous project. It's really helpful for understanding the spatial relationships."
VR User Experience: Pathway to Empathy
Designing Immersive Learning Using UX Principles

Dean Utian¹, Jason Chan²
¹Built Environment, ²UNSW Information Technology

User Experience (UX) encapsulates a person’s feelings and attitudes when interacting with a product, service or learning object. It includes the ease of use, perception of value, and efficiency of performing tasks. UX is tied to the user’s journey to solve a problem in a contextual setting that may be real or virtual.

Virtual Reality (VR) is the curation of immersive digital experiences that could be based on real or imaginary worlds and situations. Well-designed VR experiences activate an extended commitment and emotional investment facilitating deep learning, following principles of digital game-based learning (Gee, 2004).

Empathetic design is often seen as the holy grail of UX. Empathy is the ability to understand, be aware of and sensitive to another person’s context, feelings, goals and motivations. It requires user research to guide the decision-making process. Novice VR developers may assume empathy is an inherent quality of the experience. However, any experience can create empathy. It is no more automatic in VR than it is in video or words. If crafted carefully, the user experience in VR can heighten empathy, move the user, and result in deep learning (Shin, 2018).

The poster and accompanying multimedia presentation display a UX design process, the rewards, pitfalls and broad considerations for developing immersive learning in VR. They demonstrate the pathway to achieving empathy between designer and user as well as between user and the context of the experience. The UX principles are linked to pedagogy, including that from digital game-based learning.

Using case studies from within UNSW and what is being done more broadly in education, the benefits and challenges of user experience design is explored. UX is a collaborative field and the poster corresponds to this and the theme of partners in learning, developed with IT, education design and user perspectives. It aims to promote a courageous approach to learning where new possibilities are explored to enhance the education experience and outcomes. It is also about being authentic, where learning experiences are situated, relevant, meaningful to the users and makes them workplace ready.

VR User Experience: Pathway to Empathy
Designing Immersive Learning Using UX Principles

1. Analysis
   knowing the user
   - context
   - environment
   - learner specifics

2. Concept & Ideation
   - look & feel
   - journey map
   - story
   - experiential

3. Design
   interaction & visual
   - representation
   - immersion
   - discovery
   - narrative playtesting

4. Prototyping & Feedback
   - learnability
   - emotional reactions
   - usability testing
   - ergonomics

5. Empathy
   user-centric design
   - personalisation
   - choices
   - feedback loop
   - Regime of Competence

Co-design Principle, Cycles of Expertise
Jason Chan, Dean Utian
IT Services, Built Environment
At Law we have implemented a program of Interns from Art and Design school (PEP scheme) to help us to design educational materials. This includes visual imagery, video, filming and editing of events and production of animated sequences. This has become an extremely mutually beneficial program as the learning and teaching team at law has learnt about visual design and advanced video production techniques. Conversely, the students have learnt about working in an authentic workplace and produce artefacts to use in their CV.

This presentation will mirror the mutual beneficial nature of the relationship by having the learning and teaching team to describe their experience and then the Interns also describing their experience.
Interns as Mutually Beneficial Partners
Interns from Art and Design in the PEP scheme

What We Do Together

Benefits for L&T Team
- Learn immensely about video production
- Learn about modern design thinking
- Introduce Art into video production

Benefits for Interns from Art and Design
- Videography
- Lighting
- Storyboarding
- Graphic design
- Audio production
- Audio editing
- Green Screen
- Post Production
- Learn workplace relationships
- Learn time management skills
- Learn how to deal with stakeholders
- Maybe make some money

Thomas Molloy, Patrick Lynch, Danny Tan Toby Castles, Alex Li. Law Faculty
Creating effective tutorials that students value

Shannan Malsey, Kim Lapere
Faculty of Science, School of Chemistry

UNSW Chemistry has created a new paradigm for first year chemistry assessment, by separating the syllabus into two components – threshold knowledge and skills required to pass the course and mastery competencies and skills for merit grades.

Blended learning is the keystone for this project and tutorial classes are a vital face to face component of the mastery instruction. These classes will integrate chemistry topics while explicitly teaching critical thinking and problem-solving skills. In their design, we need to strike a balance between pedagogical best practice and delivering classes which students find rewarding and of value.

We began with our existing, traditionally didactic and teacher focused tutorials and evaluated them through pedagogical, instructor and student lenses. Based on these findings we reformatted the tutorials to engage a student centric approach. We compared student perceptions of learning gains in 1st year Chemistry in the two tutorial formats, using the SALG tool (salgsite.net). Results indicate a firm appreciation of opportunities for collaborative group work and peer assistance in the learning process in the student centric format. Nevertheless, there was reticence to embrace the shift from teacher to student focused classrooms. Grades were a recurring motivator for engaging in the classes and many students equated the number of answers provided with the value and ‘efficiency’ of the class.

The emergent themes of this study which have shaped the design of chemistry tutorials in UNSW 3+ include the need to challenge student perceptions of learning and their role in the process, focus on the development of the metacognitive skills needed for mastery of problem solving and the need to provide tutorial resources and assessment structures which shift the focus from an algorithmic approach to problem solving to one which encourage a deep learning approach while supporting students, who are new to university, on their path to academic independence.
Creating effective tutorials that students value

How can we create tutorial classes which encourage the development of the metacognitive skills required by expert problem solvers while supporting deep understanding of chemical concepts and academic independence?

Tutorials were initially traditional problem solving classes...

- **48 Students**
- **1 Tutor**

Up to 30 multistep problems to be attempted before class (rarely completed)

"If we expect students to take ownership of their learning they need to be guided by active learning practices."

“I only go to tutorials because they take attendance. Mostly what the tutor talks about isn’t relevant to me and I zone out.”

We redesigned the tutorials with a student centric model...

- **Groups of 6, 1 tutor**
- **48 students**

Worksheet provided in class now include faded examples and conceptual problems

- **87%**
  - Students reported good or great gains as an individual learner in tutorials

- **80%**
  - Students said the tutorials were a great help in their understanding of content

“Don't really know anyone else in the course, so I really looked forward to tutorials because I got to talk about the stuff that I find confusing.”

“It was a confronting experience to change how I teach. But equally, a rewarding one as I could engage with students one on one”

Qualitative Feedback

- Students valued the opportunity for collaboration
- Misalignment of student expectations, instructional goals, class format and assessment
- Student centric approach confronting for students and staff

Tutorials in UNSW 3+...

- **Groups of 6, 1 tutor**
- **24 students**

- Readiness assurance: individual and group quiz.
- Small number of integrated or contextualised problems presented in class.
- Development of problem solving skills scaffolded

Shannan Maisey, Kim Lapere: School of Chemistry, Faculty of Science
Blended Learning Strategy at UNSW Art & Design
Evolving leadership, administration, professional development and culture to establish a sustainable, scalable blended learning strategy.

Karin Watson
Art & Design

The Inspired Learning Initiative (ILI) has been an important catalyst for kick starting Blended Learning and the wider discussion about digital uplift at UNSW Art & Design. This SEIF funded project aims to complement and extend upon ILI by developing a cohesive Blended Learning Strategy that will inform all operational areas of the Faculty, including executive, administration, teaching and resources. This masterplan will serve as an impetus for widespread culture change across all areas to facilitate the uptake of digital pedagogies to be effective, efficient, scalable and sustainable. This will help improve the quality, personalisation and flexibility of the student learning experience. The PVCE has nominated that 40 Art & Design courses will be Digitally Uplifted as part the ILI. This project would maximize the return of investment by expanding the impact and capability of staff and faculty well beyond these selected courses.

The project will develop a cohesive Blended Learning Strategy for UNSW Art & Design that:
• builds upon and extends the Inspired Learning Initiative to all courses and programs,
• informs all areas of operation of the faculty,
• serves as a catalyst for cultural change towards Blended Learning
• provides a blueprint for the subsequent implementation of BL across all programs at the faculty.

The strategy will investigate all the different aspects of planning, managing, teaching, and experience for all courses, and produce a masterplan that informs practices in each of these aspects pulling them together into a cohesive approach. The business model can then be refined from a holistic perspective to make blended learning a key and integral component while uniting a several other UNSW A&D projects such as the online Course Outline system, online Proficiencies and Inductions, Learning Hubs and Personalised learning using data analytics (OnTask Project). It will also inform how courses are developed in all future digital uplift instances.

The key outcomes will be a series of recommendations and strategies for:
• Change culture and uptake of blended learning
• Professional Development of staff
• How to manage time and space differently
• Expectations of students and teachers
• Administrative, timetable and IT implications
• Curation of resources
• How to teach at UNSW A&D
• How to study at UNSW A&D
Blended Learning Strategy at UNSW Art & Design

Evolving leadership, administration, professional development and culture to establish a sustainable, scalable blended learning strategy.

**ISSUE**
ILI is limited to 40 courses only. How can we extend the capability of all courses, staff and operational areas to facilitate sustainability beyond ILI.

**UNSW ART & DESIGN**
- EXEC
- ADMIN
- TEACHER
- STUDENT
- 200 COURSES

**ILI**
- 40

**FACULTY**

**BLENDED LEARNING STRATEGY (SEIF 2 GRANT)**

**AIM:**
To develop a Blueprint for Blended Learning that builds and expands upon ILI and informs all operational areas of the Faculty. This will facilitate a cohesive, effective, sustainable and scalable BL experience for all staff and students.

**Recommendations + Strategies for:**
- Change culture • uptake of BL
- Manage time differently
- Expectations of Teachers
- Admin, timetable, logistics, IT
- How to teach at UNSW A&D
- Professional Development
- Manage space differently
- Expectations of Students
- Curating resources
- How to learn at UNSW A&D

**FUTURE FACULTY**

**BLENDED LEARNING STRATEGY IMPLEMENTATION**
- Professional Dev. Workshops
- Inductions
- Integrate with other systems
- Data analytics
- Inductions
- Templates
- Integrate with other projects
- Evaluations
- Guidelines
- Support

Karin Watson
UNSW Art & Design
Design Enquiry and Empathy: Fostering job-ready industrial designers

Oya Demirbilek
Built Environment

The course IDES4101-Design Studio 7: Enquiry focuses on producing job-ready graduates by developing students’ design research skills and knowledge while also cultivating empathy through integration of students’ own values. This poster presents the course and teaching approach to improving the student experience by facilitating a supportive environment for learning. Students are empowered to operate at the fuzzy front end of the design process in new product development by fostering their future thinking using real-world problems. Moreover, students are enabled to take ownership of their learning and self-development, and to embrace their internal values and personal interests. This teaching approach produces students who can draw on design research methods and strategies to identify opportunities for innovation, while using empathy and personal values that focus on people (the user) rather than prioritising technology or appearance alone, to best achieve optimal solutions.

In traditional design studio courses, learning is usually an individual process; each student works on their project under the close guidance of their tutor and monitoring of the studio leader/convener. To better foster scaffolded individual learning and to provide an equitable, inclusive and safe environment in my design research course, Design Studio 7: Enquiry, I created the concept of Peer Group meetings, which complement my other teaching methods, as illustrated in the poster. Over the past seven years, I have developed and refined this concept and for the 2019 delivery, I will be adding a digital uplift supported through a Faculty grant. The Peer Group meetings allow students to mentor and project-manage each other’s projects, share their experience and knowledge, and learn from and support one another.

The Peer Group meetings are a valuable tool for students to build their network and keep in touch with their group members well after graduation. Students often mention the importance of their Peer Group in their final research report acknowledgments, as in the following quote: “To my special research group […] who have been a wonderful source of laughter, support and understanding throughout the research project and my time at UNSW. Thank you!”
Design Enquiry & Empathy:
Fostering job-ready industrial designers

Course overview: The course IDES4101-Design Studio 7: Enquiry focuses on producing job-ready graduates by developing students’ design research skills and knowledges while also cultivating empathy through integration of students’ own values.

This poster presents the course and teaching approaches to improving the student experience by facilitating a supportive environment for learning. Students are empowered to operate at the fuzzy front end of the design process in new product development by fostering their future thinking using real-world problems. Moreover, students are enabled to take ownership of their learning and self-development, and to embrace their internal values and personal interests.

Outcomes
- Process journal,
- Peer group report,
- Self reflection

Peer Group Meetings as a main support structure:
This teaching approach produces students who can draw on design research methods and strategies to identify opportunities for innovation, while using empathy and personal values that focus on people (the user) rather than prioritising technology or appearance alone, to best achieve optimal solutions. In traditional design studio courses, learning is usually an individual process; each student works on their project under the close guidance of their tutor and monitoring of the studio leader/convenor. To better foster scaffolded individual learning and to provide an equitable, inclusive, and safe environment in my design research course, Design Studio 7: Enquiry, I created the concept of Peer Group meetings, which complement my other teaching methods, as illustrated in the poster. Over the past seven years, I have developed and refined this concept and for the 2019 delivery, I am working on a digital uplift supported through a Faculty grant.

The Peer Group meetings allow students to mentor and project-manage each other’s projects, share their experience and knowledge, and learn from and support one another. This is also a valuable tool for students to build their network and keep in touch with their group members well after graduation. Students often mention the importance of their Peer Group in their final research report acknowledgments, as in the following quote:

“To my special research group [...] who have been a wonderful source of laughter, support and understanding throughout the research project and my time at UNSW. Thank you!”

Oya Demirbilek
Industrial Design, Built Environment
The PlayEnergy project is targeting a fully-online gamified Sustainability Course that can be provided as a UNSW General Education course aiming to attract >3000 students per year by 2020. The first iteration of PlayEnergy, trialled in 2017 over a one-week period in SOLA1070 - a first year Sustainable Energy course, focused on the concepts of residential energy efficiency and photovoltaic power generation and demonstrated the feasibility of running a 30-year simulation for 160+ students.

The second iteration of PlayEnergy in 2018 will build on the 2017 prototype and aims to implement the first of eight interactive “learning quests”. These learning quests seek to enhance student learning via a platform that will allow students to complete a series of trial and error tasks combined with storylines and interactive content. Successful completion of learning quests will unlock capabilities in the game and allow students to direct their new-found knowledge into practice by making changes to their PlayEnergy house and community with the objective of reducing their greenhouse gas emissions and guiding their community towards a more sustainable future.
PlayEnergy
Guided Game Play for Learning Sustainable Energy – The Case of SOLA1070

Learning Quests: Mini-challenges combined with storylines and...

Welcome to the PV mini-challenge
I’m building a new house and want to install a rooftop PV system. I’ve got a limited budget of $8,500.
Can you help me design a PV system and suggest modifications to my house design to maximise energy generation over a typical year?
When you’re ready, design the PV system you believe will reach my generation target.

The Challenge:
Developing online educational material that engages learners.

The Objective:
Transform SOLA1070 into a fully-gamified engineering course.

The Game:
Minimise household CO₂ emissions whilst maximising occupant thermal comfort at minimal costs.

... interactive content.

The Feedback:
“The game improved my understanding of sustainable energy”
“It was ok to make and learn from mistakes”
“Fun to do, interactive, made the content less boring/tedious to complete”
“A much more practical, enjoyable and memorable way of learning.”

J. Copper¹, A. Lennon¹, M. Kay¹, A. Motta², I. Dobrescu², K. Sivanathan³, D. Maguire³
¹SPREE, Faculty of Engineering; ²UNSW Business School; ³PVCE
The year 11 and 12 high school science syllabi have been updated and are running for the first time in 2018 and 2019. These students will be in first year from 2020. The new physics syllabus is quite different from the old one. There is a greater emphasis on the quantitative nature of physics. Students have 15 hours to perform a project, called a depth study, each year. This introduces a number of opportunities and challenges for us, high school physics teachers and students.

The depth study requirement is an opportunity for us to help students and teachers. We have made our first year laboratory space and demonstrators available out of semester for schools to come in and do experiment. This has received very favourable feedback from students and teachers. As part of another project academics across science have created a series of online depth study resources to let students know about research taking place at UNSW: https://www.openlearning.com/unswscience

A challenge for 2020 is that the students will have completed a physics course in high school which covers some of the content we are teaching them in their first year. They will have completed laboratory exercises similar to some of our experiments before they start here. In order to keep the students interested and challenged we are looking at the overlap of our current laboratory experiments with the new high school syllabus and extending or replacing the ones the students have seen in high school.

The school of physics has also introduced a graduate certificate in physics for science teachers to qualify science teacher to teach physics and a visiting teaching fellow position where a high school teacher comes to UNSW on a one year secondment.

In 2019 we will be piloting a course for students undertaking 3 unit extension science, this will bring the keenest school students to UNSW.
Preparation for the new school syllabus

Graduate Certificate in Physics (for Science Teachers)
- Designed specifically for the new curriculum
- Entirely online – accessible in regional areas
- Practical – applies concepts to the real world

New Undergraduate Experiments
Designing new experiments to revitalize the first year lab experience, accounting for the changes in the high school curriculum coverage.

School Visits:
Feedback from teachers and students

“... We arrived informed and eager to begin collecting data. The quality of the resources was high and is very useful for us in developing a Depth Study for our Year 11 students... I have no hesitation in recommending this program to other schools. The value was excellent and helped to give our students a taste of campus life and research career pathways.” – Kylie Biddle, Rose Bay Secondary College

Future Project: 3 Unit Extension Science
- Online course covering the content (so course is accessible to all high-performing students, regardless of their location)
- One week summer school held in January where students work with a research group (show students where STEM can take them, establish support early on)
- Mentoring by a PhD student over the year (to strengthen links between high-performing science students and UNSW)

Liz Angstmann, Krystyna Wilk, Jessica Budden, Richard Newbury and Bryony Lanigan
Physics, Science
A UNSW Community-Driven Portal for Online Education Resources

Leads: Socrates Dokos¹, Iwan Kelaiah¹
Henar Vicente Cristobal², Valerie Combe-Germes², Mark Duffy³, Phillip Howlin⁴, Lesley Ulman⁵, Gavin Mount⁶, Patrick de Permentier⁵, Gi-Hyun Shin², Sumiko Iida², Nicole Marden⁵, Debbie Lackerstein⁶, Ayxem Eli⁷, Nicolaas Warouw⁶

¹Graduate School of Biomedical Engineering, ²Humanities and Languages, ³Law, ⁴Mechanical Engineering, ⁵Medical Sciences, ⁶UNSW Canberra, ⁷Arts and Social Sciences

We are an interdisciplinary team of Education Focused scholars who present an online portal developed for UNSW’s education community to expand and develop the quality of its online education resources. The portal, hosted on Moodle, consists of tools, tutorials, templates, testimonials and user forums to promote best-practice and facilitate the sharing of knowledge, experience and innovation in the use of online resources. It contains featured articles on digital education, including Moodle quizzes, adaptive tutorials, student forums, online role play, course landing pages and interactive virtual reality. Each feature is presented as a Moodle Book consisting of several subsections: overview, pros and cons, best practices, getting started, testimonials, tutorials, templates, pedagogical research and publications, as well as alternative options. A user forum constitutes a key aspect of the portal, where community discussions take place, questions can be asked and answered, alerts are provided to new developments and pedagogical research, as well as additional testimonials and best practices.

Our Community of Practice in Online Resources aims to support all staff in the use of online technologies for teaching through the sharing of our experiences directly with the UNSW education community. The community-driven portal will enable academic staff to produce quality teaching and learning materials efficiently from collective expertise and resources of the Community of Practice.

The portal can be accessed at http://unsw.to/online-resources (Enrolment key: CoPOR)
A UNSW Community-Driven Portal for Online Education Resources
Community of Practice in Online Resources

http://unsw.to/online-resources

We are an interdisciplinary team of Education Focused scholars who present an online portal developed for UNSW’s education community to expand and develop the quality of its online education resources. The portal consists of tools, tutorials, templates, testimonials and user forums to promote best-practice and facilitate the sharing of knowledge, experience and innovation in the use of online resources. The portal, hosted on Moodle, contains featured articles in digital education, including Moodle quizzes, adaptive tutorials, student forums, online role play, course landing pages and interactive virtual reality. Each feature is presented as a Moodle Book consisting of several subsections: overview, pros and cons, best practices, getting started, testimonials, tutorials, templates, pedagogical research and publications, as well as alternative options. A user forum constitutes a key aspect of the portal, where community discussions take place, questions can be asked and answered, alerts are provided to new developments and pedagogical research, as well as additional testimonials and best practices.
Establishment of a Rural Pathology Teaching Museum on the Mid North Coast

Leads: Julianne Weatherley, Linda Ferrington, S Singh, Aiveen Bannan
Ned Abraham, Karen Chia, Patricia Collie, Lesley Forster, John Gan, Jenine Griffths, Mark Henschke, Meredith Hinds, Dubravka Jankovic, Matthew Kinchington, Fateh Ladhani, Janet McLachlan, Michael Prowse, John Roberts, Gonasagaran Ruthnam, Marie Shaw

UNSW Rural Clinical School

Aim: To fully establish a pathology museum at the Rural Clinical School, Port Macquarie campus.

Background: A gap in the teaching provision was identified in the Rural Clinical School (RCS) with respect to physical access to pathology specimens. Currently rural students do not have physical access to a variety of learning materials, such as pathology specimens; we aim to use a blended learning approach to allow students both physical and, in the future, virtual access to this material, and to improve educators’ ability to deliver this teaching material.

Method: The project involves cataloguing and classification of the specimens that we have available, and the design and production of materials to support them, for example posters in the physical museum incorporating artwork and clinical information about the specimens. When this project has been established we aim to reproduce it in the other campuses in the RCS, thus providing pathology resources for teaching across all UNSW RCS sites. Until this time, students from other RCS campuses will be able to visit the Port Macquarie pathology museum when they are visiting the campus for other teaching purposes. Relevant pathology specimens have been identified from the stored specimens at the UNSW Kensington campus, and are being refurbished for inclusion in the new pathology museum. We are creating a searchable catalogue which students will be able to use to support their learning. All specimens will be supported by a template, which we have created (see poster), incorporating relevant artwork and clinical information. We have appointed clinical staff who are populating these templates and writing appropriate clinical scenarios to accompany each specimen. This will enable us to fully integrate clinical teaching with pathology teaching.

Outcomes and Deliverables: Identifying and collating the clinical information on each pathology specimen is underway and refurbishment of Kensington specimens has commenced. The design template for each specimen is finalised and clinical scenarios are being written to accompany each specimen. High resolution photography of each specimen is underway. The resources will create improved opportunities for students in regional locations where these pathology specimens are not readily available. Thus, the project will enhance the learning experience by integrating media and technology with more traditional learning and will allow students to learn this material in a flexible way which is engaging and supports multiple learning styles. The project allows EF academics within the Rural Clinical School to investigate opportunities for blended learning in their disciplines.
2018 Learning and Teaching Forum
Partners in Learning: Connecting Communities

Pathology Teaching Museum
Establishment of a Rural Pathology Teaching Museum on the Mid North

Aim
To fully establish a pathology museum at the Rural Clinical School, Port Macquarie campus.

Background
A gap in the teaching provision was identified in the Rural Clinical School with respect to physical access to pathology specimens.

Method
— Cataloguing and classification.
— Design and production.
— Artwork and clinical information.
— Provide pathology resources for teaching across all UNSW Rural Clinical School sites.
— Enable us to fully integrate clinical teaching with pathology teaching.

Outcomes and Deliverables
Identifying and collating the clinical information on each pathology specimen is underway and refurbishment of Kensington specimens has commenced. The design template for each specimen is finalised and clinical scenarios are being written to accompany each specimen. High resolution photography of each specimen is underway. (including videos)

Next Steps
Continue to catalogue and photograph specimens and write clinical scenarios to input into the design template.

Roll it out to all UNSW Rural Clinical Schools. Incorporate it within the existing UNSW online pathology provision (Splice or Image of Human Diseases)

Ensure pathology specimens are accessible to all UNSW Medical Students regardless of geography.

Weatherley, J., Singh, S., Bannan, A. and Ferrington, L.
Rural Clinical School, Medicine

UNSW SYDNEY
Office of the PVC (Education)
Digital assessment: empowering students and supporting teachers through innovative student-oriented educational practices

Louise Lutze-Mann1,6, Mengistu Amberer2, Jose Bilbao3, Trudie Binder4, Shirley Carlon5, Zhixi Chen3, Steven Davis3, Irina Dedova4, Ray Eaton3, Robert Holdom3, Phillip Jones6, Kana Kanapathipillai3, Kim Lapere7, Kevin Liu3, Chi Mak1, Peter Neal3, Carol Oliver1, Nalini Pather4, Felicity Smith4, Scott Sulway1, Silas Taylor4, Gary Velan4, Karin Watson7

1 Science; 2 Arts and Social Sciences, 3 Engineering, 4 Medicine; 5 UNSW Business School, 6 Office of the Pro Vice-Chancellor (Education); 7 UNSW Art and Design.

Assessment has long been recognised as a driver of student learning. Given its influence on how students learn and approach their studies, it needs to be personalised and flexible to support the diverse community of students, academics, disciplines and programs at UNSW. As the university systematically moves towards integrating digital technologies into teaching, and in recognition of the importance of assessment in the student experience, it is essential that existing assessment practices evolve to facilitate a seamless learning experience in the digital domain, without loss of assessment integrity. Consequently, this project aims to identify, pilot, evaluate and record a breadth of scalable digital assessment approaches across UNSW. The significant benefit to the UNSW community will be the production of an information repository, in the form of an online toolkit, of the best technology-enhanced assessment approaches, the feasibility and challenges associated with their use in varying contexts, detailed instructions on how to implement them, and exemplars from UNSW academics.

The project involves:
• Surveying academics from across UNSW to evaluate and test approaches to summative, formative, diagnostic and integrative, assessments in the digital domain.
• Evaluating advances in large scale assessment such as computer adaptive assessment (CAT), digital learning environments and learning analytics.
• Evaluating innovative approaches such as performance-based, instructionally embedded, competency-based, project-based, portfolio based and stealth approaches (embedded valid assessments that are directly inserted into immersive environments like video games).
• Creating exemplars from existing assets being used across the university and create others aimed at informing future digital assessment being made possible by advances in the field.

The outcome of this testing and evaluation will be the development of a curated online portfolio, that will be based on the very successful Teaching Technology Toolkit developed in Medicine. The online toolkit developed as part of this project will identify:
1. Assessment types and digital assessment strategies, including a decision tree to assist academics to choose the most appropriate digital assessment tool for their needs
2. Exemplars (What does it do/look like? Step by step instructions, including real examples from a range of Faculties, and how they fit into the educational design of courses)
3. Advantages and disadvantages of each type of assessment
4. Appropriate feedback mechanisms for students
5. Learning analytics where available
6. Efficiency measures resulting from the use of the digital assessment
Digital Assessment
Empowering students and supporting teachers through innovative student-oriented educational practices

Do you assess digitally? Do you want to?

Here’s what we’re planning…

The development of a curated online portfolio of digital assessment methods and technologies, based on the Teaching Technology Toolkit.

Advantages and disadvantages of digital assessment technologies
Digital assessment types & strategies
Feedback mechanisms for students using digital assessment technologies

Decision tree to guide digital assessment selection

THE PORTFOLIO WILL IDENTIFY AND INCLUDE...
Digital assessment exemplars from a range of faculties

Efficiency measures resulting from the use of digital assessment

Get involved!

→ Complete* our survey to help us create a more comprehensive online portfolio.
→ Send* us your exemplars of digital assessment.
→ Join* our enthusiastic and fun team!
→ *How? Add your contact details to the list on the laptop ↓

Louise Lutze-Mann1, Mengistu Amberger2, Jose Bilbao3, Trudie Binder4, Shirley Carlon5, Zhixi Chen6, Steven Davis7, Irina Dedova8, Ray Eaton9, Robert Holdom10, Philip Jones10, Kana Kanapathipillai11, Kim Lapere11, Kevin Liu12, Chi Mak13, Peter Neal14, Carol Oliver15, Nalini Pather14, Felicity Smith14, Scott Sulway11, Silas Taylor11, Gary Velan14,16, Karin Watson17

Schools of: 1 Biotechnology & Biomolecular Sciences, 2 Humanities & Languages, 3 Photovoltaics & Renewable Energy Engineering, 4 Medical Sciences, 5 Taxation & Business Law, 6 Petroleum Engineering, 7 Civil & Environmental Engineering, 8 Electrical Engineering, 9 Office of the PVC (Education), 10 Mechanical & Manufacturing Engineering, 11 Chemistry, 12 Risk & Actuarial Studies, 13 Mathematics & Statistics, 14 Chemical Engineering, 15 Biological, Earth & Environmental Sciences, 16 Office of Medical Education, 17 UNSW Art & Design
The Evaluation of Teaching and Learning Resource

Leads: Adrienne Torda¹, Rebecca Le Bard², Sarah Jane Moore¹
Barbara-Ann Adelstein¹, Patricia Arthur², Chinthaka Balasooriya¹, Melvin Chin¹, Orin Chisholm¹, Kar Ming Chong³, Jacquelyn Cranney², Arvin Damodaran¹, Nagisa Fukui⁴, Anne Galea², Miriam Neigert⁴, Anthony O’Sullivan¹, Husna Razee¹, Iain Skinner⁵, Silas Taylor¹
¹Medicine, ²Science, ³UNSW Business School, ⁴Arts and Social Sciences, ⁵Engineering

Engagement in scholarship can inform teaching of an individual academic, and provide beneficial information at an institutional level. The Tertiary Education Quality and Standards Agency views scholarship that informs teaching as an essential practice of higher education providers. For individual academics, evaluation of teaching and student learning and experience is a scholarly practice. At UNSW, the MyExperience student evaluation reports and peer review process provide some evidence of the quality of learning and teaching of an academic. Academics however may also want to or need to evaluate specific aspects of their teaching, such as innovations, changes or for future iterations of a course, or when applying for awards for promotion.

In late 2017, a courageous team of curious, creative and dedicated education-focussed academics formed a community of practice, embracing the task of identifying and developing resources on how to improve evaluation of learning and teaching at UNSW.

Our interfaculty community of practise aims to develop resources for educators throughout UNSW that will support them in informing educational practice. The starting point will be the ‘Why?’ and the ‘What?’ of their purpose. The ‘Why?’ may be to improve a course, or gather information for an award or for a promotion. The ‘What?’ may be an innovation, teaching activity or assessment within a course. Our aim is to assist UNSW academics to identify what evaluative approach may best suit their purpose, their discipline and curricula, and their students.
Evaluate Your Practice
Community of Education & Learning Evidence Based Scholarship

Satisfaction  Quality  Teamwork  Impact  Knowledge  Creativity  Engagement  Strengths  Improvement  Weaknesses  Reflection
WIL@UNSW – Developing skilled graduates, providing best practice for staff, and meeting employability standards

Leads: Leanne Piggott¹, Theresa Winchester-Seeto¹
Juan Pablo Alvarez Gaitan², Andrew Blance³, Kevin Clarke³, Sing D’Arcy⁴, Shannan Maisey⁵, Diane Mayorga¹, Patsie Polly³, Jayashri Ravishankar², Mira van der Ley⁵, Sean Xiang Cheng⁶, Bruce Edward Watson⁴, Steve Weymouth⁷, Lisa Zamberlan⁴

¹UNSW Business, School, ²Engineering, ³Medicine, ⁴Built Environment, ⁵Science, ⁶Arts and Social Sciences, ⁷Arts & Design

Work Integrated Learning (WIL) at UNSW is undergoing a transformation. Although WIL has been available to students in most Faculties for many years, a new UNSW Work Integrated Learning procedure will require all programs to provide students with a work integrated learning experience. This fulfils the aims and intent of the 2025 Strategy and the Scientia Educational Experience. To support the implementation of the Procedure, 16 Education Focused Academics from seven faculties have joined together with the support of an Education Focus Foundation Funding (EFFF) award to design, develop, implement and evaluate best practice educational content aimed at assisting all UNSW course work students gain high quality and meaningful work learning experiences to provide “real-world skills for a rapidly evolving workplace”. Our work has thus far included contributing to the development of a definitive definition of what WIL at UNSW is with a supporting explanatory document; the development of checklists for staff, students and external partners; and supervision guidelines for university staff, host/workplace supervisors and students. However, the work of our EFFF goes beyond support for the implementation of the WIL Procedure. Sound pedagogical practice, robust partnerships and commitment to duty of care for students is also an important part of our endeavours. The EF WIL Project seeks to develop resources to support all stakeholders understand and deliver high quality, enjoyable learning experiences for students. University staff and student surveys have thus been developed to identify resource needs of these groups and to ascertain what might be needed into the future. Resources for this purpose are also in progress with the aim of providing ready access to the latest ideas and scholarship for busy academic and professional staff. Ultimately WIL is delivered by people and for people and therefore facilitating a sense of community is important to the success of WIL at UNSW. The EF WIL Project Team is building a community of practice with events and workshops for university staff, and they plan to extend this to industry partners in 2019. Paid student internships are planned for later in 2018 to both access talent at UNSW and provide some great learning experiences for our students. The team is also undertaking research into professional development options and attitudes and thus actively contributing to scholarship in WIL. With a new focus on WIL across campus and the support provided by this team, we are set to achieve the project slogan: UNSW Graduates: Ready for Anything!
WIL@UNSW – Developing skilled graduates, providing best practice for staff, and meeting employability standards

Transforming Work Integrated Learning at UNSW

UNSW graduates: ready for anything

Work Integrated Learning (WIL) at UNSW is undergoing a transformation.

By 2025 all students will have the opportunity to participate in WIL experiences, underpinned and supported by the new UNSW WIL Procedure.

The EF WIL Project is funded by the EFFF Award and comprises 17 Education Focused Academics from 7 faculties. The Project aims to support the implementation of the Procedure as well as designing, developing and evaluating best practice educational content so that all UNSW course work students gain high quality and meaningful work learning experiences to provide “real-world skills for a rapidly evolving workplace”.

Thus far the work has included:

+ input into the supporting documents for the WIL Procedure including the UNSW WIL Definition; Preparing for WIL Checklists for students, WIL staff and partners; and Student Supervision and Support Guidelines
+ student and staff survey design with accompanying ethics approval

The Project seeks to assist all UNSW WIL stakeholders with a spotlight on fostering sound pedagogical practice, robust partnerships, and commitment to duty of care for students.

Resources for this purpose are in progress with the aim of providing ready access to the latest ideas and scholarship for busy academic and professional staff.

Facilitating a sense of community is important to the success of WIL at UNSW. Accordingly, initiatives underway to create a UNSW WIL Community Practice include:

+ paid student internships to access talent at UNSW and provide some great learning experiences for our students (2018/9);
+ research into professional development options and attitudes, thus actively contributing to scholarship in WIL (2018/9);
+ events and workshops for university staff, and industry partners (2019).

With a new focus on transforming WIL across campus and the support provided by this team, we are set to achieve the project slogan: UNSW Graduates: Ready for Anything!
Sustainability Education in the Built Environment through Problem/Project Based Learning (PBL)

Sarath Mataraarachchi
Built Environment

This research project intends to critically evaluate “group project” model practiced in our courses as a learning and teaching technique against the world’s best practice.

‘Models’ used in each course in the are not confined to a single set of criteria although there are similarities between them. Discussion with practitioners of these group project models revealed that they do not follow any specific model or a set of criteria when developing group projects and not based on the well-structured and scientific-pedagogical foundation of the best practice methods such as Problem Bed Learning (PBL).

The project will critically and systematically examine group project-based learning practices in four Sustainable Built Environment Courses to ascertain successes and failures and compare them with the advances made in project/ problem-based learning practice elsewhere to achieve excellence in teaching sustainable built environment.

A project reference group has been formed with representatives from Engineering and the Built Environment to guide the project.

Publication of a monthly newsletter from November 2018 to April 2019 and two workshops (March and April 2019) will be used to disseminate the ongoing findings of the project. The findings will lead to developing a best practice guideline for project/ problem-based learning suitable for Australian academic structures as well as journal article.
Sustainability Education in the Built Environment through Problem/Project Based Learning (PBL)

Objectives
1. To develop an understanding of the group project model practiced in four selected courses of the Sustainable Built Environment Program and compare them with world’s best practice including the Aalborg PBL Model of the Aalborg University in Denmark.
2. To evaluate the model to determine its effectiveness in delivering sustainability education in the built environment profession.
3. To develop an evaluation tool to examine the group project model against course learning outcomes and UNSW Strategic Priority Theme A2: Educational Excellence.
4. To develop a problem/project-based learning model that is suitable for the academic structure applicable to Sustainable Built environment courses.

Outcomes
- Develop a knowledge base on PBL within university.
- Improve awareness of PBL amongst academic staff.
- Develop a best practice PBL model for the EF community and broader university.
- Establish close relationship with other universities to exchange information and conduct joint research on this teaching model for continuous improvement.
- Establish an evaluation system to measure success of this method as practice in different courses.

Rationale
The group project model used in our courses were done with little knowledge on best practice. While the method we practice has elements of PBL, it hardly contains the well-structured and scientific pedagogical characteristics of the best practice PBL method. It is used year after year without critically and systematically examining its successes and failures and comparing it with the advances made in this practice in other parts of the world. This project will provide an opportunity to examine the existing practice, assess its effectiveness as a teaching strategy in sustainability education, and make recommendations to improve it.

PBL Model – cognitive, content and collaborative
- Blended learning focusing student empowerment
- Real life experience with a real purpose
- Unlimited support
- Minimum intervention
- Industry involvement from the beginning
- Supported by seminars and consultations
- Focusing on a final report presented at an industry event in front of the client and the other industry community
- Diverse student groups
- Competition between groups
- Competition between students
- Continuous feedback

Dr Sarath Mataraarachchi
Faculty of Built Environment
Supporting students in their transition to university studies by building learning communities

Leesa Sidhu1, Kate Wilson1, Warren Smith1, Charles Hoke1, Toby Boyson1, Heather Neilson1, Natalie Cujes1, Mona Bahri1, Jacquelyn Cranney2

1UNSW Canberra, 2Psychology, Science

This project will identify issues relating to first-year students’ transition to university studies that are detrimental to their learning and well-being, as well as devising and testing effective strategies to improve their experience. It will review currently available literature on transition and UNSW Canberra student transition survey and interview data, as well as conducting an audit across all Schools at UNSW, to determine issues relating to transition, strategies implemented and their perceived effectiveness. The audit results will be analysed, trials of transition support strategies will be conducted at several Schools at UNSW, including all four Schools at UNSW Canberra, and a report written to summarise the findings and make recommendations to all Schools regarding potential strategies that could be used to assist first-year students in their transition. Successful transition support strategies will be extended to other Schools in 2019/2020.

Since all but one of the team members are based at UNSW Canberra, this project focuses primarily on that student cohort. Most UNSW Canberra students are not only developing new identities as students, but also as Defence Force officers, as they undertake military training concurrently with tertiary studies. UNSW Sydney students are developing identities as students, but many are also working. The tension between study and work is of significant concern at UNSW broadly, so any insights obtained from investigating the transition experience at UNSW Canberra will also be relevant to UNSW Sydney. Furthermore, we expect that strategies used to assist in the transition of students from minority groups (such as women in engineering, civilians in a predominantly military class, first-in-family students, mature aged students, etc.) would be applicable across UNSW.

Progress thus far includes: entering UNSW Canberra student transition survey data, conducting a literature review, and drafting a report on transition issues and strategies identified in existing literature, as well as staff interview questions to audit existing transition strategies across UNSW Schools. The next phase of the project includes conducting interviews of relevant staff across Schools at UNSW Canberra and Sydney, and planning trials of transition support strategies for implementation in Semester 1 2019.
Supporting students in their transition to university studies by building learning communities:

An Education Focussed Foundation Funding Project

**Project Overview:**
- Identify issues relating to first-year students' transition to university studies as well as strategies to assist students in their transition via:
  - review of existing literature;
  - UNSW Canberra student transition surveys and interviews;
  - audit across all UNSW Schools (staff interviews).
- Devise strategies to assist in transition based on ideas from literature and/or those used successfully in Schools at UNSW.
- Trial transition support strategies at several Schools at UNSW, in particular at all four Schools at UNSW Canberra.
- Summarize findings and make recommendations regarding strategies to be used to assist students during transition.
- Extend successful transition support strategies to other Schools in 2019/2020.

**Upcoming Project Milestones:**
- Literature review report.
- Staff interviews across UNSW Schools.
- Report summarizing findings of audit.
- Plan and implement trials of transition support strategies for implementation.
- Report on successful and unsuccessful trial transition support strategies.
- Produce “how to” guides for successful strategies.
- Extend trials in other UNSW Schools.

**Possible Trial Transition Support Strategies:**
- Networking events with alumni speakers, students and academic (and perhaps military) staff.
- Video transition advice from upper level students.
- Increased integration of self-management capability development within the curriculum (e.g., study skills, time management, expectation management).
- Increased focus on curricular design and delivery strategies to support student transition.

**Progress to Date:**
- Employed Research Assistant.
- Ethics approval for student surveys.
- Entered UNSW Canberra student transition survey data.
- Commenced literature review and draft report on transition issues and strategies as identified in existing literature.
- Prepared staff interview questions for audit of existing transition strategies across UNSW Schools.

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Improving the learning experience of part-time, postgraduate, off-campus students

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Postgraduate coursework students comprise nearly 30% of the UNSW student body and they account for around 40% of the university’s teaching-related revenue. The largest student cohort studying at UNSW Canberra consists of part-time, postgraduate students, located off campus and studying entirely online. This is also the fastest-growing student cohort and the cohort with the greatest potential for future growth.

These students differ from other students in a number of ways: most have full-time jobs, many have spouses, partners and/or children, many are time-poor, some are geographically isolated, and many see asynchronous online learning as a way to schedule their study around work and family demands in their busy lives. As students, they demand that their time be used efficiently, and Moodle is their primary, and often only, medium of engagement with the University’s learning environment.

We have little doubt that the fundamental principles of the Scientia Educational Experience (SEE) and the RASE course design model apply to this student cohort, just as they apply to all other cohorts. Those principles are at the core of the prevailing constructivist learning paradigm, now based on over 100 years of educational research. However, those general constructivist principles such as student engagement, active learning, diversity of perspectives, and interaction in communities, can be operationalised in many different ways, in many different educational designs. The key question motivating our project is: how do we best operationalise SEE and RASE principles, in online course design, to align with the learning preferences of part-time, postgraduate, off-campus students?

Before we can answer that question, we need to have a better understanding of the learning preferences of those students. Our project has begun with a survey of relevant findings from the educational research literature and a survey of part-time postgraduate students currently studying at UNSW Canberra.

We will use the findings from the research literature and the results from the survey of our own students to redesign – perhaps radically – two Moodle-based core courses in the Master of Business program at UNSW Canberra. These two Moodle courses will be made available for inspection by all interested UNSW teaching staff and a set of design notes will be produced, explaining the research-based design decisions made along the way.
Improving the learning experience of part-time, postgraduate, off-campus students

A research-led educational design project for an under-researched student cohort

Our Challenge:

- Student engagement
- Active Learning
- Diversity of Perspectives
- How do we operationalise these principles, in Moodle-based courses, to align with the learning preferences of part-time, postgraduate, off-campus students?
- Interaction in Communities
- Employed full time
- Geographically isolated
- Time-poor

Our EFFF Project:

- Survey of educational research literature (nearing completion)
- Survey of UNSW Canberra students with follow-up interviews (now underway)
- Redesign of 2 Moodle-based courses, based on the educational research literature and the preferences of UNSW Canberra students (Dec 18 – Apr 19)
- UNSW-wide dissemination of 2 exemplar Moodle sites with design notes (to be launched in semester 2, 2019)

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