2018 UTD Grant Projects Snapshots

2018 Project Titles (Snaphots Below)

- **Applying and testing an intervention to scaffold students' metacognitive practice.** Dr David Berg

- **Experiential learning among student volunteers in a prison setting.** Dr Fairleigh

- **Developing an implementable Health Informatics curriculum for Otago Medical School: novel and innovative content and approach.** Dr Rebecca Grainger

- **Continuous feedback model: a new model of paper evaluation that enables students as partners in curricular development.** Dr Professor Leith Hale

- **'Now we've got them, how to keep them? Empowering and Engaging First Year Student through Simulations.** Professor Janine Hayward

- **Coins in the Classroom: Creating Digital Coin Exhibits.** Dr Gwynaeth McIntyre

- **Innovative help for HUBS192 students in the First Year Health Science Programme – an interactive online tutorial.** Dr Ruth Napper

- **An investigation into the reasons for 'no-show' of students at lectures.** Dr Matthew Parackal

- **Mental wellbeing of students in the Health Sciences First Year course. Stage 1: measuring the impact of a learning environment intervention.** Professor John Reynolds

- **Piloting a Postgraduate Certificate in Professional, Researcher and Career Development.** Professor Rachel Spronken-Smith

- **Video assisted surgical learning for dental students.** Professor Darryl Tong

- **Development and Deployment of Research Instrument to Measure the Efficacy of the Safe and Effective Clinical Outcomes (SECO) Clinic in Health Professional Education.** Dr Martyn Williamson

2018 UTD Grant Projects

Title	**Scaffolding students' metacognitive learning practices (learning to be more critical in your learning).**
Project Team	Dr David Berg, Dr Kim Brown, and Dr Sylvia Robertson (University of Otago College of Education)
Snapshot	The aim of this one-year project was to assess and enhance a scaffolded approach to teaching metacognitive skills. The teaching team of EDUC 252 (How People Learn) had begun to develop a range of teaching interventions in 2016, and after reviewing our previous teaching practices, we decided we could do more to enable students to have greater judgement and sense of agency over their metacognitive practices. The CALT grant provided us with the opportunity to formally research the impact of the teaching interventions that we adopted to scaffold students' metacognitive awareness and regulation.

Title	**Experiential learning among student volunteers in a prison setting.**
Project Team	Dr Fairleigh Gilmour, Lecturer, Sociology, Gender Studies and Criminology
Snapshot	In early 2017, I initiated a volunteering opportunity in which students enrolled in the Criminology Minor could volunteer at the Otago Corrections Facility. In small groups, the students developed a 6-week course to provide to the prison inmates. These courses were designed to engage the inmates in a personal development activity (i.e. sport, art and creative writing). In 2018, I organized for 16 students from the Criminology Minor to again do a 6-week volunteer program at the Otago Corrections Facility. In order to ensure the best outcomes for both students, this project sought, through focus groups and interviews with these students, to explore the pedagogical impacts of the volunteering program.

2018 UTD Grant Projects

Title	**Developing an implementable Health Informatics curriculum for Otago Medical School: novel and innovative content and approach.**
Project Team	A/P Rebecca Grainger (PI), A/P Diane Kenwright (NI), Dr MaryLeigh Moore (NI), Prof Tim Wilkinson (NI), Amy O'Neal (Summer Student), Hermaleigh Townsley (Research Assistant)
Snapshot	The doctor of the future is very likely to require new knowledge and skills in digital health and information science, collectively known as Health Informatics (HI). Studies from the UK and USA suggest that medical school curricula do not explicitly expect graduates to learn, and be competent in these skills. We aimed to identify the potential content of a Health informatics curriculum for Otago Medical School (OMS) and explore from a student perspective the utility and relevance of this learning. We undertook an evaluative summary of medical HI in the curricula from UK, Australian, New Zealand and Canadian Medical schools via information available online. We then undertook a survey of recent graduates from Otago Medical school to explore their experiences in learning HI in their medical studies. We then undertook focus groups with current medical students to explore their experience and opinions on learning HI. We found that medical schools expected students to learn some aspects of HI but coverage was inconsistent and incomplete. Survey and focus groups identified similar themes: 1) a preference for learning in the clinical context, 2) a taught curriculum can create tension if it does not address contemporary clinical environment (i.e. teaches out of date software or skills and attitudes not modelled by clinicians), and 3) digital native students have confidence in their ability to learn HI skills in the workplace as required. These findings will be used to inform further discussions with medical education leaders in Australian and New Zealand to identify relevant health informatics learning outcomes for medical graduates. Further work is planned to identified specific HI learning outcomes relevant for OMS in workshops with medical students (at the New Zealand Medical Students' Association Medical Education forum May 12th 2019) and medical education leaders in Australia and New Zealand (ANZAPHE MECC-MELANZ workshop 1 July 2019).

Title	**Continuous feedback model: a new model of paper evaluation that enables students as partners in curricular development.**
Project Team	Professor Leigh Hale, Dr Divya Adhia, School of Physiotherapy

2018 UTD Grant Projects

Snapshot	We evaluated the continuous real-time curricula feedback model as a novel method more appropriate for simultaneous evaluation and improvement of papers than typical end-of-course evaluation. We used a mixed-method design involving concurrent qualitative (focus group interviews, anonymous comments in a "suggestion" box) and quantitative (survey) approaches to regularly collect staff (n=20) and students (n=127) perceptions of full year paper. We found the new model to be helpful and liked by both staff and students. Students liked they could see change as a result of their feedback. Staff felt it should be used in conjunction with the typical end-of-course evaluation; they found the periodic student feedback reports helpful. Students preference was for surveys over focus groups (they eventually stopped attending) and the suggestion box (few suggestions received). We are proposing to use periodic short surveys to evaluate our other full year papers, but not continue with focus groups or suggestion boxes.
Title	**'Now we've got them, how to keep them? Empowering and Engaging First Year Student through Simulations.**
Project Team	Professor Janine Hayward
Snapshot	Through the use of simulations the Politics Program aimed to increase student retention, meet the learning preferences of younger students, and teach behavioural and educational skills that will benefit them both within their studies, and once they leave the academy. This was successful: enrolment in 200 level Politics papers are the highest they have been in many years, and students reported feeling more engaged, learning more, and thinking that the skills they learned would benefit them in the future.
Title	**Coins in the Classroom: Creating Digital Coin Exhibits.**
Project Team	Dr Gwynaeth McIntyre (Classics), Research Assistants: Dr Charlotte Dunn and Dr Bill Richardson
Snapshot	This project was designed to support student engagement with material culture – namely the Roman coin

2018 UTD Grant Projects

	collection housed at the Otago Museum – as part of the course work for CLAS344. It involved both curriculum development (the incorporation of group assessments) and eLearning Enhancement (through digital tutorials and the introduction of a digital exhibition as the major piece of assessment). Strategies were put in place to build and develop the student groups over the course of the semester as well as introduce students to the key terms and methods for studying coins. As their final project for this paper, students (in groups of five) created their own online exhibition of five of the coins from the Otago Museum's Roman coin collection. These exhibitions can be found in a compiled format at: https://julioclaudiancoinage2018.omeka.net/
Title	**Innovative help for HUBS192 students in the First Year Health Science Programme – an interactive online tutorial.**
Project Team	Dr Ruth Napper, Dr Rebecca Bird, Department of Anatomy; Andrew Barlow, Tim McLennan, Department of Physiology, University of Otago.
Snapshot	The aim of the project was to establish an interactive online tool for the HUBS192, Human Body Systems 2, paper that allowed focused learning across a series of modules. In 2016 and 2017 conventional tutorials were successful with an improved pass rate in those attending tutorials. However, many students with low grades did not attend and we considered an on-line tool, accessible to all students, may be beneficial to success. The interactive on-line tool used 'drag-and-drop' options for completing sentences, diagrams and concept maps. Submission of an incorrect answer delivered a feedback dialogue box that assisted the student to make further attempts. MCQ questions at the end of each module formed a self-testing tool. Student questionnaires were embedded to obtain demographic student data and their opinions of the tool. Student participation was lower than hoped, but this intervention has now been incorporated into the revised HUBS192 paper for Semester 2, 2019.
Title	**An investigation into the reasons for 'no-show' of students at lectures.**
Project Team	Dr Mathew Parackal, Dr Damien Mather, Ms Brigid Casey, Dr Rob Wass, Associate Professor Lisa McNeill, Associate Professor Andrea Insch and Dr John Guthrie

2018 UTD Grant Projects

Snapshot	The project investigated reasons for non-attendance at lectures among final year, undergraduate students. Student focus groups informed the development of a self-efficacy measurement tool and a pilot intervention, 'Customised Individual Support' (CIS), to improve the skills students need for performing academic tasks. Lecture attendance was recorded for four B.Com marketing 300-level papers. Students' views on attendance were explored in 12 focus groups. Among reasons for non-attendance were poor social skills and self-regulated learning – factors related to self-efficacy, and that informed the development and implementation of a pilot intervention. A positive relationship existed between lecture attendance and academic performance. The focus groups provided information on lecture attendance and student learning that indicated a low level of academic self-efficacy, which was the focus of the intervention. A best-worst academic self-efficacy scale (BWASES) was developed and used for evaluating the intervention. The intervention was positively rated by the participants and BWASES showed the potential to be applied widely. The findings and recommendation of this project have been presented and discussed across the University of Otago.

Title	**Mental wellbeing of students in the Health Sciences First Year Course. Stage 1: measuring impact of a learning environment intervention.**
Research Team	Professor John Reynolds, Dr Shyamala Nada-Raja, Dr Jo Oranje, Mr Paul Garbett
Snapshot	This two-stage project aims to evaluate the impact of a learning environment intervention on the mental wellbeing of Otago's Health Sciences First Year (HSFY) students. In 2019, we are implementing changes to the HSFY programme (an intervention) to enhance the student experience and manage the impact of the programme on wellbeing. Stage 1 (this grant) gathered data from the 2018 cohort as a baseline. In Stage 2 (separately CALT funded), data collected from the 2019 cohort will be compared to the baseline. A mixed methods approach included three online assessments of mental wellbeing across the academic year (n = 550) and focus groups in each semester (n = 26). Initial results and findings have been generated but the meaningful analysis will take place at the conclusion of the overall project at the end of 2019.

2018 UTD Grant Projects

Title	**Piloting a Postgraduate Certificate in Professional, Researcher and Career Development.**
Project Team	Professor Rachel Spronken-Smith & Kim Brown, (Graduate Research School and Higher Education Development Centre), Vijay Mallan (Higher Education Development Centre), Yvonne Gaut and Jackie Dean (Careers Development Centre)
Snapshot	The aim of this two-year project was to develop, pilot, and evaluate a new qualification that explicitly focuses on the development of advanced research and transferable skills in doctoral candidates. In 2017, we conducted a literature search and then ran focus groups with stakeholders (PhD candidates and supervisors), to determine support for a formal or informal programme focused on the research and professional development of PhD candidates. We also conducted a survey of PhD alumni and employers. While feedback was overall supportive of offering an optional postgraduate certificate, the higher education landscape changed with the arrival of micro-credentials. Consequently, the emphasis shifted to focus on suite of micro-credentials to support the professional development of PhD candidates. In 2018, GRS reshaped workshops into day long induction and finishing courses as a precursor to introducing micro-credentials and planning is well underway for a suite of micro-credentials to support the professional development of PhD candidates. A web portal was also developed as a one-stop-shop for professional development offerings across the University.

Title	**Video Assisted Surgical Learning for Dental Students.**
Project Team	DC Tong, HL De Silva, RK De Silva
Snapshot	This project has been subject to many unforeseen obstacles, mainly due to issues relating to the building of the new dental school and limited time and staff resources from the media production unit. Two videos have been filmed of surgical procedures involving extra-oral biopsies with good resolution and picture quality. Intraoral procedures have remained problematic due to the camera equipment, lighting and operating theatre space at the dental school.

2018 UTD Grant Projects

	The quality of the intraoral videos were poor and the camera view too wide for focussed attention on the surgical site. Various attempts using different lighting systems, photographic clamps and arms to mount the camera and temporary head mounts have been unsuccessful. Coordinating times for the media production unit for professional filming has been difficult given the acute lack of staff in the unit and higher priority demands on their time. Alternate camera systems have been investigated but cost prohibitive and equipment purchase is not permitted by the grant.
Title	**Development and Deployment of Research Instrument to Measure the Efficacy of the Safe and Effective Clinical Outcomes (SECO) Clinic in Health Professional Education.**
Project Team	Dr Martyn Williamson, Ms Jessica Young, Dr Jim Ross, Mr Tony Egan, Associate Professor Ben Daniel Motidyang.
Snapshot	We have deployed the tool with a total of 92 students which represents a response rate of 64%. Students were approached toward the end of their 4th year General Practice attachment (4 groups per year) and similarly for 5th year students (4 groups per year) The questionnaire was completed on line. The analysis shows a high reliability, revealing an alpha of 0.93. We are in the process of a more in depth analysis of the data to look at possible underlying latent variables and constructs. This may result in a further refinement of the tool,, before we deploy it in other settings that have adopted SECO. We have approached two UK institutions who have trialled SECO and they have expressed interest once we have the final version complete.