



UNSW MedEd L&T Forum 2008

Weds 3rd December

Scenario Group Rooms 6-9,
Mathews Basement, Kensington Campus

Program

0930 Welcome A/Prof Phil Jones

0940 Long Paper 1

A/Prof Tony O'Sullivan presenting for the Virtual Patient Project

1005 Short papers session 1

Ms Eilean Watson – A Triangulated Investigation of the Use of eMed Map

Ms Sophie di Corpo – What graduate capabilities? Using online scenarios to engage students and staff with graduate capabilities in the Masters of Public Health Program @ SPHCM

Dr Husna Razee – Using viva-type questions in face-to-face teaching to stimulate learning

Dr Chinthaka Balasooriya – Dysfunctional groups – the Achilles Heel of inquiry-based curricula?

1100 Coffee and Posters

Ms Edna Koritschoner, Dr Cathie Lane, Dr Rachel Thompson, Dr Margot Whitfeld

1130 Long Paper 2

Dr Gary Velan – Integrated online formative assessments in the biomedical sciences for medical students: benefits for learning

1155 Short papers session 2

Dr Geraldine Duncan – Long clinical placements in the Rural School at UNSW

Dr Geraldine Duncan – Refugee Health: an opportunity for medical student education

Ms Eilean Watson and Dr Rachel Thompson – Proposal for improving the assessment of assignments and projects in the undergraduate medicine program

Ms Eilean Watson – Partners in curriculum design: learning about teamwork and conflict resolution

Dr Rachel Thompson – Medipedia: using wiki writing to encourage peer-learning and reflection in Phase 1 of the Medical Program.

1300 Faculty Learning and Teaching Awards followed by lunch and close

Polling for next year's seminar topics and times of meetings will take place during coffee and lunch – please go to the labelled PCs in the conference room to cast your votes.

A. LONG PAPERS

1. The Virtual Patient Project: Piloting Low-Fidelity, Student-Generated Online Cases in Undergraduate Medical Education

Chris Hughes¹, Peter Harris¹, Tony O'Sullivan² (presenting), Phil Crowe³, Patrick McNeil⁴ and Michelle Imison¹

1. School of Public Health and Community Medicine, UNSW
2. Saint George Clinical School, UNSW
3. Prince of Wales Clinical School, UNSW
4. South West Sydney Clinical School, UNSW

Abstract

Virtual patients are a medical teaching tool whose educational potential has yet to be fully realised – largely because of the cost and time constraints related to their production. This presentation reports on a pilot study of low-fidelity virtual patients (VPs) created by P3 students at UNSW for their P2 peers. The project aimed to advance the diagnostic reasoning and patient management skills of all participating students.

The student authors were all able to create interesting and engaging cases, despite their varying levels of technical prowess. Thus far they have produced ten VPs, and qualitative analysis indicates positive impacts for their confidence in diagnostic pathways and treatment options, and consolidation of knowledge. Student readers rated both the virtual patient process and content very highly, and especially praised the VPs' ability to sum up all aspects of patient evaluation and treatment. Given the pilot's success, we intend to offer the creation of virtual patients as an optional assessment task in certain P3 subjects in the future, with the added benefit that this will develop a bank of VPs for continued use in the program.

2. Integrated online formative assessments in the biomedical sciences for medical students: benefits for learning.

Gary Velan (presenting) (School of Medical Sciences, UNSW), Phil Jones (OME, UNSW), Patrick McNeil (OME, UNSW) and Rakesh Kumar (School of Medical Sciences, UNSW).

Background: Online formative assessments have a sound theoretical basis, and are prevalent and popular in higher education settings, but data establishing their educational benefits are lacking. This study attempts to determine whether participation and performance in integrated online formative assessments in the biomedical sciences has measurable learning benefits for junior medical students.

Methods: Students enrolled in Phase 1 (Years 1 and 2) of an undergraduate Medicine program were studied over two consecutive years, 2006 and 2007. In seven consecutive courses, end-of-course (EOC) summative examination marks were analysed with respect to effects of participation and performance in voluntary online formative assessments. Online evaluation surveys were utilised to gather students' perceptions regarding online formative assessments.

Results: Students rated online assessments highly on all measures. Participation in formative assessments had a statistically significant positive relationship with EOC marks in all courses. The mean difference in EOC marks for those who participated in formative assessments ranged from 6.3% (95% confidence intervals 1.6 to 11.0; $p=0.009$) in Course 5 to 3.2% (0.2 to 6.2; $p=0.037$) in Course 2. For all courses, performance in formative assessments correlated significantly with EOC marks ($p<0.001$ for each course). The variance in EOC marks that could be explained by performance in the formative assessments ranged from 21.8% in Course 6 to 4.1% in Course 7.

Conclusions: The results support the contention that well-designed formative assessments can have significant benefits for learning. There is untapped potential for use of formative assessments to assist learning by medical students and postgraduate medical trainees.

Dr Gary Velan (MB BS (Hons), DipHEd, PhD UNSW) is a Senior Lecturer in the Department of Pathology, School of Medical Sciences, Medical Faculty, UNSW. His current research is based on educational innovations; including computer assisted learning and Web-based assessments, and their effect upon learning outcomes in medical education.

B. SHORT PRESENTATIONS

Session 1: (4 presentations)

1. A Triangulated Investigation of the Use of eMed Map

Eilean Watson (PhD candidate, SPHCM, UNSW)

Abstract

This research study aims to evaluate the use of the curriculum mapping tool eMed Map by staff involved in delivering the Medicine Program at UNSW. It employs a triangulation of qualitative and quantitative research methods to measure the observed behaviours and practices of curriculum map users, as well as the inferred values, beliefs and attitudes of users and non-users towards the mapping tool and the mapping process in general. The study aims to understand the organisational and cultural issues that impact on the use of the Map, and to identify the organisational changes required to make curriculum mapping a success for teachers, academic administrators, general administrators and ultimately students. The results of this study could assist in developing user-specific information and training to improve curriculum mapping in the Faculty. Findings from this study could also assist in introducing curriculum mapping in other higher education programs at UNSW and elsewhere.

Eilean Watson (RN, BSc (Hons), MHPEd UNSW, PhD candidate, SPHCM, UNSW) is a Lecturer in the School of Public Health and Community Medicine with research interests in Medical Education and Medical Informatics.

2. What graduate capabilities? Using online scenarios to engage students and staff with graduate capabilities in the Masters of Public Health Program @ SPHCM.

Sophie di Corpo (SPHCM, UNSW) and Lois Meyer (SPHCM, UNSW)

Problem: The Master of Public Health at the School of Public Health and Community Medicine was recently reviewed. Part of this review involved the development of a set of graduate capabilities for the program. It also included mapping of these across the courses in the program. An evaluation of the courses this year revealed students were largely unaware of these graduate capabilities. We also discovered most academic staff had not engaged with the graduate capabilities after they had completed the mapping exercise.

Solution: We received a faculty L&T grant to 'embed' the graduate capabilities through the use of online scenarios. Our aim was to design scenarios that would provide a resource for students and staff to assess the capabilities across the courses. I will present the two scenarios we are currently working on and how we intend to proceed with this project.

Effectiveness of implemented change – TBA

Sophie di Corpo is a Lecturer in the School of Public Health and Community Medicine, Faculty of Medicine. She is Convenor of two postgraduate programs and also Convenes the Foundations course in the undergraduate medicine program. Her research interests include the design and evaluation of learning materials and particularly the use of educational technology to support learning and teaching; facilitation of learning in small groups; and the development and use of graduate capabilities to support learning and teaching.

Lois Meyer is Postgraduate Educational Consultant in the School of Public Health and Community Medicine, Faculty of Medicine. She has been providing strategic curriculum review and development for the postgraduate programs, the Master of Health Management and the Master of Public Health. Principal research interests are in learning strategies for professional formation in educational and workplace settings; scenario based learning and graduate capabilities; and public health workforce development in local and international contexts. Doctoral research is investigating the development of professional judgement and changing practices in public health.

3. Using viva-type questions in face-to-face teaching to stimulate learning

Dr Husna Razee (School of Public Health and Community Medicine, UNSW).

Problem: Poor student attention and engagement in some small group sessions (e.g. in Phase 1 scenario group work sessions).

Solution: End the teaching session with a short answer viva type question around a brief real life scenario that will resonate with the types of problems students would encounter in their future medical profession. Ensure the 2- 3 questions that follow the scenario assess the learners' ability to apply the knowledge, concepts, theory etc covered in the session. The emphasis is not whether the learners know the right answer but on the critical thinking process they use to arrive at the answer. Using the questions generates a discussion that leads to the answers. This can work for audiences of up to 50 – 60 students and can be used in lectures too. It can be a useful way of wrapping up the session, assessing students understanding of the application of the material covered and to drive home the relevance of the topic/material to their future life as a medical practitioner.

Evaluation: is being developed, but this activity appears particularly effective in engaging students with a topic or discipline that they believe has no relevance to their future life as doctors.

Dr Husna Razee, BSc (AUB), MPH (UC Berkeley), PhD (UNSW) is Associate Lecturer in the School of Public Health and Community Medicine, UNSW.

4. Dysfunctional groups – the Achilles Heel of inquiry-based curricula?

Chinthaka Balasooriya (SPHCM, OME), Sophie di Corpo (SPHCM, OME), Nicholas Hawkins (School of Medical Sciences, UNSW)

Summary: The better management of group dynamics is increasingly being recognised as crucial for the success of inquiry-based curricula. However, the literature suggests that many inquiry-based programs still struggle in this area, and Norman (2001, p.820) described dysfunctional groups as the “Achilles heel of PBL”. The project reported in this paper sought to explore this important area with a view to identifying, developing and sharing successful group management strategies used by facilitators in Phase 1 of the MED3802 program at UNSW.

All scenario group facilitators were invited to participate in a survey which was followed by in-depth interviews. Facilitators were asked to share their experience of small group facilitation in the program, and to identify areas in which they required further support or skills development. Facilitators identified the management of group dynamics as a predominant area in which they required more support. Facilitators were also able to suggest some preliminary strategies to deal with the various types of group behaviour that they identified. The findings of this project highlighted the need for further work to develop a more comprehensive set of group management strategies and to make these strategies available to facilitators in an easy-to-use manner. We are currently developing a project proposal aimed at achieving the above.

Researchers:

Dr. Chinthaka Balasooriya, MBBS, PhD, has a background in medicine and a PhD in Medical Education. He has extensive experience facilitating small group learning in the medicine program since its inception, is a Co-convenor of the BGD A course and is a Portfolio Advisor.

Ms. Sophie di Corpo BA (Hons), Grad Dip Ed, MDist Ed, is both Instructional Designer and Lecturer at the School of Public Health and Community Medicine at UNSW. She is the Convenor of the Foundations course, has extensive experience in facilitation and is responsible for training of new facilitators.

Professor Nicholas Hawkins MBBS (Hons 1), MHEd, PhD, FRCPA is the Head of the School of Medical Sciences at UNSW. From 2002 to 2007, as Convenor of Phase 1 of the Medicine program at UNSW, he was responsible for the effective implementation of the first two years of MED3802.

2nd Session: (5 presentations)

1. Long clinical placements for medical rural students.

Geraldine Duncan, Rural Clinical School, UNSW.

A new innovation in the placement arrangements at Wagga Wagga Campus Rural Clinical School for Phase 3 3802 Medical Program students studying general practice and Psychiatry. The students are assigned to placements of 16 weeks' duration with rural GPs as part of their UG training. This presentation will discuss the issues surrounding the development of these placements, their setting up and evaluation.

Dr Geraldine Duncan is Senior Lecturer and Head of the Wagga Wagga Campus, Rural Clinical School, UNSW.

2. Refugee health – an opportunity for medical student education.

Geraldine Duncan, Rural Clinical School, UNSW.

This presentation will discuss the possibilities provided for medical student education by improved and increased refugee health provision in the rural areas.

Dr Geraldine Duncan is Senior Lecturer and Head of the Wagga Wagga Campus, Rural Clinical School, UNSW.

3. Proposal for improving the assessment of assignments and projects in the undergraduate medicine program.

Eilean Watson (School of Public Health and Community Medicine, UNSW) and Rachel Thompson (OME, UNSW).

Marking of assessments in the new medical program is fraught with difficulties. This paper presents one option that could vastly improve the speed and standardisation of the marking of assignments and projects in the 3802 Medical Program at UNSW.

Eilean Watson (RN, BSc (Hons), MHPEd UNSW, PhD candidate, SPHCM, UNSW) is a Lecturer in the School of Public Health and Community Medicine with research interests in Medical Education and Medical Informatics.

Dr Rachel Thompson (MBChB, BmedSci Epidemiology, MPH, GradcertULT) is Lecturer in Quality of Medical Practice and Academic Fellow in Learning and Teaching for the Medical Faculty.

4. Partners in curriculum design: learning about teamwork and conflict resolution

Alma Elizabeth Paul (ILP student, SPHCM) (Supervisors: Eilean Watson (presenting) (SPHCM, UNSW) and Patrick McNeil, (OME, UNSW).

Abstract

This research study explored teamwork and conflict resolution issues encountered by first and second year students in the undergraduate medicine program at UNSW. It identified problems and sources of conflict encountered by students while working on group projects, as well as positive techniques and solutions employed by them. The study utilised qualitative and quantitative content analysis methods. The analysis of eMed Map data revealed that teamwork skills pertaining to project work were only taught in one scenario group session in “Foundations”, the first course of the medicine program. Peer-given, self-given and facilitator-given comments from the eMed Teamwork database were analysed to identify teamwork problems and solutions, which were then grouped into four categories: communication and group dynamics, presentation skills, research and content, and attendance. These results guided the development of a learning resource in the form of a scenario group session activity to teach conflict resolution and teamwork skills.

5. Medipedia: using wiki writing to encourage peer-learning and reflection in Phase 1 of the Medical Program.

Rachel Thompson (OME, UNSW), Chris Hughes (OME, UNSW), Gary Velan (OME, UNSW), Peter Harris (SPHCM, UNSW), Jake Surman (Medicine Computing Support Unit, UNSW), Suzanne Mobbs (OME, UNSW)

A brief presentation of the medical student Wikipedia developed this year to stimulate and assess peer-learning and reflection in Phase 1 of the 3802 Medical Program and discussion of the planned evaluation of the project.

C. POSTERS

Campus-based teaching of clinical skills in the early years of an integrated undergraduate medical program.

Edna Koritschoner (SPHCM, UNSW) – presenting, Chinthaka Balasooriya (SPHCM, UNSW), Leah Bloomfield (SPHCM, UNSW).

To determine whether vascular access and renal biopsy procedures are still undertaken by nephrologists and therefore whether these procedures should remain part of the general nephrology curriculum.

Cathie Lane (St George’s Clinical School) – presenting, Mark Brown (St George’s Clinical School), Maria-Theresa Ho (previously at OME, UNSW).

Resuscitating medical statistics: A group project that aligns learning and assessment for one of the most unpopular subjects in the medical curriculum.

Rachel Thompson (OME, UNSW) - presenting, Deborah Black, Margaret Cunningham, Nicholas Hawkins, Andrew Moorhouse, Robyn Richmond. Faculty of Medicine (rachel.t@unsw.edu.au)

Provision of dermatology clinical teaching in the undergraduate medical program at UNSW

Margot Whifeld (presenting) for the Dermatology group at St. Vincent’s Hospital.