

UNSW Medical Faculty
MedEd L&T Forum 2009

Program

Weds 2nd December

**LG02 Lower Ground Floor of Wallace Wurth Building
Kensington Campus.**

0930 Welcome A/Prof Phil Jones (Associate Dean of Education)

0940 – 1010 Adaptive Tutorials Using Virtual Slides to Enhance Learning of Microscopic Morphology. G. Velan, D.Ben-Naim, R. Kumar. M.Bain, B.Kan and N.Marcus.

1010 – 1040 Preparing medical students for teamwork related competencies in internship: Issues and challenges in assessment. A.Olupeliyawa.

1040 - 1100 Extra self-selective goal setting promotes teaching and learning for students in the Independent learning project (ILP). J.L.Yang

1100 Morning Coffee - viewing of posters

1130 - 1150 Summative portfolio assessment: A method to assess reflective practice in medical students. A. O'Sullivan, P.Harris, C.Hughes, P.Jones.

1150 - 1220 A collaborative approach to enhancing student learning in a second-year Pathology course. P.Polly and G.Jones.

1220 - 1240 Online Cardiac Embryology ILP. P.Norville and M.Hill.

1240 – 1300 Benefits of Testable Concept Maps for Learning about Pathogenesis of Disease. S.Kumar, G.Velan, F.Dee and R.Kumar.

1300 Awards Ceremony followed by lunch

Phil Jones to present the Faculty L&T Awards and congratulate the FULT/ GCULT Graduates from 2009

Format of Presentations

A Long research paper: 20 mins with 5-10 mins discussion time.

B Short presentation: 10 mins with 5-10 mins discussion time.

C Poster presentation: Posters will be presented during the morning break. They will be hung in the student common area with presenters available for discussion about their poster.

Abstracts (in order of presentation)

Adaptive Tutorials Using Virtual Slides to Enhance Learning of Microscopic Morphology

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Anatomy and Pathology require students to understand normal microscopic structure (histology) and appearances of disease (histopathology). For this purpose, we use Virtual Slides (VS) – browser-based virtual microscopy simulating use of a real microscope. However, in large practical classes using VS, teachers cannot assist every student who has difficulty with microscopic morphology. Thus, some students are not optimally engaged in learning with VS. To address this issue, we created online Adaptive Tutorials (ATs) that guide students through their interactions with VS. ATs are activities where feedback adapts to students' needs, based on their interactions with the tutorial. Analysis of students' interactions with ATs can permit refinement of feedback. ATs used in our Medicine program received high praise from students and teachers. There is also evidence of learning benefits for students. Such ATs could enhance learning in all disciplines that use microscopy.

Preparing medical students for teamwork related competencies in internship: Issues and challenges in assessment

Asela Olupeliyawa

Dr. Asela Olupeliyawa is a medical graduate and a lecturer in medical education at the Faculty of Medicine, University of Colombo, Sri Lanka. He is conducting his Masters research in Health Professions Education under the supervision of A/Prof. Chris Hughes and Dr. Chinthaka Balasooriya. He is a young medical educator and his interests in medical education are on learning environment and assessment issues.

Introduction

Teamwork training in workplace based teams has resulted in better healthcare outcomes. The need for teamwork among medical trainees and the value of teamwork related competencies in the transition from student to intern have been highlighted. Therefore preparedness for teamwork issues related to interns need to be assessed in medical student curricula. Many workplace based assessment tools target professionalism as a subset of clinical competence, and the few which assess professionalism directly, assess teamwork without emphasis on the many critical elements. The few tools that address teamwork alone are limited to critical elements in dynamic situations, and are assessed through simulations.

Work done

Views on the critical elements of teamwork for interns, and their teaching and assessment, were explored through semi-structured interviews with clinical supervisors and focus group discussions with senior students. Knowing their own role and seeking support appropriately, working with nursing/ allied health professionals, adaptability, proactive support and decision making, communicating information and advocating for the patient were identified as critical. Patient handovers, consults, emergency situations and seeking support after hours were identified as challenging. Workplace based assessment was identified as relevant and promoting preparedness. Their strengths, including opportunities for feedback and reflection, were valued. Weaknesses such as complexity, 'halo' effect and errors of central tendency were highlighted.

Future directions

I propose to develop and trial an assessment strategy by modifying several assessment tools such as the Professionalism Mini Evaluation Exercise and 360 degree feedback. The focus of assessment will be observer ratings of critical elements of teamwork during challenging interpersonal encounters.

Extra self-selective goal setting promotes teaching and learning for students in the Independent learning project (ILP)

Jia Lin Yang

A/Prog Yang is currently a research director of the Surgical Oncology Research Group at Prince of Wales Clinical School and has been doing cancer research in our university for 16 years. He was a rheumatologist in China, has MEd degree from UNSW and is also a biostatistician with numerous publications.

Problem: The current setting of ILP is challenging to both teacher and student. Separate assessed courses (ILP 1-3) and laboratory training concurrent with extra faculty courses affect time use and consistency.

Solution: Extra goal setting (e.g. in ILP1 - specific and broad review covering original problems/questions, importance, feasibility as well as various methodologies) discussed with students promotes effective time management and maintains consistency to achieve more output.

Effectiveness of implemented change: The full time ILP1 course will be used not only to review literature for assessment, but also providing information for ordering experimental agents and researching methodology for ILP2 work, as well as for writing report in ILP3. In particular it provides enough information for writing a high quality review for publication. I have provided important direction and feedback to my students to encourage reflection and self direction in developing excellent research skills leading to suitable material for publications.

Summative portfolio assessment: A method to assess reflective practice in medical students

O'Sullivan AJ, Harris P, Hughes CS, Jones PD.

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Medical schools need to ensure capabilities, such as reflective practice and self-directed learning, are assessed along with the more traditional basic and medical science knowledge and application. This has required the development of more innovative assessments such as portfolios, which can ensure educational goals and competencies are met. Portfolios should require the student to reflect on their achievements or the evidence presented, their progress and plans for the future.

The aim was to determine whether preparing a portfolio helps students appreciate and develop in areas of competency such as reflective practice. A questionnaire designed to evaluate undergraduate medical students' experiences of completing a portfolio specifically related to key competencies. Two independent summative portfolio assessments with similar grading processes were targeted. The questionnaire consisted of 18 questions, all linked to specific graduate capabilities such as reflective practice and self-directed learning. 411 (49% response rate) and 115 (36% response rate) students answered the on-line questionnaire. Students from both universities rated the questions of reflective practice the highest, and when results were combined, questions related to self-directed learning were rated the second highest whereas questions on effective communication were rated the lowest. 63 % of students agreed the portfolio helped them on questions about reflective practice ($P < 0.001$) whereas only 22 % disagreed. In contrast, 34 % of students thought the portfolio helped them to develop effective communication whereas 42 % disagreed. Portfolio examination can be a successful method to link assessment to learning capabilities such as reflective practice and self-directed learning whereas other capabilities such as effective communication may require complementary examinations such as oral clinical examinations and vivas.

A collaborative approach to enhancing student learning in a second-year Pathology course.

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Collaboration between Learning Advisors' and Faculty colleagues calls for a variety of approaches to enhancing student learning. This paper discusses the development of a Multidirectional Collaborative Apprenticeship model. This model drives a discipline decoding tool and an integrated multi-faceted approach to scientific literacies which supports a major assessment task within PATH2201/2202. This course is a core Pathology subject offered to second-year Science students within the School of Medical Sciences (SoMS), UNSW. The assessment task "The Media Assignment" aims to introduce students to the culture of Science research; to develop graduate attributes specifically focused on written scientific communication skills, as well as to enhance self-directed learning and critical thinking skills. The assignment places the learners in 'the role of the researcher' by engaging them in their own research experience based on a current issue in Science.

This learning process is supported by a five element integrated approach: 1) Science Writing Literacy' (SWL) Workshops; 2) 'Skills Focus Guide' (SFG), a self-directed learning resource; 3) A standardised marking and feedback criteria; 4) Learning Objective groups (LOGS) and 5)Tutorials.

Student and tutor feedback on this approach has been very positive, and has had a significant impact on learning and teaching within the School. It has led to explicit discussion with other faculty members on developing transparent assessment criteria and the embedding of academic literacies within other courses in SoMS. This cross discipline collaboration has engaged both students and specialists as active participants in what it means to be part of their learning community.

Key Words: collaboration , apprenticeship model, decoding disciplines, embedding academic literacies, science literacies, student engagement.

Online Cardiac Embryology ILP

Phoebe Norville (ILP student), Mark Hill (Supervisor)

http://php.med.unsw.edu.au/cellbiology/index.php?title=ILP_z3212774

Benefits of Testable Concept Maps for Learning about Pathogenesis of Disease

Shweta Kumar (ILP student, Med Program, UNSW), Gary Velan (Pathology Dept, UNSW), Fred Dee (University of Iowa), Rakesh Kumar (UNSW)