Medical, Dentistry and Health Sciences

2011 Education Research Symposium

Friday March 18, 2011
Blue Room, Currie Hall, UWA
Program and Abstracts
Welcome to the inaugural Education Research Symposium for the Faculty of Medicine, Dentistry and Health Sciences at UWA. The event aims to enrich the teaching and learning experience, by exploring themes of mutual interest in a community of educators.

Many of our educators are recognised not only for their excellence in teaching locally and nationally but are also active scholars of teaching and learning practice. This symposium provides an opportunity for staff and students to share their ideas, projects, and best practice in the area of medical and health professions education.

A wide range of interesting studies and projects will be presented from across all Schools in the Faculty. We are indeed fortunate to have such motivated and dynamic Faculty members.

I would like to thank all presenters for sharing their work and expect that all participants will gain something they can take away with them.

Sandra Carr
Associate Dean, Teaching and Learning
Symposium Program
Friday, 18th March 2011

<table>
<thead>
<tr>
<th>Time</th>
<th>Session</th>
<th>Location</th>
</tr>
</thead>
<tbody>
<tr>
<td>11:15 – 12:00</td>
<td>Registration</td>
<td></td>
</tr>
<tr>
<td>12:00 – 12:30</td>
<td>Welcome and Housekeeping – Associate Professor Sandra Carr</td>
<td></td>
</tr>
<tr>
<td>12:30 – 12:35</td>
<td>Keynote Address – Associate Professor Lyndal Parker-Newlyn, University of Wollongong</td>
<td></td>
</tr>
<tr>
<td>12:35 – 12:35</td>
<td>Graduate Medical Students - are they wiser or just older?</td>
<td></td>
</tr>
<tr>
<td>13:20 - 13:35</td>
<td>Virtual reality teaching tools for dentoalveolar oral surgery</td>
<td>Blue Room</td>
</tr>
<tr>
<td>13:35 – 13:50</td>
<td>Student access to patients in an emergency department</td>
<td>Bartlett Room</td>
</tr>
<tr>
<td>13:50 – 14:05</td>
<td>Fitness-to-practise policies in Australian medical schools - are they fit for purpose?</td>
<td></td>
</tr>
<tr>
<td>14:05 – 14:20</td>
<td>Can clinical medicine be taught effectively totally online?</td>
<td></td>
</tr>
<tr>
<td>14:20 – 14:35</td>
<td>Answering Clinical Questions: a web based resource for evidence based practice (EBP) teaching and learning in the FMDHS.</td>
<td></td>
</tr>
<tr>
<td>14:35 – 15:05</td>
<td>Afternoon Tea Break</td>
<td></td>
</tr>
<tr>
<td>15:05 – 15:20</td>
<td>Curriculum development - preparation for internship with student grand rounds</td>
<td></td>
</tr>
<tr>
<td>15:20 – 15:35</td>
<td>Psychological well-being and coping in migrant vs non-migrant medical students: an exploratory study</td>
<td></td>
</tr>
<tr>
<td>15:35 – 15:50</td>
<td>Using “PROMPT” Simulation Training for Medical Students</td>
<td></td>
</tr>
<tr>
<td>15:50 – 16:05</td>
<td>Peer-assisted learning in teaching clinical examination to junior medical students</td>
<td></td>
</tr>
<tr>
<td>16:05 – 16:20</td>
<td>Health Industry Practicum: Preparing Health Science Students for Employment</td>
<td></td>
</tr>
<tr>
<td>16:20 – 16:35</td>
<td>Feeling of otherness: Non English Speaking Background (NESB) Overseas</td>
<td></td>
</tr>
<tr>
<td>16:35 – 16:50</td>
<td>Correlation between the Self reflection and Insight Scale with admission processes for entry to the UWA MBBS course</td>
<td></td>
</tr>
<tr>
<td>17:20</td>
<td>Excellence Teaching Awards</td>
<td></td>
</tr>
</tbody>
</table>
Graduate Medical Students - are they wiser or just older?

Associate Professor of Medical Education
University of Wollongong

Associate Professor Lyndal Parker-Newlyn holds the appointment of Associate Professor of Medical Education, is the Head of GSM at the Shoalhaven Campus and has been with the school since February 2006. Her duties include oversight of the educational flavour and delivery of the curriculum, particularly the case based delivery aspects such as the Case Based Learning activities and clinical problem blueprints. She is also the Academic Leader of the Admissions & Selection process for the GSM.

Lyndal holds a Bachelor of Medicine (Honours) from the University of Newcastle and is a Fellow of the Royal Australian College of General Practitioners. She has also completed a Masters in Health Science (Education) from the University of Sydney.

After completing her undergraduate medical training in Newcastle, Lyndal worked as Airfield Emergency Officer and Senior Medical Officer for the Royal Australian Navy at HMAS Albatross. She completed her General Practice specialty training, and since leaving the RAN has had over a decade of experience as a rural general practitioner in Nowra.

Lyndal has a keen interest in medical politics, serving as a board member, program manager, Deputy Chairman and finally Chairman of the Shoalhaven Division of General Practice since 2001. She has a history of committee involvement at a local, state and national level including Deputy Chair of the NSW Rural Doctors Network, and Deputy Chair of Rural Health Workforce Australia (the national peak body for rural workforce agencies in Australia).

Her experience with teaching covers nursing staff, medical students, general practice registrars and medical sailors and she is passionate about rural general practice and workforce issues affecting rural communities. She is particularly interested in the development of clinical reasoning in medical students, the delivery of education at distributed campuses and the factors that motivate students to consider rural medicine as a career path.
Virtual reality teaching tools for dentoalveolar oral surgery

Presenter
Andrew Smith, School of Dentistry

Introduction
Advances in computing, specifically those used for simulation and games technology has allowed for exciting developments in dental and surgical education. At the same time concerns are being raised that students with relatively little training, practice to improve their skill on patients with all of the inherent risks that may occur.

Simulation in Dentistry has been practiced for many years and so the concept is not new to the Profession. New tools have been developed that both enhance teaching and learning and are also useful for assessment of students and trainees.

Purpose of Project
To develop a virtual reality medium fidelity haptic teaching tool for dentoalveolar surgery.

To compare teaching and learning outcomes between conventional teaching methods and the use of virtual reality.

The challenge of virtual and simulated reality tools is to have the required fidelity to improve teaching and learning outcomes over the currently utilised methodology.

Results and Discussion
This presentation will outline the development and discuss the educational rationale for a training tool to provide virtual reality learning in the area of dentoalveolar surgery.

A pilot study of the use of peer-assisted learning (PAL) in the teaching of musculoskeletal medicine

Presenter
Lisa Caputo, Helen Keen, Fiona Lake, School of Medicine and Pharmacology

Introduction
Ensuring students receive feedback in clinical environments is challenging. In musculoskeletal (MSK) medicine, often taught in outpatients, challenges are busyness and a lack of identifiable clinical team. Peer-Assisted Learning (PAL) has been shown to improve student confidence, marks and clinical skills and may provide leadership skills for tutors.

Aim
Pilot a PAL program within the MSK clerkship (Y4 Medicine), focussing on examination skills.

Methods
Before-after study over 3 terms with voluntary recruitment of students into 3 groups: tutors (n=x), learners (n=y) and controls (n=z). Tutors received training in MSK examination (wrist/hand, knee, shoulder) and skills in teaching and feedback. Modifications were made each term based on feedback, so a flexible program organized by tutors moved to scheduled times/locations with a clinician present to support multiple groups. Outcomes included satisfaction ratings, before-after confidence with examination (MSK Assessment Tool (MSAT)) and final OSCE scores. Non-participants were also surveyed.

Results
Participant and tutor satisfaction increased over time, likely reflecting changes in the format of sessions. Both supported peer tutoring. Before-after MSAT scores increased significantly in all groups with no difference between groups, OSCE scores did not differ between groups. Main reason given for non-participation was time constraints in the course.

Discussion
Participants were satisfied with the modified PAL MSK program, however no objective impact on MSK skills was measured. Ensuring the program is formally structured is required. Although use of peers increases satisfaction and available resources for teaching, the role of the senior supervising clinician is unclear and impact of an optimised program on learning is not known.
Blue Room 13.35pm

Student access to patients in an emergency department

A Celenza, J Li, J Teng

Presenter
Tony Celenza, FMDHS Education Centre

Aims
To determine the proportion of patients in a teaching hospital emergency department who are available to medical students; identify barriers to student access to patients; and determine whether patients are more likely to be accessible if the term student doctor is used rather than medical student.

Methods
Repeated cross-sectional study of the emergency department of a tertiary teaching hospital. Interviews were attempted with all patients in the emergency department during six 4-hour periods. Outcome measures included: Number of patients present and accessible to students; present but inaccessible, absent or unfit for clinical reasons; number of patients consenting to history, physical examination and certain procedures; and difference in patient consent between the terms ‘medical student’ and ‘student doctor’.

Results
Overall, 180 of 450 (40.0%) patients completed the interview, 72 (16.0%) were able to be observed only, and 198 (44.0%) were not suitable for interview or observation. The common reasons for patient unsuitability were: physically not available (60%), being assessed by a health professional or undergoing a procedure (13.0%) altered mental status (7.4%), unstable or terminally ill (5.2%); refusal to participate in the study (4.8%), or dangerous or under arrest (4.1%). No significant differences were found in patient willingness to undergo clinical skills from “student doctors” compared to “medical students”.

Conclusion
A minimum 40% of patients in a tertiary ED are accessible for student learning, with high proportions of patients accepting of students practising supervised history-taking, physical examination, and most less-invasive procedural skills.

Bartlett Room 13.35pm

Evaluation of an innovative approach to recruitment of medical students to a career in psychiatry

Presenter
Zaza Lyons, Kellie Bennett, School of Psychiatry and Neurosciences

Background
Recruitment of medical students to a career in psychiatry has become a growing issue over recent decades. Due to low uptake of this career path, innovative strategies are required to encourage students towards psychiatry. In 2008, the School of Psychiatry and Clinical Neurosciences developed the Claassen Institute of Psychiatry for Medical Students (the Institute). The Institute is a week-long programme with interactive seminars and elective sessions with local service providers

Purpose of project
The main aim of the Institute is to enable medical students to explore psychiatry as a possible career path.

Methods used
Students complete a baseline questionnaire at the beginning of the week, a follow-up questionnaire on the final day and a daily questionnaire to rate each day’s seminars and elective sessions. Questions were rated on a scale of 1-10, where 1 indicated low interest/knowledge and 10 high interest/knowledge.

Results
50 students have attended since 2008. Interest in psychiatry has increased significantly from 7.8 to 8.9, t(47)=-5.371, p < 0.001, and knowledge of psychiatry has increased from 5.8 to 7.3 t(47)=10.312, p < 0.001. Numbers of students ‘definitely considering’ a career in psychiatry increased by 20%. Student comments included ‘This is the BEST programme I’ve attended. I am more motivated to do psychiatry as a career’ and ‘Overall a fantastic experience, one I would highly recommend to others’.

Discussion
The Institute is popular among UWA medical students and has become an annual event. The impact of the Institute on career choices of past and future students is being evaluated as part of a current PhD research project.
Fitness-to-practise policies in Australian medical schools - are they fit for purpose?

Presenter
Paul McGurgan, School of Women's and Infants' Health

Objective
To determine the current usage and possible effects of Australian medical school Fitness to Practice Policies (FTPP). To define and benchmark FTPP "best practice".

Design and participants: National questionnaire based study of Australian medical schools.

Main outcome measures: Use of FTPPs. The relationship between having a FTPP and the type of medical school programme, student registration with a state medical board, the format of remediation processes, the numbers of students excluded for professional misconduct, the year level and reasons for exclusion.

Results
Fifteen out of the nineteen schools replied (79%). Twelve of the respondents used a FTPP (80%). In the past 5 years, up to nineteen students have been excluded for reasons relating to professional conduct. Most students were excluded by third year.

Conclusions
Most Australian medical schools use FTPPs. These policies have minimal consistency. The small number of medical schools surveyed precludes the ability to demonstrate causality. However, FTPPs do not seem to affect remediation processes or the rates of, or reasons for, medical student exclusion from medical schools. The variations in the numbers of students excluded by the different medical schools for professional behaviour suggest discrepancies in the medical schools’ abilities to detect and manage students with problems in these areas. Previous calls to develop nationally consistent approaches to the management of poorly behaved students within academic programs should be addressed.

Teacher perspectives of the first year experience

Presenter
Kate Ryan, 4th Year Health Science Student

Background
The first year experience of university students occurs in the context of the institution, this includes academic staff. However, little is known of the extent to which academic staff are aware of the problems unique to first year students, and what can be done to ease the transition into higher education.

Purpose
This study was intended to assess staff knowledge of issues surrounding the first year experience, as well as to report on what they perceived as factors facilitating or inhibiting their ability to enhance the first year experience.

Methods
Academic staff across all faculties at the University of Western Australia were invited to participate in an anonymous online survey.

Results
The qualitative data which was generated indicated that respondents had a good understanding of the problems first year students face. In addition, the study highlighted that staff perceive resourcing constraints, resulting in large class sizes and inadequate time to dedicate to first year students, as one of the biggest barriers to addressing first year problems. In general, staff from the Faculty of Medicine, Dentistry and Health Sciences reported the same issues at staff from the university at large, but a low number of participants from the Faculty preclude generalisations.

Discussion
This study adds a valuable insight into the first year experience from a point of view of academic staff. Given that large class sizes are becoming increasingly commonplace, staff should be given access to the tools and training required to effectively engage large groups of students.
**Blue Room 14.05pm**

**Can clinical medicine be taught effectively totally online?**

**Presenter**

Prudence Manners, School of Paediatrics and Child Health

**Aim**

To review the outcomes after 3 years of delivery of a totally online clinical course, the Graduate Certificate of Paediatric Rheumatology.

**Background**

: The GCPR is administered totally online, aimed at medical postgraduates and is Paediatric Rheumatology designed particularly for clinicians, i.e. paediatricians or adult rheumatologists or trainees in paediatric rheumatology. It is completed as part time study and is compatible with full-time employment and requires no travel. It is aimed at providing real help for those medically responsible for children with rheumatological disorders. Successful students receive the letters "Grad Cert PRheum" from a prestigious university.

Whilst the course does not provide clinical “hands-on” and cannot do so via the web, it provides a thorough preparation for a clinical placement where a fellow will be better placed to benefit from such a placement. It also means that where colleagues are time-pressured or financially-pressured and able to have only a short clinical placement, they are able to get maximum return from time spent, with the course having prepared them substantially. The course is also aimed at being immediately useful for practicing physicians who care for children with rheumatological disorders and who would benefit from clinical teaching based on a depth of clinical experience in paediatric rheumatology.

**Method**

The results were considered in the following categories: course uptake; completion rate; level of satisfaction of students, tutors, academic and financial administrators; and SWOT assessment.

**Results**

To date students from the following a range of countries have successfully participated in the course with interest increasing in countries around the world. Feedback has been very positive on most parameters, but some problems are defined.

**Conclusions**

The course has achieved many of the goals. The participation has been relatively strong with strategies to further enhance participation. The university financial structure provides financial complexities for courses aimed at international students. Many lessons have been learned and there are more to be learned.

---

**Bartlett Room 14.05pm**

**Ensuring quality graduates of pharmacology: a survey of Australian students**

Lynette Fernandes1, Ian Musgrave2, Anna-Marie Babey3, Shane Bullock4, Elizabeth Davis5, Joanne Hart5, Tina Hinton5, Hilary Lloyd5 and James Ziegas5.

School of Medicine and Pharmacology, UWA; University of Adelaide2; James Cook University3; Monash University4; RMIT University5; University of Sydney6; University of Melbourne7.

**Presenter**

Lynette Fernandes, School of Medicine and Pharmacology

**Introduction**

A national survey of Australian university students’ perceptions of pharmacology curricula was recently conducted.

**Purpose of Project**

Regarding tertiary education in pharmacology, we aimed to (i) identify student perceptions, (ii) determine whether students consider it meets their needs and (iii) identify any areas of major concern.

**Methods used**

Following institutional ethics board approval, anonymous and confidential surveys were delivered online. Data from each institution were pooled and represented as Science, Medicine, Nursing and Allied Health student perceptions. Data were expressed as Approval (% of total responses represented by Strongly Agree and Agree).

**Results**

This survey’s results indicated that the pharmacology course material was motivating, intellectually stimulating and integrated well with their other studies. Students also perceived pharmacology as relevant to and complementing their career path. Students valued laboratory practicals and perceived that they integrated with the lecture material. Free entry comments placed significant emphasis on the importance of tutorials. Simulation-based work and e-learning has been promoted in many fields of science, yet only 21-51% of students agreed that they would like to have more self-directed computer-based tutorials. In Medicine, students indicated a desire for more resource sessions devoted to pharmacology (87% Approval).

**Discussion**

The findings suggest that pharmacology students welcome more traditional teaching methods to complement self-directed and problem-based learning.

This project was funded by the Australian Learning and Teaching Council.
Answering Clinical Questions*: a web based resource for evidence based practice [EBP] teaching and learning in the FMDHS.

Anna Nowak¹, Diana Jonas-Dwyer¹, Carol Newton-Smith¹, Belinda Shilkin¹, Gina Sjepcevich¹, Felicity Renner³, Fiona Leere³. Faculty of Medicine, Dentistry and Health Sciences: School of Medicine and Pharmacology, EdCentre, Medical and Dental Library³.

Presenter
Anna Nowak, School of Medicine and Pharmacology

Introduction/Background
Evidence Based Practice (EBP) enables clinicians to integrate individual patient situations, clinical expertise, and the best available evidence for quality patient care. Health care practitioners need to learn to locate and identify the best quality information, and interpret and apply it efficiently in routine clinical practice; these skills are as important as content-based knowledge and clinical skills. In 2007 a review of EBP content in the undergraduate medical curriculum revealed a lack of consistency of approach, and poor student knowledge and skills.

Purpose of project
Increasing student numbers and distributed teaching sites are a challenge to teaching and learning. The EBP working party recommended developing a central resource to provide a standardised faculty platform for EBP teaching and learning.

Methods
Over two years a multi-disciplinary team, including staff with content expertise, information literacy, web design, visual design and e-learning developed specifications and content for the resource in consultation with academic staff from a range of disciplines. The project initially focused on evidence based medicine but was broadened (evidence based practice) to include dentistry, podiatric medicine, nursing and physiotherapy.

Results
The resource went live in Semester 1, 2010 at www.meddent.uwa.edu.au/teaching/acq. Four modules [Formulate, Find, Appraise, Apply] and a glossary can be accessed sequentially or individually and scaffold the progressive building of student skills and abilities with increased depth as students moved through the curriculum. Flexible, customisable resources for each discipline include examples, guides, worksheets and advanced skills information. Longitudinal evaluation has begun using a validated survey and qualitative evaluation is planned through focus groups and interviews.

The use of the audience response system for medical student participation and learning

Presenter
Alexandra Tregonning, School of Women’s and Infants’ Health

Introduction
The introduction of Audience Response Systems (ARS) in the obstetric and gynaecology course for medical students at The University of Western Australia provided an opportunity to measure knowledge gain from using ARS during lectures compared to didactic lectures.

Methods
The study used a controlled crossover design over 4 obstetric and gynaecology terms and compared an ARS lecture with a traditional didactic lecture. Two specialists individually presented one lecture each term and the use of ARS format was alternated between them. Students completed multiple-choice quizzes measuring knowledge gain both immediately post-lecture and 5 weeks later.

Results
Immediate post-lecture quiz mean scores for the ARS lectures were significantly higher compared with the scores for the didactic lecture (Preterm Labour 8.3 vs. 7.4, p=0.032; and Prenatal Diagnosis 6.9 vs. 6.0, p=0.014). Quiz scores for the didactic Preterm Labour lecture were also significantly higher than scores for the didactic Prenatal Diagnosis Lecture (6.0 vs. 7.4, p<0.001). The quiz results at 5 weeks showed no differences in scores between the ARS and the didactic lectures and no differences between the lecture topics.

Conclusions
The use of the ARS in lectures for medical students appeared to improve knowledge gain immediately post-lecture but no difference was found in retention of knowledge after retesting at 5 weeks.
Blue Room 15.05pm

Curriculum development - Preparation for Internship with Student Grand Rounds

Presenter
David Kandiah, FMDHS Education Centre

Background and Purpose

The development of consistent clinical reasoning and decision making skills is often limited in medical school curricula. Medical graduates acquire these skills during their first few years of residency. This can be stressful as they may be working under limited supervision in some of their rotations.

Methods Used

“Student Grand Rounds” was developed to transfer both explicit and tacit knowledge to final year medical students. The original pilot project was to expose the students to clinical reasoning and decision making of common clinical presentations. Student feedback through questionnaires was collated at the end of the programme.

Results

The initial programme was trialled in mid-2008. Based on feedback and focus groups, modifications were made to produce a stable programme in 2009. Formal feedback was collated from the 76 students who participated in 2009. There was 100% response rate as the feedback forms were given and collected at the end of the last session per block. The student responses were both in ratings defined in a feedback forms as well as by written comments. 74 of the 76 students rated the programme highly. They enjoyed the non-threatening interactions. The remaining 2 students preferred more didactic teaching.

Discussion

This initiative allows for an efficient transfer and utilisation of knowledge. This could also maximise the acquisition of practical knowledge by medical students at the end of their course in the transition to internship. This is now part of the Final Year curriculum. A short video of the process will be shown.

Bartlett Room 15.05pm

Web-based learning modules in surgery

Presenter
Dickon Hyane, School of Surgery, Callum Logan

Methods

Fourth year medical students were approached to take part in a study to test their level of urological knowledge and the effectiveness of the web-based urology learning modules. Ethical approval was sought from the UWA Human Research Ethics Committee and each recruited student was asked to give formal written consent (see Appendix A & B). An MCQ type pre-test was completed online (Appendix C) and subsequently access to the learning modules was permitted. A further post test was then requested.

Results

62 out of a possible 218 UWA 4th year Medical students completed the pre-test. The mean pre-test score (n=62) was 22/40 (55%). 10 students completed all sections of the pre and post-test. Mean scores (n=10) improved from 20/40(50%) to 32/40 (80%) Conclusions Completion of the learning modules greatly improves the test score. Mean scores suggest the pre-test is pitched at an appropriate level of difficulty. Disappointingly few students chose to complete the post-test having been given access to the learning materials. This will be taken into account in the design of future studies.
Psychological well-being and coping in migrant vs non-migrant medical students: an exploratory study

Presenter
Joseph Luo, former MBBS student, graduated 2010

Introduction
Much of current evidence suggests that migrants have poorer mental health status than non-migrants. However, the links between migration, mental health and coping mechanisms has never been thoroughly investigated in medical students. An exploratory study is thus needed to investigate the relationship between these variables so that differences can be understood and managed.

Purpose of Project
To explore the mental health differences between migrants and non-migrants, and to establish a relationship between mental health, migration status and coping mechanisms.

Methods Used
114 migrant medical students and 93 non-migrants in the University of Western Australia were surveyed with the Self-Reporting Questionnaire (SRQ) and Coping Checklist (CCL-II) to assess their mental health and coping mechanisms. The results of the 2 groups were then analyzed and compared statistically.

Results
Mean SRQ scores proved to be 3.09 in migrants and 4.18 in non-migrants. Patterns of coping strategies revealed statistically significant increased use of denial/blame and religion amongst migrant students. However, a significant correlation between coping styles and mental welfare was not established. Analysis also revealed increased SRQ scores amongst females and pre-clinical students.

Discussion
Interestingly, non-migrant students had higher SRQ scores and therefore more psychological distress than migrant students. There were minor coping style differences between migrants and non-migrants but this did not seem to have a conclusive impact on the SRQ scores.

Interprofessional learning and collaborative practice in the Faculty of Medicine, Dentistry and Health Sciences at the University of Western Australia

Sandra Carre1, Rosemary Saunders1, Pam Nicol1, Paul Ichim1, Paula Johnson1

The University of Western Australia, Faculty of Medicine, Dentistry and Health Sciences

Presenter
Gillian Cleary, FMDHS Education Centre

Introduction / Background
Interprofessional Education (IPE) an educational approach encompassing principles facilitating students of different but related professions to learn “with, from and about each other to improve collaboration and the quality of care” aims ultimately to improve health care service and delivery for patients by graduating new practitioners competent in the capabilities associated with interprofessional learning. These include, for example, knowledge and respect of each profession and the role each plays in care delivery, an awareness of the needs of direct and indirect service users, and skills in effective communication, teamwork, and reflective practice.

IPE has been used internationally for some years yet adoption by Australian institutions has been limited, constrained by well-established curricula for each discipline, logistical difficulties of interdisciplinary liaison and lack of dedicated IPE resources. Recently government policy has advocated IPE, citing this as a means of improving patient outcomes through the delivery of safer and more effective patient-centred care. Accordingly an interest group comprising representatives from all disciplines of the Faculty of Medicine, Dentistry and Health Sciences was formed and an IPE framework facilitating the embedding and integration of interprofessional learning in these courses was developed. Initially two programmes engaging students in IPE activities were developed and the first, a simulated ward, was piloted.

Purpose / Objectives
To provide an overview of the challenges faced and solutions adopted in developing and implementing an intra-faculty IPE experience in a simulated ward; and of project evaluation data, culminating with strategies to refine and develop the experience for future participants.

Issues / Questions for exploration or ideas for discussion
What strategies are useful when implementing Interprofessional Learning experiences that align with existing learning outcomes? What processes are effective in implementing IPE experiences in established curricula? What evaluation activities are useful in determining whether student experiences meet the planned IPE learning outcomes?
Blue Room  15.35pm

Using “PROMPT” Simulation Training for Medical Students

Yap S-J, Tregonning A, Calvert K, Carmody D, McGurgan P.

Presenter
Shui-Jean Yap, former MBBS student, graduated 2010

Introduction / Background
Simulation and team work training in emergencies is increasingly used in medical student education. Shoulder dystocia is an obstetric emergency which requires effective communication, knowledge and skills by staff caring for labouring women. There are a variety of simulators available for shoulder dystocia drills, ranging from simple model pelvises and mannequins to more sophisticated (and expensive) computerised models which measure tractive forces.

Purpose of Project
Assess whether medical students undergoing training in shoulder dystocia drills had any differences in learning outcomes or satisfaction when using either “low” or “high” fidelity PROMPT shoulder dystocia simulators.

Methods used
294 medical students were provided educational sessions (lecture and a workshop) on shoulder dystocia management. Students were randomly divided into groups for assessment and each given a specific role. The groups were randomly assigned to a high fidelity (force monitor) PROMPT simulator or a low fidelity (non-force monitor) PROMPT simulator. Group performance was assessed using a standardised scoring sheet by experienced obstetric/midwifery staff educators. Student t tests and Bonferroni correction were used for statistical analysis.

Results
37 low-fidelity and 12 high-fidelity groups were assessed. Overall, no statistically significant differences in performance were recorded between the high and low-fidelity PROMPT simulators in the criteria assessed.

Discussion/ Conclusion
These results differ from post-graduate simulator studies were high fidelity models have improved delivery skills. This may reflect the different emphasis on the assessment criteria used for the medical students (focussed on communication, teamwork and seeking assistance rather than the complex manoeuvres sometimes required). Also the force monitoring used in the high fidelity simulators may have been an unnecessary distracter for the students who were practicing new skills.

Bartlett Room  15.35pm

Making a difference: evaluating the impact of an Aboriginal health undergraduate medical curriculum and its translation into other health professional degrees

Presenter
David Paul, Centre for Aboriginal and Indigenous Health; Sandra Carr, FMDHS Education Centre

Introduction/background
Exploring Aboriginal Health, confronting stereotypes and developing the knowledge, skills and understandings to be able to provide culturally competent care are essential elements of educating students of the health professions.

But what perspectives of Aboriginal Health do students hold and display? What impact can an integrated Aboriginal Health Curriculum have on shifting students’ beliefs and pre-conceptions? The Centre for Aboriginal Medical and Dental Health within the Faculty of Medicine, Dentistry and Health Sciences at the University of Western Australia in collaboration with the School of Indigenous Studies have developed and implemented an integrated curriculum in Aboriginal Health that is taught in the dental, medical, nursing and podiatry courses. As part of the curriculum evaluation, using an evaluation tool developed by CAMDH in collaboration with the Faculty Education Centre, senior students’ perspectives of Aboriginal Health have been gathered.

Purpose/objectives
This paper presents perceptions senior students from medicine, dentistry and podiatry hold of their preparedness, ability and future commitment toward Aboriginal Health.

Issues/questions for exploration or ideas for discussion
The literature tells us that the attitudes and understandings of health care workers towards Aboriginal peoples do not occur in isolation and often take the same narrow ethnocentric views commonly held within non-Aboriginal Australians. Further, the evidence on health inequality and race concordance reveals that understandings and attitudes, covert, overt and unacknowledged, influence the quality of health care services that minority populations receive. This presentation will explore how the integrated Aboriginal health curriculum has gone some way to ensuring graduates are better informed, more experienced, and aware of the underlying issues of relevance in Aboriginal Health. How though can we move toward students from different health professions exploring attitudes and experiences of Aboriginal Health together? And how can we continue to move toward our goal of creating a culturally competent health workforce?
Peer-assisted learning in teaching clinical examination to junior medical students

Presenter
Benjamin Silbert, 6th Year MBBS Student

Background
In the context of medical education, peer-assisted learning (PAL) refers to teaching occurring between fellow medical students. PAL is widely utilised to teach medical theory, however few descriptions of its use to teach clinical examination have been published. Student Grand Rounds (SGR) commenced in 2004 and is a student-led initiative whereby senior medical students volunteer to teach clinical examination to their pre-clinical peers. Student tutors attend a modified Teaching on the Run (TOTR) course originally designed to train clinicians to teach students and junior doctors.

Purpose of project
To investigate the value of SGR tutorials in teaching pre-clinical students, and evaluate the effectiveness of TOTR workshops (2x3hrs).

Methods used
Over 9 months, tutors and participants in each SGR tutorial were asked to complete an online survey. At the conclusion of annual TOTR workshops (2004-2010), participants completed a survey evaluating their impression of the course.

Results
Sixty-four SGR tutorials were attended by a total of 321 students (120 unique). All agreed that tutorials were beneficial and enjoyable, with a threefold increase in the number of students self-identifying as able to perform the skills required. TOTR workshop participants classified the course as both relevant and beneficial, and all course outcomes were achieved. SGR tutors (n=29) reported improved knowledge and confidence in teaching following TOTR workshops, and the majority incorporated techniques learnt into SGR tutorials.

Discussion
PAL is an effective method of supplementing the teaching of clinical examination. In addition, senior students learn valuable skills and gain experience in teaching clinical methods.

Perceptions of how email affects student staff interactions beyond the classroom: Expectations and criteria

Presenter
Rachel Dennis, 5th year Health Science/Commerce Student

The rapid increase in the use of email as a means of communication between students and staff in universities in recent years raises the issue of the impact this has on student learning. Online surveys were distributed to undergraduate students and faculty staff at The University of Western Australia to determine their perceptions of how email is being used and how this compares to face-to-face interactions. Findings about what students and staff believe enhance and hinder the use of email were used to develop a set of guidelines outlining how email can be used in a way that is most conducive to learning.

Keywords
Email, student-staff communication, university learning
Health Industry Practicum: Preparing Health Science Students for Employment

Ms Ania Stasinska1, Associate Professor Colleen Fisher1, Associate Professor Jane Heyworth1
1School of Population Health, University of Western Australia

Presenter
Ania Stasinska, School of Population Health

Introduction / Background
Health Industry Practicum (HSMD3316) is a compulsory semester-long component and final unit of the Bachelor of Health Science degree at UWA.

HSMD3316 comprises a 450 hour placement at a health related agency and weekly university-based tutorials. Its focuses on students’ learning processes rather than the product per se. Students are supported through orientation, WebCT, academic supervision and a detailed guidebook. The program began in 2003 and each year student number have been increasing with 47 students placed in 2010.

Purpose
This presentation will describe the practicum program and discuss its evaluation results and future directions and challenges.

Methods
Expressions of Interest to host a student are called in February from non-government organisations, local and state government and the private sector. Interstate and international placements are increasing in popularity. Each student is interviewed to determine career goals and practicum placements that match these goals are identified.

The unit is evaluated annually.

Results & Discussion
Results from 2006-2010 found that students in general had a positive practicum experience, with levels of agreement ranging from 77% to 100% for individual items. Some felt their supervisors needed to be better prepared for their arrival. Supervisors overall were satisfied with the program and student. A number of students each year are offered employment immediately at the end of the practicum. Several practicum supervisors continue to mentor students or act as their referees.

The practicum is highly valued by the health sector, has raised the profile of the BHlthSc and meets its goal of producing work-ready graduates.

Is MCQ marking without negative marking fair, is there an inconsistent bias?

Stuart Bunt, School of Anatomy and Human Biology

Workload, student numbers, time and financial pressures are causing a move towards the use of more MCQs in examinations in the faculty. MCQ's have some pedagogical advantages; computer marking is anonymous, quick, accurate and provides a statistical breakdown of the difficulty and discriminatory power of the individual questions. In Anatomy and Human Biology we have started using MCQs in practical exams to further reduce the emphasis on rote learning. Rather than being asked to name a part, students can pick from the MCQ's range of options; the exercise becomes one of word recognition rather than testing memory. A real world skill needed by the lifelong learner when they read research papers.

However there is a worry, particularly with the move to four stem MCQ’s, that guessing can give a 25% bonus. The less a student knows, the more they will be guessing and the more “bonus marks” they are likely to gain. In theory a student who knows only 36% of the answers can get (on average) 16 marks by guessing the other 64% to end up with a pass mark of 52%. To see if this is true in practice we can take advantage of the natural control that first and second year medics take both MCQs and written exams. By using regression analysis to compare these marks we can see if the use of MCQ's leads to any systematic errors. Results from an analysis of exam results over the last few years will be presented.
Feeling of Otherness: Non English Speaking Background (NESB) Overseas Nurses working in Western Australia (WA)

Presenter
Christine Smith, Master Student in Health Professional Education

The shortage of nurses worldwide has taken its toll on the Australian health care system. At present nurses are at the top of the ten occupations in most demand. As a result there is an increasing and ongoing migration of OQNs to Australia, some of them coming from NESB countries.

To be eligible to gain their nursing registration applicants must comply with the Australian Nursing and Midwifery Council (ANMC) professional requirements. Furthermore to ensure that they are able to communicate effectively migrant nurses have to pass either the Occupational English Test (OET) or the International English language Testing System (IELTS).

This paper will present a component of the findings of a qualitative study, based on Husserlian phenomenology. The study involved 13 female NESB OQNs describing their lived experience of working in the WA metropolitan hospital workforce, specifically their ‘Feeling of Otherness’ which became visible though interactions with colleagues and patients. The participants described the broad spectrum of communication difficulties they experienced as they practised nursing in WA. The cultural shift they experienced in moving from their home country was heightened as it involved major communication challenges. Their working lives, however, revolved around communicating with and responding to others in English, which was not their first language. Furthermore this communication was at a professional level. The participants’ ‘Feeling of Otherness’ occurred at two levels. Firstly through comments from their colleagues highlighting their cultural differences and secondly through their own awareness of being ‘different’ from the local nurses. Implications for nursing practice will be highlighted.

Bartlett Room 16.20pm

Does peer observation of teaching with feedback create an improvement in teacher performance?

Presenter
Katrina Calvert, Master Student in Health Professional Education

Introduction
Peer observation of teaching (POT) is a well recognised tool in medical education. POT occurs when one teacher observes and provides feedback to another. The evidence base shows that participants enjoy POT and find it helpful, but there is little evidence that POT actually improves the teaching skills of the junior doctors involved. This project aims to address this deficit.

Purpose of project
The project aims to provide quantitative data on the potential benefit of POT. This will increase justification for the use of finite resources and allow application of POT according to an evidence-based format.

Methods
The study utilises a randomised controlled trial design. Recruitment will be aimed at junior medical staff in King Edward Memorial Hospital. Participants will be randomised to two groups, both of whom will teach an observed tutorial to a small group of medical students. Assessment will be triangulated – self-assessment, student assessment and peer observation. Following the first tutorial the study group will receive feedback with suggestions for improvement; the control group will not receive feedback. A second assessment will then occur.

Results
The results will aim to show whether or not there is an improvement in assessment scores for the study group following feedback.

Discussion
This methodology has not previously been applied to this subject. This project has the potential to provide a new perspective and inform future practice.
Correlation between the self reflection and insight scale with admission processes for entry to the UWA MBBS course

**Presenter**
Paula Johnson, School of Medicine and Pharmacology; Sandra Carr, FMDHS Education Centre

**Introduction**
Medical students in academic difficulty are often described as lacking insight. The Self Reflection and Insight Scale (SRIS) is a validated tool for measuring insight which has been validated in medical students. The SRIS measures three domains of insight: recognition of the need for reflection, engaging in reflection and the presence of insight. We previously measured SRIS scores in Y4 and Y5 students on the MBBS course at UWA. The usefulness of the SRIS in medical education is as yet undefined.

**Purpose of project**
To investigate whether SRIS scores correlated with UMAT scores, GAMSAT scores or interview score for candidates applying for entry to the UWA MBBS course.

**Methods**
244 (131 female) candidates for interview for the MBBS course completed the SRIS during the 2010 round of interviews. Candidates were approached after their interviews and completed the SRIS at the same time as filling out their interview evaluation questionnaires.

**Results**
There was no correlation between SRIS scores and UMAT score or interview score. We found no difference in SRIS scores according to gender, age or ethnicity and no differences in mean scores between interviewees and students in years 4 and 5 of the MBBS course. There was one significant negative correlation between engagement in reflection and GAMSAT section 1 – reasoning in the humanities and social sciences (r= -0.514, p=0.014)

**Conclusions**
The SRIS did not discriminate between successful and unsuccessful applicants to the MBBS course at UWA. Overall scores did not differ from those measured in existing year 4 and 5 students.

Evaluation and review of the SWIH Blackboard LMS/ CATL project offering an innovative teaching strategy to the IMED students in the anatomy and physiology component of their Obstetrics and Gynaecology units of study.

**Presenter**
Susannah Fletcher, School of Women’s and Infants’ Health

Building upon course evaluations and potential future course directions a pilot project was introduced to the IMED 5541/5542 Obstetrics and Gynaecology students in the School of Women’s and Infants Health. The intention of this pilot project was to work with CATL and Blackboard Learn, to develop an innovative teaching strategy to make available to students an on line managed learning environment which would hopefully enhance teaching and learning and student support - and introduce new social learning and teaching tools that foster more logical, visually impactful and active learning opportunities for students. Within this managed learning environment the students were given the opportunity to engage in webinars, learning forums, shared interest groups, blogs, virtual classrooms, on-line quizzes and formative case study reviews. In this part of their unit, the students could potentially remain interactively connected to their educational experience 24 hours a day, throughout the duration of their course enrolment.

Thirty nine students accessed the LMS and qualitative and quantitative feedback was ascertained at the end of their enrolment session via a semi structured questionnaire and also via statistics tracking within the LMS. The latter, primarily reviewed the frequency and type of course content accessed by students such as academic, interactive, formative assessment or extension work – and also which specific course content was accessed and when, within a twenty four hour time frame period. Feedback was excellent in terms of students enjoying the interactive content of their unit, and also specific characteristics of the LMS environment such as the virtual lecture theatre, on line quizzes and extended study work.