

# Sydney University Pharmacy Education Symposium Abstracts

The Sydney University Pharmacy Education Symposium was held on December 3. The following are abstracts of presentations at the symposium.

## **Taking Action Together for Asthma (TATA) – an interprofessional learning module focusing on asthma within the Faculties of Medicine, Nursing and Pharmacy.**

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**AIM:** This project, funded under the University's Teaching Improvement and Equipment Scheme, aimed to implement and evaluate a new Inter-Professional Learning (IPL) module focused on asthma (named TATA – Taking Action Together for Asthma) that was embedded in existing units of study during Semester 2, 2008 within the Faculties of Medicine, Nursing and Midwifery, and Pharmacy. This project aims to combine the need for conducting interprofessional education and exposing future health professionals to their health promotion roles.

**METHOD:** The project team constructed 1) a 3-day program that was aligned with the learning objectives of the courses students were enrolled in their own Faculties, and 2) assignments that fitted the overall load expectations for each course and activities that were relevant to all professions/subjects.

**OUTCOMES:** Twenty-six students enrolled in different subjects in the three faculties volunteered to undertake the TATA module. On the first day of the TATA module, students undertook activities relating to group/team work, understanding the roles and perspectives of each profession in the management of asthma, and within interprofessional groups designed activities to engage the community in improving asthma management practices. Over the course of the next two days, participating university students were first trained to become educators for an evidence-based peer-led asthma health promotion program for high school students, known as the Triple A (Adolescent Asthma Action) and then delivered the program in four NSW schools. The TATA module is currently undergoing evaluation using a pre-test post-test design. Students have, however, already informally offered very positive feedback about the overall TATA experience. Feedback about the progress of the TATA activities was also provided by observers (IPL Unit, Faculties of Health), and was very encouraging.

## **Evaluation of the Bridging the Rural Gap On-line Program**

*Sue Taylor, Greg Ryan*

Faculty of Pharmacy, The University of Sydney

**AIM:** This program is designed to develop an understanding of the health issues of rural/remote and Indigenous Australians in all health science students at the University of Sydney. The University's e-Learning scheme and two university grants are supporting the development, evaluation and embedding of the program in all curricula in the Faculties of Health. The program was trialed and evaluated with first and fourth year Pharmacy students in 2008 before a roll out to other faculties in 2009.

**METHOD:** All (n=280) students in first year Pharmacy used the program as part of a tutorial supported by two lectures and the material was assessed in the final examination. Those fourth year students who went on a rural block placement (n=150) used the program as part of their placement activities and assessment. All students were invited to complete a questionnaire in which they were asked to strongly agree/agree/disagree or strongly disagree with 10 statements about the program. They were also encouraged to write comments to qualify each statement and give general comments.

**OUTCOMES:** Sixty eight per cent of first year students and 69% of the fourth year students agreed or strongly agreed that the program was a useful learning resource and over 70% in each group agreed or strongly agreed that the program had increased their understanding of rural and remote health issues. Comments indicated that clearer instructions for students and assessment commensurate with time spent were required. The positive feedback and constructive criticism will be taken into account in the roll out.

## **Clinical Placements in Pharmacy: Development of an on-line learning module to orientate students to clinical practice**

*Beata Bajorek<sup>1</sup>, Marianna Koulias<sup>2</sup>, Marina Lobastov<sup>2</sup>, Jim Woulfe<sup>1</sup>, Greg Ryan<sup>1</sup>.*

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**AIM:** To develop, implement, and evaluate an on-line learning module ('ePlacement') that would maintain and/or supplement experiential learning within pharmacy programs.

**METHOD:** The ePlacement was designed as a web-based learning module, depicting aspects of pharmacy practice across the continuum of care using mixed media and other resources, and incorporating specific student activities.

Development of the module involved collaboration between academics and designers to conceptualise the module, confirm content, obtain/provide feedback, modify the module as required, produce/retrieve resources (e.g. video clips, images, sound recordings, narrations), and develop and analyse evaluation surveys. Student feedback was elicited in a 3-part survey (Jan-March 2008) comprising Likert Scale responses and open-ended questions to gauge student expectations of module, immediate impressions following its completion, and final opinions after completing a 'live' clinical placement.

**OUTCOMES:** Overall, most students "Agreed" or "Strongly Agreed" that the module provided a broader insight into practice, presented new information and resources, and helped them better prepare for clinical placements. Two key features were particularly appreciated: the overview of the healthcare system, and presentation of career options in pharmacy. Whilst the module was well received, a proportion of students were challenged by the need for self-direction, including time management, in completing the module. An alternate learning mode to help orientate students to pharmacy practice settings has been successfully developed and implemented, resulting in students being more prepared for 'live' clinical placements and more confident and able integrate into the clinical practice site. This module may help decrease the time spent orientating to 'live' placements, and alleviate the challenges of placement site shortages.

### Blogging and the development of critical reflection in Pharmacy

*Beata Bajorek, Kylie Williams, Jim Woulfe, Greg Ryan*

Faculty of Pharmacy, The University of Sydney

**AIM:** To investigate the extent to which the use of blogs ('weblogs' – online diaries) can lead to qualitative differences in Pharmacy students' reflective thinking abilities during clinical placement.

**METHOD:** MPharm students undertaking clinical placements must submit two diaries reflecting on their experiences – one in the first half of the placement and one in the second. For this study, one diary was submitted as a private, 'paper-based' document (i.e. traditional, journal-like reflection) and the other as a public, 'blog-based' diary. Blog instructions encouraged students to read and comment on each other's work. The diaries were evaluated using Biggs' SOLO taxonomy. A brief questionnaire and focus group interviews were used to gauge students' experiences of both the diary and blog in the learning context. Metrics of student activity (number of blog-posts) were recorded.

**OUTCOMES:** There was no demonstrable difference in the quality of students' reflection between paper vs blog-based mediums. In contrast to our expectation that writing for an audience of peers would encourage students to be more reflective, it appears that students have simply 'lowered the

tone', i.e. posted comments in the blog-space which were more superficial than in the paper-based diaries. In focus group discussions, students were overwhelmingly positive about the use of blogs; this medium facilitated regular and ongoing reflection on their placement experiences, and felt 'more like conversation'. However, to achieve deeper reflection, some training/brainstorming on the discourse features of a blog might be required, similarly to that provided for paper-based reflection.

Blog-based reflection is favoured by students as a more relaxed medium for recording their placement experiences. However, to facilitate higher level reflection, additional scaffolding may be required.

### Towards student-centred learning and teaching – reflections on the new Unit of Study 'Fundamentals of Complementary Medicines' for physiotherapy students

*Karen Bridgman<sup>1</sup>, Indu Narayan<sup>1</sup>, Susan Coulsan<sup>2</sup>, George Li<sup>1</sup>*

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**AIM:** The Faculty of Pharmacy and the Discipline of Physiotherapy, Faculty of Health Sciences collaborated to offer an elective Fundamentals of Complementary Medicines Unit of Study to the Bachelor of Applied Sciences (Physiotherapy) students in Semester 2, 2008. The aim of the unit is for students to gain fundamental knowledge and literature evaluation skills in evidence based complementary medicines.

**METHOD:** In designing the course the students' backgrounds were taken into consideration and integrative and evidence-based medicine were used as guidelines. The content focused on the use of herbal medicines in musculoskeletal conditions and pain management. The teaching and learning activities to promote student centre learning were: group project work, student presentation, staff feedback on assignments, peer feedback, interactive activities such as quizzes and questionnaires to assess the individual body type; and demonstration of herbal materials.

**OUTCOMES:** There was active participation by the students in the lectures and presentations. Students demonstrated effective understanding and skills in the literature evaluation of herbal medicines. Students' feedback was used for planning the second year's teaching. Researching effective clinical usage of herbal medicines and other applications in physiotherapy practice constituted greater challenges than the students' previous experiences in this area. Reflecting on this and analysing the evaluation responses from last year has successfully enabled us to develop increasing alignment of assessments with the clinical expectations of the students. The design and development of this new unit of study has illustrated the benefits of student-centred learning and teaching, considering students' needs and backgrounds, student participation and student feedback.

### Pharmacy teaching resources – Library online resources: New products for new pharmacists

Lorraine Evison

Medical Library, The University of Sydney

**AIM:** Engaging Faculty of Pharmacy students with new library online resources is both challenging and rewarding. The challenge is to bring awareness and knowledge of new resources to the students. The reward is to equip undergraduate and postgraduate students with skills that allow them to utilise new online library resources to enhance their learning.

**METHOD:** Library Seminars and/or Information Literacy instruction provides an opportunity to introduce scholarly and authoritative new information resources to all students. Library e-resources are growing exponentially and often in complexity and there is a need for librarians to increase the awareness and knowledge of students to use quality resources available to them. Librarians are also teachers who are adept at dealing with students who have widely differing experiences of digital resources. The presentation will highlight most recent core subject-specific Pharmacy electronic library resources:

#### NEW Library Resources – 2008

1. Access Pharmacy (McGraw Hill) at:  
<http://opac.library.usyd.edu.au/record=b3480179>
2. MedicinesComplete (Pharmaceutical Press) at:  
<http://opac.library.usyd.edu.au/record=b3281679>

#### NEW Library Resources – 2009

1. Encyclopedia of Pharmaceutical Technology (Informahealthcare) at:  
<http://opac.library.usyd.edu.au/record=b3565174>
2. MIMs on PDA (proposed new service for students in 2009) at: [http://www.mims.com.au/index.php?option=com\\_content&task=view&id=73&Itemid=108](http://www.mims.com.au/index.php?option=com_content&task=view&id=73&Itemid=108)

**OUTCOMES:** Qualitative feedback from students via information literacy classes and quantitative feedback from recent library usage statistics indicate that students are interested in using a range of electronic resources. New library online products provide all students with a diversity of scholarly and authoritative information resources on and off campus. Competency in using new library products develops information literacy and lifelong learning skills for student research.

### Academic staff peer learning about assessments used in Pharmacy teaching

*Rebekah Moles<sup>1</sup>, Kathryn Bartimote-Aufflick<sup>2</sup>, Lorraine Smith<sup>1</sup>, Bandana Saini<sup>1</sup>, Beata Bajorek<sup>1</sup>, Ines Krass<sup>1</sup>.*

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**AIM:** To establish a reciprocal arrangement of learning about and reviewing assessments used in units of study in the Faculty of Pharmacy.

**METHOD:** Triads of academics involved in various units have been established. Each triad contains at least one unit coordinator of a second semester unit of study (2008). Each participant has been reviewing four aspects of assessment in another teacher's unit of study, and in turn has had the same four aspects reviewed in their own unit of study, if currently coordinating, by a member of their triad. Participants have provided feedback via online discussion board postings, and face-to-face meetings. All participants have been asked to post a reflective statement regarding their experience of peer learning, and the influence it has had on their teaching (and ultimately student learning), at the end of the trial.

**OUTCOMES:** Currently 13 Pharmacy teachers are working in triads to review Semester 2, 2008 units of study. Participants have been reviewing: intended learning outcomes; the way they explain assessment task requirements to students in classes; and written assessment task instructions for students. At the Symposium the project team will be able to report on the project's progress and some of the early feedback from participants about the value of this peer review of teaching trial. This trial will be repeated during first semester 2009. The intention is that participants from the Semester 2, 2008 group will use their reflections and feedback from peers to adapt their units of study, and gauge subsequent differences in the student experience. We expect that changes will be made to units of study as a result of peer review, and that these changes will be beneficial to student learning, as reflected in teacher perceptions and student evaluations.

### Mental health pharmacy education – a qualitative evaluation

*Clare L O'Reilly<sup>1</sup>, Veerle Foulon<sup>2</sup>, John S Bell<sup>3</sup>, Rebekah Moles<sup>1</sup>, Vicky Kritikos<sup>1</sup>, Timothy F. Chen<sup>1</sup>.*

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**AIM:** Mental health is a national health priority area and medicines are a major modality of treatment. Stigma associated with mental illness may interfere with professional practice and pharmacists are often not confident in counselling on psychotropic medicines. It is therefore essential that pharmacy students have advanced communication skills and confidence when interacting with consumers with a mental illness. The aim of this study was to conduct a qualitative evaluation of an innovative teaching intervention involving trained mental health consumer educators (MHCE) for pharmacy students.

**METHOD:** All third year pharmacy students at the University of Sydney participated in the mental health tutorial. Following

this tutorial in the 3rd year of the four year Bachelor of Pharmacy program, students were invited to participate in one of a series of focus groups. The mental health tutorial involved trained MHCEs from the Schizophrenia Fellowship of NSW with students practising their communication and counselling skills. This evaluation forms part of a larger evaluation of this study. Focus groups were transcribed verbatim and thematically content analysed.

**OUTCOMES:** To date three focus groups have been conducted with the pharmacy students (n=11). Overall participants found that practising communication and counselling skills with MHCEs to be beneficial. Key themes identified included an increased knowledge and insight into mental illness and improved understanding of mental health stigma which resulted in more positive attitudes. Furthermore many participants indicated their intention to increase their level of interaction with consumers with a mental illness and improve the professional nature of that interaction. This qualitative study highlights the value of using MHCE in pharmacy education.

### Development of a Pharmacy Experiential Learning Database

*Greg Ryan<sup>1</sup>, Jim Woulfe<sup>1</sup>, Ieva Stupans<sup>2</sup>, Susanne Owen<sup>2</sup>, Leigh McKaige<sup>3</sup>.*

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**AIM:** The first stage of a collaborative project involving The University of Sydney, University of South Australia and University of Queensland, funded by the Australian Learning and Teaching Council (formerly the Carrick Institute), is now underway. The aim of this first stage is to improve planning of pharmacy experiential learning through the establishment of a national central online repository of collaboratively developed learning and assessment tasks. This repository will be publicly available, and will be of particular use to Pharmacy programs throughout Australasia.

**METHOD:** A previous national project established the need for a repository of learning and assessment activities suitable for experiential placements in Pharmacy, and proposed an educational model and template by which to achieve this. Using this template, the current project will undertake a series of national workshops to generate new materials, which will then be housed on an interactive website custom-designed for the project. Role-specific, password-protected materials will be available to academic, preceptor and student site members, and short descriptions of each activity will be available publicly. An online evaluation form for each activity, tailored to each user role, will ensure ongoing content maintenance and overall site improvement.

**OUTCOMES:** Activities currently contained on the site include patient counselling interaction and reflection; individual reflection on a group project; and dispensing – with more activities to be added following the next workshop to be held during the 2008 APSA Conference in Canberra, and subsequent workshops during 2009. The database will provide a basis for the next two stages of the project: collaborative development of standardised graduated developmental descriptors; and development of quality indicators for experiential learning.

### Developing criteria for assessing Pharmacy students' reflective diaries

*Jim Woulfe, Greg Ryan*

Faculty of Pharmacy, The University of Sydney

**AIM:** The use of reflective diaries in Pharmacy education is intended to direct students toward the graduate outcome goals associated with personal and intellectual autonomy, research and enquiry, and ethical, social and professional understanding (Faculty of Pharmacy, 2006). Although some writers maintain that grading student reflections is inappropriate (Biggs, 2003;189.), feedback from both staff and students in our Faculty indicates a strong need for graded assessment of this type of assignment. The aim of this undertaking is to develop Pharmacy students' reflective skills through the use of a validated set of graduated descriptors, and a related student training package.

**METHOD:** An iterative process has been used to develop and trial a set of graduated descriptors in one course unit within the Master of Pharmacy program. The process has included synthesis of existing grading forms in use within the Faculty, consultation with relevant Faculty members, and a search of

the literature related to reflective practices. It is proposed in this session to summarise this work, and to discuss alternatives for validating the work to date.

**OUTCOMES:** This process started with a simple four-point scale of self-referencing statements ranging from unsatisfactory to excellent (e.g. Excellent: 'comprehensive reflections of learning experiences'), to the next iteration based on Biggs' SOLO (Structure of the Observed Learning Outcome) taxonomy (2003:49-50) that contained broad statements referring to characteristics of reflection (e.g. 'demonstrates excellent ability to relate experiences to previous learning'). Gradually, more specific statements drawn from the literature on reflection have been added. The current iteration contains five grades (HD to F) with simple descriptions of required outcomes at each level. A student training package is in preparation, and validation testing is planned.

Biggs J. Teaching for Quality Learning at University. Buckingham, UK. SRHE & Open University Press. 2003

Faculty of Pharmacy. Contextualised Graduate Attributes. 2006. At: [www.itl.usyd.edu.au/graduateattributes/facultyGA.cfm?faculty=Pharmacy](http://www.itl.usyd.edu.au/graduateattributes/facultyGA.cfm?faculty=Pharmacy), accessed 3 Nov 2008.