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# WELCOME MESSAGE

The Conference Organising Committee of the SAAHE Western Cape Region has the pleasure of inviting you to the 2nd National Health Sciences Education Conference in Cape Town on 2-4 July 2009. This conference continues SAAHE's practice of annually bringing together professionals with an interest in health science education.

The 2009 SAAHE Conference is hosted by the Faculty of Health Sciences, University of Cape Town and is organised together with the University of the Western Cape, the Cape Peninsula University of Technology and Stellenbosch University. The 2009 SAAHE Conference brings together distinguished health science individuals from South African universities, the United Kingdom, the United States of America and Malaysia.

The conference provides an important forum in which to share the latest developments and thinking in health science education. The broad theme of this year's conference is *Growing Health Science Education*. We invite you to come and share in a range of conference activities and satellite events. Half and full day workshops and special interest groups will be hosted on Wednesday 1 July.

The 2009 SAAHE National Conference will provide a unique opportunity to learn and teach, to network and socialise with colleagues and to exchange ideas on new developments in health science education. We hope to see you there.

Kind regards

Dr Viki Janse van Rensburg Chairperson: Organising Committee viki.jansevanrensburg@uct.ac.za

# **ORGANISING COMMITTEE**

Dr Athol Kent (MB.ChB. M.Phil. FROG) Dept of Obstetrics & Gynaecology Medical School University of Cape Town

Dr Wendy McMillan (B. Ed; Post-grad Pre-Prim; B. Ed; D. Ed.) Faculty of Dentistry University of the Western Cape

Ms Elize Archer (B.CUR. Hons; M.Phil) Clinical Skills Centre Faculty of Health Sciences Stellenbosch University

Ms Wendy Solomon (B.Tech) Department of Biomedical Sciences Health and Wellness Sciences Cape Peninsula University of Technology

Dr Francois Cilliers MB.ChB Stellenbosch University

Chairperson of the Organising Committee Dr Viki Janse van Rensburg, (B.O.T.; M.Phil.; Ph.D). Education Development Unit Faculty of Health Sciences University of Cape Town

Assisted by: Ms Angie Coetzee Dean's Office Manager

And

# **Congress Secretariat:**

For further information please contact: Mrs Janet Sirmongpong, UCT Conference Management Centre, Faculty of Health Sciences, Barnard Fuller Building, Anzio Road, Observatory, 7925 Tel: 021 406 6733, Fax: 021 448 6263, Email: janet.sirmongpong@uct.ac.za

# **PROFILES OF INTERNATIONAL GUEST SPEAKERS**

# DOCTOR DAVID TAYLOR



David is a Senior Lecturer in Medical Education and is deputy director for medical studies.

David has particular responsibilities for assessment, quality assurance, research and problem-based learning. He is closely associated with the work of the CETL for professionalism in medical students.

Outside the University David works with

the GMC as a visitor of the Quality Assurance of Basic Medical Education (QABME) programme the Medical University of Vienna

the South African Association of Healthcare Educators

# **PROFESSOR DEBORAH MURDOCH-EATON**



Professor of Medical Education, MEU, Consultant Neuropaediatrician, Leeds Teaching Hospitals Trust

She is currently working on the following research projects:

Generic Learning Skills on entry to medical school, and the impact of the early UG curriculum on their development of independent learning skills.

International project running with medical schools in South Africa (n=7), and England (n=6) other international schools are also participating in the study to understand their own student profiles.

Feedback in the undergraduate medical curriculum - misunderstood or just not recognized?

A national project running with the Northern Medical Schools SSC Consortium, looking at the changing pattern of SSCs Selection; diversity of opportunities offered to students, understanding reasons behind student choices and evaluating research opportunities offered to students.

# PROFESSOR CHRISTINA TAN



Director of the Medical Education & Research Development Unit, University of Malaya

Christina Tan is a family physician by training, and is currently Director of the Medical Education & Research Development Unit, Faculty of Medicine, University of Malaya. She also heads the Clinical Skills Unit in the faculty, as well as being chief coordinator for the Objective Structured Clinical Examinations at 3<sup>rd</sup> and Final MBBS levels.

She has a deep interest in medical education, particularly in curriculum development and assessment, and was twice awarded international fellowships in medical education, in 2000 (based in Albuquerque, New Mexico, USA) and 2005-6 (in Philadelphia, USA), and has on-going international links in USA and South Africa in training and mentoring medical educationists. Since 2000, she has been involved in many faculty staff training workshops in Problem-Based Learning and PBL Case Design, as well as OSCE Examiner Training.

# PROFESSOR ARA TEKIAN



Associate Professor of Medical Education and Director, International Affairs; University of Illinois at Chicago

Professor Tekian's current research interests include curriculum planning and evaluation for medical schools, student assessment and innovative testing methodologies, instructional technology, selection and retention of underrepresented minorities in medical schools, and international health professions education.

He participates in teaching in the MHPE program and his areas of expertise include curriculum development, assessment methods and medical simulations. He consults both nationally and internationally and has organized and conducted over 100 international workshops. He regularly teaches the Training of Trainers course in the MPH program at the American University of Armenia, and the Curriculum Development course in the Masters in Medical Education (MME) program at the University of Bern, Switzerland.

# **PROFESSOR WILLIAM P. BURDICK**



Associate Vice President for Education; Co-Director, FAIMER Institute

As FAIMER's Associate Vice President for Education, Dr. Burdick oversees the Foundation's efforts to create educational opportunities for international health professions educators. He has been a Co-Director of the FAIMER Institute since its inception in 2001. He also serves as ECFMG's Assistant Vice President of Assessment Services, a position he has held since 1999. Dr. Burdick is Clinical Professor of Emergency Medicine at Drexel University College of Medicine, where he is also an Associate Director for the Program for Integrated Learning (a problem-based curriculum).

# PROFESSOR PAUL BRADLEY



Professor and Director of Clinical Skills, Peninsula College of Medicine and Dentistry

At Peninsula Medical School he is responsible for developing and implementing the clinical skills learning programme. The course begins in the very first week of the first year of the undergraduate programme and runs throughout the whole 5 years. It uses a variety of innovative and established educational techniques to deliver a learning programme designed to meet the needs of young doctors in the 21st Century. He is Programme Co-ordinator for the new Peninsula College of Medicine and Dentistry Graduate School programme in Educational Practice and Educational Research.

Professor Bradley's research interests are the acquisition and retention of clinical and communication skills and the use of high fidelity simulation as a vehicle for learning of complex interactive team based skills. He is also interested in applying and developing strong theoretical underpinning to the teaching and learning in these environments, in particular in relation to the application of Activity Theory.

# **GENERAL INFORMATION**

# **Registration and Information Desk**

The registration desk will be located in the foyer of the New Learning Centre, Anatomy Building, Faculty of Health Sciences, Anzio Road, Observatory, at the following times:

Date	Time
Wed 01 July 2009	08h00 – 09h00
Thurs 02 July 2009	08h00 – 08h45
Fri 03 July 2009	08h30 – 09h00
Sat 04 July 2009	08h30 – 09h00

The information desk will be open throughout the conference.

# **Language**

The official language of the congress will be English. No simultaneous translation service will be provided.

# **Presentations**

Presentations may be uploaded and previewed in the lecture theatre. All computer presentations must be checked for viruses and reach the technicians in the preview room, during tea or lunch breaks before your presentation. Computer presentations must be compatible with Windows XP (or later versions) and in Microsoft PowerPoint.

# Admission Badges

Conference nametags must be worn by all participants at all times during the conference, whilst visiting the exhibition area and on all conference premises. Nametags should also be worn when attending the events of the social programme. Only participants or accompanying persons wearing their conference nametags will be admitted to the scientific sessions, the exhibition and the social events.

# **CPD Registration**

Application has been made for Continuing Professional Development (CPD) accreditation of this event. Delegates may claim up to a maximum of 15 points for attending the conference and a maximum of 7 points for attending the preconference workshops. Delegates are required to register daily at the CPD Desk situated at the entrance of the plenary lecture theatre.

# Airport Transfers, Excursions and Activities

Our dedicated tour operators are Mpumalanga Experience. For airport transfers or a personalised excursion / tour please contact Robin Troup at: wildsafari@worldonline.co.za Phone: +27 82 657 3443. All cost for airport transfers and excursions are for the delegates own account.

# **Conference Transport**

Complimentary transport will be provided by Jammie Shuttle to the conference venue for delegates staying at the Villa Garda Bed & Breakfast, Little Scotia Guest House, Carmichael Guest House, Southern Sun Newlands and the Courtyard Suites Hotel. Delegates are requested to be at the collection points at the following times:

Collection Point	Date	Departure	Depart to
Hotel			
Villa Garda B&B	01 July 2009	07H30	SAAHE Conference Venue
Little Scotia GH	01 July 2009	07H30	SAAHE Conference Venue
Carmichael GH	01 July 2009	07H30	SAAHE Conference Venue
Southern Sun Newlands	01 July 2009	07H15	SAAHE Conference Venue
Courtyard Suites Hotel	01 July 2009	07H30	SAAHE Conference Venue
Conference Venue			
UCT Faculty of Health Sciences	01 July 2009	16H30	All hotels & guest houses
Hotel			
Villa Garda B&B	02 July 2009	07H30	SAAHE Conference Venue
Little Scotia GH	02 July 2009	07H30	SAAHE Conference Venue
Carmichael GH	02 July 2009	07H30	SAAHE Conference Venue
Southern Sun Newlands	02 July 2009	07H15	SAAHE Conference Venue
Courtyard Suites Hotel	02 July 2009	07H30	SAAHE Conference Venue
Conference Venue			
UCT Faculty of Health Sciences	02 July 2009	18H15	All hotels & guest houses
Hotel			
Villa Garda B&B	03 July 2009	07H30	SAAHE Conference Venue
Little Scotia GH	03 July 2009	07H30	SAAHE Conference Venue
Carmichael GH	03 July 2009	07H30	SAAHE Conference Venue
Southern Sun Newlands	03 July 2009	07H15	SAAHE Conference Venue
Courtyard Suites Hotel	03 July 2009	07H30	SAAHE Conference Venue
Conference Venue			
UCT Faculty of Health Sciences	03 July 2009	16H45	All hotels & guest houses
Hotel			
Villa Garda B&B	04 July 2009	07H30	SAAHE Conference Venue
Little Scotia GH	04 July 2009	07H30	SAAHE Conference Venue
Carmichael GH	04 July 2009	07H30	SAAHE Conference Venue
Southern Sun Newlands	04 July 2009	07H15	SAAHE Conference Venue
Courtyard Suites Hotel	04 July 2009	07H30	SAAHE Conference Venue
Conference Venue			
UCT Faculty of Health Sciences	04 July 2009	14H30	All hotels & guest houses

Complimentary transport has also been arranged to and from the Gala Dinner at Groot Constantia Wine Estate.

Social Function	Date	Depart	
UCT Faculty of Health Sciences	03 July 2009	18h15	Groot Constantia Wine Estate
Groot Constantia Wine Estate	03 July 2009	22h30	UCT Faculty of Health Sciences

# PRE CONFERENCE WORKSHOPS 1 JULY 2009

08h30 – 09h00	Registration	Tea & Coffee	New Learning Centre Foyer
<b>Workshop 1 – 09h00-16h00</b> <i>Full day</i> Wolfson Pavilion Lecture Theatre	The Secrets of Leadership in <u>Prof B van Heerden</u> , SU <u>Prof Juanita Bezuidenhout</u> , SU <u>Prof Vanessa Burch</u> , UCT	n Health Sciences Edu	cation
<b>Workshop 2 – 14h00-16h00</b> <i>Afternoon</i> Conference Room 4	Detecting and Supporting S Prof Deborah Murdoch-Eaton Dr C Sikakana, UCT	<b>tudents in Difficulty in</b> , University of Leeds, UK	Health Sciences Programmes
<b>Workshop 3 – 09h00-13h00</b> <i>Morning</i> Post- Graduate Seminar Room 1	Improving OSCE Examiner S <u>Prof Christina Tan</u> , University P Rokiah, University Malaya, I F Yang, University Malaya, Ma V Anushya, University Malaya	<b>Skills</b> Malaya, Malaysia Malaysia alaysia I, Malaysia	
<b>Workshop 4 – 09h00-13h00</b> <i>Morning</i> Conference Room 4	Empowering Medical and He <u>Prof Pauline Kneale</u> , Universiti Prof Deborah Murdoch-Eaton Prof Jannie Hugo, UP Dr Marietjie van Rooyen, UP Dr Brenda de Klerk, UFS Dr Di Manning, WITS Dr Enoch Kwizera, WSU	ealthcare Students to b ty of Leeds, UK , University of Leeds, UK	e Change Agents
<b>Workshop 5 – 14h00-16h00</b> <i>Afternoon</i> Post- Graduate Seminar Room 1	Writing 'extended matching Prof D Prozesky, WITS Dr Di Manning, WITS	' (R type) and '>1 corre	ct answer' (n of N type) MCQs
Workshop 6	NO LONGER OFFERED		
<b>Workshop 7 – 09h00-11h00</b> <i>Morning</i> Computer Lab	Locating, Grading and Using Prof Bruce Sparks, WITS Dr L Green-Thompson, WITS Dr Z Mahomed, WITS	g Web-based Education	nal Material
Workshop 8 – 14h00-16h00 <i>Afternoon</i> Conference Room 1 & 2	Die "EINA", die "EISH" en d community engaged training Prof Jannie Hugo, UP Dr Marietije van Rooyen, UP Dr Angelika Schutte, UP	ie "YEBO GOGO" L-CA g opportunities for und	AS. Developing and running longitudinal lergraduate students in an urban area.

SCIENTIFIC PROGRAMME				
DAY 1: Thursday 2	July 2009 MORNING SESSION			
	New Learning Centre Lecture Theatre			
08h00 – 08h45	Registration Tea and Coffee			
	OPENING CEREMONY			
08h45 – 09h00	Welcome & Opening Address:	Prof Crain Soudien, School of Education Prof Marian Jacobs, Dean of the Faculty of Health Sciences		
09h00 – 09h45	Keynote Address 1: What students understand by research	Prof Deborah Murdoch-Eaton		
09h45 – 10h30	Keynote Address 2: Capacity Building in Health Sciences Education	Prof Bill Burdick		
10h30 – 10h35	Journal announcement:	Prof Vanessa Burch		
10h35 – 11h00	TEA New Learning Centre Foyer			

#### PAPER PRESENTATIONS

	Academics in the Field Paper Session 1 New Learning Centre Lecture Theatre	Students: The Personal Experience Paper Session 2 Wolfson Pavilion Lecture Theatre	Student Selection Paper Session 3 Conference Room 4	First Year Experience Paper Session 4 Conference Room 1&2	Quality Assurance Paper Session 5 PG Seminar Room 1
11h00–11h15	Using evidence-informed decision making as a paedogogic tool in Health Science education. <i>Lloyd</i> <i>Christopher</i>	An investigation into the first year experiences of health science students during the early transitional period. <i>Kantilal</i> <i>Parshotam</i>	Applying academic history & psychometric potential as multiple indicators for potential student success in an outcomes based environment. <i>Rassie Smit</i>	Transferable generic learning skills of students entering the Walter Sisulu University (WSU) MB ChB I programme: A comparison of 2008 & 2009 cohorts. <i>Enoch Kwizera</i>	Quality assurance: Quantitative analysis of staff development attendance (2006-2008) in the Faculty of Health Sciences, University of the Free State. Johan Bezuidenhout
11h15–11h30	When you can't be there: Partners in the field. <i>JE</i> <i>Wolfaardt</i>	The impact of individual counselling of B.Pharm students with academic and social difficulties. <i>Lindi Mabope</i>	Reconsideration of the criteria for selection of medical students at the UFS. <i>Brenda</i> <i>de Klerk</i>	The effect of extra-curricular activities (ECAs) on academic performance in the Graduate Entry Medical Programme as the University of the Witwatersrand. Steven Nel	A quality assurance model for clinical assessments in internal medicine. <i>Madelein Koning</i>
11h30–11h45	Service learning: Experiences of the first year of community engagements by Central University of Technology Radiography learners. <i>René</i> <i>Botha</i>	The enemy within. Juanita Bezuidenhout	Psychometrics of the student version of the Jefferson Scale of physician empathy (JSPE- S) in final year medical students in Johannesburg. <i>Kantilal Vallabh</i>	Putting the "Me" into HIV/AIDS Education. <i>Lorna</i> <i>Olckers</i>	Using quality assurance to get faculty talking about educational practice. <i>Glynis</i> <i>Pickworth</i>

	Curriculum Innovation Poster Session 1 (5 posters) Clinical Learning Poster Session 4 (6 posters)		Students           Poster Session 2 (8 posters)           Learning & Teaching           Poster Session 5 (8 posters)		Assessors & Assessment Poster Session 3 (6 posters)	
					Monitoring & Evaluation Poster Session 6 (4 posters)	
13h00 – 14h00	LUNCH	Students Cafeteria	- SAAH	E Council meeting	Conference Room 3	

13h00 - 14h00 LUNCH

DAY 1: Thursday 2 July 2009

AFTERNOON SESSION

WORKSHOPS 14h00-16h30					
Workshop 1 New Learning Centre	Developing your teaching portfolio	Dr Patricia McInerney			
Workshop 2 Wolfson Pavilion	Interactive teaching: planning and design	Prof Bill Burdick and Ms Mary-Beth Scallen			
Workshop 3 Conference Room 4	Designing a communications skills OSCE station	Prof Christina Tan and Prof Julia Blitz			
Workshop 4 <i>Computer Lab</i>	Teaching and assessing evidence based searching for health science students	Dr G Myers			
Workshop 5 Skills Lab	Are clinical skills laboratories really necessary?	Prof Paul Bradley and Dr George Draper			
Workshop 6 Conference Room 3	Approaches to research-led evaluation of outcomes	Rev Dr David Taylor			
16h30 - 18h00	SAAHE Annual General meeting         Conference Room 4           SAAHE Regional meeting         Conference Rms 4, 1&2, PG Rm 1 & PG Rm 2				

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DAY 2: Friday 3 July 2009 MORNING SESSION New Learning Centre Lecture Theatre 08h30 - 09h00 Registration Tea and Coffee New Learning Centre Foyer 09h00 - 09h45 Keynote Address 3: Making a virtue of necessity Rev Dr David Taylor 09h45 - 10h30 Keynote Address 4: Does faculty development make a difference? Prof Ara Tekian 10h30 - 11h00 TEA New Learning Centre Foyer

#### PAPER PRESENTATIONS

	E-Learning Paper Session 6 New Learning Centre Lecture Theatre	Teaching & Learning Paper Session 7 Wolfson Pavilion Lecture Theatre	Innovative Teaching Paper Session 8 Conference Room 4	The Workplace Paper Session 9 Conference Room 1&2	Student Learning Paper Session 10 PG Seminar Room 1
11h00–11h15	Blogging as a reflective tool in physiotherapy ethics. <i>Michael Rowe</i>	Audio-visual in the teaching and acquisition of language with clinical skills. <i>Rae Nash</i>	In search of the professional voice: The professional communication practices of Radiation Therapists in the classroom & the workplace. <i>Bridget Wyrley-Birch</i>	Challenges faced by clinicians dealing with blood transfusion in the clinical medico-legal perspective. <i>Vernon Louw</i>	Educational by-products of an e-portfolio technological pilot project. <i>Karien Mostert-</i> <i>Wentzel</i>
11h15–11h30	Digital story telling: Understanding the process of reflection. <i>Jannie Hugo</i>	Basic surgical skills training required by junior doctors to ensure competency as generalists. <i>Frank Peters</i>	Innovative teaching of clinical skills to medical students at the University of the Free State. Juanita Lombaard	What generic graduate skills do radiography graduates at the Central University of Technology need for the world of work? <i>Louisa Beÿer</i>	The "MacPhail Model": A tool promoting clinical reasoning skills in PBL tutorials. <i>Dianne Manning</i>
11h30–11h45	The Med-Web Project: An edu- health programme in the Wits Faculty of Health Sciences. Zareena Mahomed	Learning to help postgraduate students write. Anna Voce	Developing a charter for medical professionalism. <i>Rhena Delport</i>	Motivation and career prospects of pharmacy students at Nelson Mandela Metropolitan University: A follow-up study. <i>Ilse Truter</i>	Students' learning in problem- based learning curriculum. <i>Charles Slater</i>
11h45–12h00	Harnessing the potential of online performance tasks to promote active learning: Wishful thinking or reality? <i>Alwyn Hugo</i>	Student contribution to quality health care: A review of the quality improvement projects undertaken by final year medical students. <i>Nontsikelelo</i> <i>Sondzaba</i>	Empowering students for change: A collaborative enterprise project. <i>Marietjie van Rooyen</i>	The major outcomes of a Postgraduate Diploma in transfusion medicine. <i>Vernon Louw</i>	The impact of changes in learning approaches on the academic performance of a group of GEMP I (MB ChB III) students: Quantitative & qualitative analysis. Tatiana Sosznianin

12h00 – 12h15	COMFORT BREAK			
12h15 – 13h00	Keynote Address 5: L The value proposition of New Le	everaging the value of oper of Open Educational Resour arning Centre	nness and collaboration in Health Education: ces in South Africa	Mr Neil Butcher
13h00 – 14h00	LUNCH	Students Cafeteria	MEET THE EXPERTS	

13h00 – 14h00 LUNCH
DAY 2: Friday 3 July 2009

#### AFTERNOON SESSION

WORKSHOPS 14h00 – 16h30					
Workshop 7 PG Seminar Room 2	Bringing Human Rights into focus	Ms V. Mitchell, Ms S. Statham, and Mr M. Rowe			
Workshop 8 Wolfson Pavilion	Helping students make the most of feedback	Dr Sue Whittle			
Workshop 9 <i>Conference Room 4</i>	Interactive teaching: communication skills	Ms Mary-Beth Scallen and Prof Bill Burdick			
Workshop 10 Conference Room 1&2	Creating Open Educational Resources	Mr Neil Butcher, Prof Marian Jacobs & Mr Greg Doyle			
Workshop 11 PG Seminar Room 1	Communication Skills: Sources of error during verbal, non-verbal and written communication	Prof Ara Tekian			
Workshop 12 <i>Computer Lab</i>	Writing computer-based assessments of clinical skills (ACS)	Dr Lionel Green-Thompson			
18h30	Busses leave Barnard Fuller Building for Groot Constantia				
19h00	Conference Gala Dinner – Groot Constantia				

DAY 3: Saturday 4 July 2009

MORNING SESSION

### New Learning Centre Lecture Theatre

08h30 – 09h00	Registration	Tea and Coffee	New Lea	rning Centre Foyer
09h00 – 09h45	Keynote Address 6: Is medical education ethical?			Prof Christina Tan

#### PAPER PRESENTATIONS

	Monitoring & Evaluation Paper Session 11a-e New Learning Centre Lecture Theatre		Assessment Paper Session 12a-e Wolfson Pavilion Lecture Theatre	Making It Work Paper Session 13a-e Conference Room 4	Service Learning Paper Session 14a-e Conference Room 1&2	Health Professions Education Paper Session 15a-e PG Seminar Room 1			
09h45–10h00	Students view of integration in the MBChB III programme at Walter Sisulu University. <i>Mirta Garcia-Jardon</i>		Should discipline subminima be considered in assessment of an integrated curriculum? <i>Dianne Manning</i>	The value of service level agreements in an integrated course: Managing the graduate entry medical programme (GEMP) at the University of the Witwatersrand. <i>Detlief</i> <i>Prozesky</i>	Evaluation of the comprehensive community clerkship programme at the Northern Onatrio School of Medicine. <i>Ian Couper</i>	Model for education of reflective neonatal nurses in SA context. <i>Carin Maree</i>			
10h00–10h15	Effects of curriculum change on medical graduates' internship performance. <i>Bridget Smuts</i>		Intergrating information communications and technologies (ICT) to enhance problem based learning. Lateef Amusa	Assessment of criteria for awarding credits for Continuing Professional Development. <i>François de</i> <i>Villiers</i>	Service learning in a rural community. An inter-professional practice example. <i>Firdouza</i> <i>Waggie</i>	Competencies of reflective paediatric nurses. Seugnette Rossouw			
10h15–10h30	Initial perspectives of staff & students leads to timeous intervention in a newly implemented curriculum. <i>Alwyn Louw</i>		Mark discrepancies in computer-based assessments of true & false exams. <i>Firoza</i> <i>Haffejee</i>	A training programme for social gerontology in the South African context from a post-modern perspective. <i>Alida Herbst</i>	Introduction of a new clinical assessment: Did it achieve the aim? <i>Lionel Green-Thompson</i>	Access with success: Challenges faced in an extended curriculum at the University of the Free State. <i>Luzelle Naude</i>			
10h30–10h45	The DREEM in Zambia. <i>Julie Schurgers</i>		Implications of whole brain learning on assessment strategies. Gustaaf Wolvaardt	Assessment of foreign- qualified doctors' clinical skills using an OSCE. Julia Blitz	Experiential learning experience of pharmacy students at NMMU on the Phelophepa Health Care Train. <i>Ilse Truter</i>	Mainstreaming HIV into physiotherapy education & practice. <i>Hellen Myezwa</i>			
10h45–11h00	Short course in clinical supervision: Design, implementation & evaluation. <i>Elize Archer</i>		Correlation between continuous assessment, final exam & final mark for MB ChB III at Walter Sisulu University. <i>Mirta Garcia-Jardon</i>	Clinical supervision of dental students: A staff training workshop programme. Soraya Harneker	Physiotherapy students' experiences in implementing a health education programme. Jose Frantz	Does learning approach determine the outcome in the Anatomy courses? <i>Gisela</i> <i>Milanes-Rodriquez</i>			
11h00–11h30	TEA New Learning Centre Foyer								
	Monitoring & Evaluation Paper Session 11f-h New Learning Centre Lecture Theatre		Assessment Paper Session 12f-h Wolfson Pavilion Lecture Theatre	Curriculum Paper Session 13f-h Conference Room 4	Reflection on Teaching & Learning Paper Session 14f-h Conference Room 1&2	Health Professions Education Paper Session 15f-h PG Seminar Room 1			
11h30–11h45	Evaluation of community based education & service courses for undergraduate radiography students at Makerere University, Uganda. <i>Aloysius Mubuuke</i>		Formative feedback: Is it worth the effort? <i>Jeanette du Plessis</i>	Learning outcomes for community physiotherapy in South Africa. Karien Mostert- Wentzel	They went, they saw, they learned: Students' reflections on community clinic visits. Adriana Beylefeld	Methods to evaluate the quality of written assessments. <i>Sophia Fourie</i>			
11h45–12h00	The development & validation of an evaluation instrument for bedside teaching. <i>Patricia</i> <i>McInerney</i>		Portfolio-based assessment of general skills: Development & evaluation of an interim solution. <i>Alwyn Hugo</i>	Clinical associate curriculum: An integrated, problem solving approach. Andrew Truscott	What is the point of getting students to reflect? <i>Julia Blitz</i>	Readiness of the rural paramedic for difficult airway management: Implications for emergency medical care education. <i>Navindhra Naidoo</i>			
12h00–12h15	00–12h15 Evaluation of the integrated primary care block for final year medical students. <i>Ian</i> <i>Couper</i>		Non-verbal communication in medical students. Dana Niehaus	A multiprofessional curriculum review process: Lessons from the coalface. Seyi Ladele Amosun	Evaluation of teacher's skills by Medical Students in Faculty of Health Sciences, Walter Sisulu University, Mthatha. <i>Banwari Meel</i>	Trainers in Health and Human Rights: Implementing curriculum change in South African health sciences institutions. <i>Leslie London</i>			
		CI	OSING CEREMONY	New Learning Centre Lec	ture Theatre				
12h15 – 13h00 Prize G Summa		Prize Giving	ze Giving						
		Summary and Closure							
13h00 – 14h00		LIGHT LUNC	LIGHT LUNCH Students Cafeteria						

# Keynote Abstracts and Speakers CV's

# 1. What students understand by research and research skills?

#### Prof Deborah Murdoch-Eaton

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Deborah Murdoch-Eaton is a Professor of Medical Education within the School of Medicine, Leeds, UK. As a practicing paediatrician, Deborah's achievements in the field of teaching and learning reflect close contact with the purposes and challenges of working in an ever-changing health service. Her interests focus around developing students' individuality and potential and she is particularly interested in how medical students acquire generic learning skills – the so-called "transferable skills". Her publications reflect the innovations in challenging students to learn in differing environments.

She has a strong interest in Internationalism. She has recently taken the chair of the Faculty of Medicine & Health International Committee, and membership of the university Faculty International Representatives; The University of Leeds is committed to fulfilling its purpose "to advance and disseminate knowledge, and develop outstanding graduates and scholars to make a major impact on global society". Through active participation in these committees, Deborah never forgets her Zimbabwean roots, and strives to ensure that low / middle income countries, especially in sub-Saharan Africa remain high on the university's agenda!

She was awarded a National Teaching Fellowship in 2004 by the UK Higher Education Academy. She is using her NTF monies to fund travel to a number of African Countries including South Africa; this is for both consultancy and advice on curricular developments as well as leading an international project looking at the generic learning skills of students entering medical school (in which all 8 South Africa medical schools are participating from 2009!).

In the postgraduate education arena, she has worked as a PLAB assessor and chief invigilator for the GMC, is lead editor developing a distance learning course for paediatric neurologists, co-editor of Learning and Teaching section of Archives of Disease and Childhood, Education and Practice journal, and director of the Paediatric Educators Programme for the Royal College of Paediatics and Child Health, UK. Her work includes leadership on HEA subject centres and HEFCE projects on areas of curriculum development, feedback, undergraduate research skills development, and student support. With Pauline Kneale (from the Enterprise White Rose Centre for Excellence in Learning & Teaching), she is currently involved with a number of SA collaborators on curricular development projects, and knowledge transfer activities to develop models of facilitating enterprise skills; effective international health care needs innovative health care practitioners able to implement change in challenging work environments!

### Abstract

All clinicians need to understand research and the research process, even if they are not actively engaged in research themselves. Evidence-based medicine, the cornerstone of effective and good practice, requires that clinicians make informed judgments on the best possible care for their patients or populations, and base this upon the best available evidence. To undertake such critical appraisal, they need to understand how evidence is derived and hence appreciate the principles of research.

Education about research must start at the level of the undergraduate, and across Higher Education disciplines, research skill development is increasingly being seen as a key "underlying principle" and outcome. The literature indicates that students value opportunities for conducting research, and recognize research experience as a means to establish professional credibility, gain skills, acquire specific mindsets, and confirm future career plans.

However, it is apparent that student awareness of opportunities to conduct research and their abilities to make choices about the development of their own research skills are crucial to embedding a research culture into undergraduate medical education. To date there have been few studies of whether medical students appreciate the nature of research and if they readily identify research skills and the chances offered to acquire them.

In this plenary, the key models published within literature on how research skills might be developed as undergraduates are discussed. A recently completed study in five UK medical schools has investigated (1) What do medical students understand by research and research skills? (2) Can they easily identify research opportunities? (3) How can student identification and selection of research opportunities be better informed? Outcomes will be presented and contextualized into implications for best practice and future programme development in Health Care disciplines.

# 2. Capacity Building in Health Sciences Education

## Prof Bill Burdick

## С٧

William P. Burdick, M.D., M.S.Ed. is Associate Vice President for Education at the Foundation for Advancement of International Medical Education and Research, and Co-Director of the FAIMER Institute. He is Clinical Professor of Emergency Medicine at Drexel University College of Medicine and has been recognized for teaching excellence with the Lindback Award and the Trustees' Award. A graduate of Oberlin College, Cornell University Weill School of Medicine, and University of Pennsylvania Graduate School of Education, Dr. Burdick completed training in Internal Medicine at Boston City Hospital and is certified by the American Board of Internal Medicine

### Abstract

How does one strengthen, or try to strengthen, health professions education, and does it make a difference in health? What does it mean to develop a "field" like health professions education, what steps are involved, and how does this concept of field development factor into the discussion of improving health professions education and potentially improving health? Stay tuned for the "answers" to these and other exciting questions during the talk on "Capacity building in health professions education

# 3. Making a virtue out of necessity

#### **Rev Dr David Taylor**

#### CV

David Taylor is Deputy Director of Medical Studies at the University of Liverpool, where he is responsible for assessment, quality assurance and research. He has been responsible for, and published several papers concerning, the evaluation of curriculum reform. His most recent interest is in prescribing errors, and the ways in which the educational process can help avoid them. If anyone has a few free minutes he will be delighted to talk them through the topic of "developing an instrument to assess professionalism", which is the title of his MA dissertation!

#### Abstract

As health professionals, and as educators, we are all well aware of the necessity for evidence based practice. In this plenary we will look at the different approaches to evaluating the outcomes of educational development, and consider how we can move beyond "audit".

# 4. Does faculty development make a difference?

## Prof Ara Tekian

## C۷

Ara Tekian is Associate Professor and Director of the International Affairs in the Department of Medical Education at the University of Illinois at Chicago College of Medicine (UIC-COM). He holds a PhD in neuroscience from the American University of Beirut, and MHPE from UIC-COM. Prior to joining UIC. Dr. Tekian established the Medical Education Unit at King Saud University in Riyadh, and was its Director from 1983-1990. He has served as a short-term consultant to WHO-EMRO for more than two decades and established a number of medical education departments/units in the Eastern Mediterranean countries. He joined DME in 1992 and participates in teaching in the Masters in Health Professions Education (MHPE). In 1996, he was awarded an honorary degree by the Tashkent University in Uzbekistan. Dr. Tekian was the winner of the 1997 Teaching Recognition Program Award selected by the UIC Council for Excellence in Teaching and Learning. Dr. Tekian consults both nationally and internationally and has organized and conducted over 120 international workshops in more than 35 countries and 55 cities. He is the senior author of the book "Innovative Simulations for Assessing Professional Competence: From Paper-and-Pencil to Virtual Reality" published in 1999. Currently, he is the Vice President (VP) for the American Educational Research Association (AERA) Division I -Education in the Professions. His current research interests include curriculum planning, student assessment and innovative testing methodologies, simulations, selection and retention of underrepresented minorities in medicine, and international health professions education.

### Abstract

Faculty development is any activity or program that helps faculty to prepare for or succeed in their different roles. It needs to be integrated with organizational development, which means that anytime a curriculum is developed, the faculty development program that supports that curriculum needs to be developed at the same time – a parallel process. Individuals and institutions at large understand the need for faculty development; however, we still have a lot of work to do to understand what it is about certain interventions that make faculty development effective. Supporting faculty vitality is an important goal of faculty development.

This presentation will review the literature about faculty development, identify the different formats, key features, and reported outcomes of such activities. Recommendations will be presented for future research to fully explore the outcomes of faculty development programs through rigorous methodological designs.

# 5. <u>Leveraging the value of openness and collaboration in Health Education: The</u> value proposition of Open Educational Resources in South Africa

#### **Neil Butcher**

### C۷

**Neil Butcher** is based in South Africa, from where he has provided policy and technical advice and support to a range of national and international clients regarding educational planning, uses of educational technology and distance education, both as a full-time employee at the South African Institute for Distance Education (SAIDE) from 1993 to 2001 and as Director of Neil Butcher & Associates. He has worked with various educational institutions, assisting with institutional transformation efforts that focus on harnessing the potential of distance education methods and educational technology as effectively as possible. Neil has travelled extensively through Africa conducting research on higher education, distance education, and educational technology for a range of organizations. He is currently working as an OER Strategist with SAIDE on its new OER Africa Initiative, which is funded by the Hewlett Foundation and is managing the Partnership for Higher Education in Africa's Educational Technology Initiative.

Neil has developed a range of instructional materials for various types of educators, including education policymakers, development agency staff, teachers, and universities. In the field of IT applications, he is leading the development of South Africa's national education portal for the Department of Education – www.thutong.org.za. He has managed a range of online database and web development projects for various organizations, including a student portal for the Federation of Tertiary Institutions of the Northern Metropolis (FOTIM), Higher Education South Africa, International Association for Digital Publications, UNESCO, and the Southern African Regional Universities' Association.

#### Abstract

There is growing interest in development and sharing of Open Educational Resources (OER) around the world, with increasing numbers of Faculties and Colleges of Health Sciences either making plans to harness and deploy OER or actively using and sharing OER in their programmes. For many, however, the term 'OER' is either new, sounds confusing, or seems irrelevant. In this presentation, therefore, Neil Butcher will provide a simple introduction to the concept and explain how its transformative potential lies in this simplicity and the collaborative opportunities it generates. He will identify keys trends in the field of OER, separating those that have potential to improve education from those that serve to confuse health educators or waste their time. Using this as a conceptual platform, he will then seek to construct a roadmap that demonstrates how it can be harnessed in the quest to find educationally and financially sustainable solutions for some key challenges in Health educators and between our institutions and partners from the other parts of the world. This presentation will also provide a conceptual introduction to the afternoon workshop no 10: Building Communities in Health Sciences Using Open Education Resources. For more information, see www.oerafrica.org.

# 6. Is medical education ethical?

## Christina Tan

## C۷

Christina Tan is a family physician by training, and is currently Director of the Medical Education & Research Development Unit, Faculty of Medicine, University of Malaya, in Kuala Lumpur, Malaysia. She also heads the Clinical Skills Unit in the faculty, as well as being chief coordinator for the Objective Structured Clinical Examinations at 3<sup>rd</sup> and Final MBBS levels. She has a deep interest in medical education, particularly in curriculum development and assessment, and was twice awarded international fellowships in medical education, in 2000 (based in Albuquerque, New Mexico, USA) and 2005-6 (in Philadelphia, USA), and has on-going international links in USA and South Africa in training and mentoring medical educationists. Since 2000, she has been involved in many faculty staff training workshops in Problem-Based Learning and PBL Case Design, as well as OSCE Examiner Training.

### Abstract

"Ethics" and "Morals" were originally Greek and Latin expressions for the same idea – the code of conduct acceptable and normal within a particular society. It is about how people should relate to each other.

In the course of their practice, health professionals have obligations to their patients and the communities in which they work. We are guided by the principles of ethics that include autonomy, beneficence, non-maleficence, and distributive justice. We also talk about telling the truth and informed consent.

As teachers in addition to being practising health professionals, we also have obligations to the students we teach. Just as we are guided by these principles in our clinical work and how we treat our patients, should these principles be applied to how we provide medical education to our students?

# PRE-CONFERENCE WORKSHOPS: SPEAKERS <u>CV's</u>

# Workshop 1. The Secrets of Leadership in Health Sciences Education

<u>Prof BB van Heerden</u>, SU <u>Prof Juanita Bezuidenhout, SU</u> Prof Vanessa Burch, UCT

# CV

**Ben van Heerden** is Professor and founding director of the Centre for Health Sciences Education of the Faculty of Health Sciences of Stellenbosch University since 2006. He qualified as medical doctor, Nuclear Medicine Physician and Physician (Internist) at the same University and was also awarded a MRC post-doctoral fellowship in Nuclear Medicine at the Johns Hopkins University, Baltimore, USA from 1989 -1991. He was Head of the School of Medicine at Stellenbosch University from 2001- 2005. He completed a Foundation for the Advancement of Medical Education and Research (FAIMER) fellowship in 2007 and is a member of the board and faculty of the Southern Africa FAIMER Regional Institute (SAFRI).

**Vanessa Burch** is Professor and Chair of Clinical Medicine at the University of Cape Town in South Africa. After completing her clinical training as a specialist rheumatologist she became involved in health professions education. She went on to obtain her PhD in medical education from Erasmus University in the Netherlands. Her research interests include the development and implementation of assessment practices in resource-constrained settings in the developing world.

**Juanita Bezuidenhout** is an Anatomical Pathologist at the NHLS/Stellenbosch University. She is extensively involved in under- and postgraduate teaching at the Faculty of Health Sciences, as teacher, educational and discipline specific researcher, and educational innovator and administrator. She is a FAIMER fellow and founding member of SAFRI. She has 12 publications, 17 international and 36 national congress presentations to her name.

# Workshop 2. Detecting and Supporting Students in Difficulty in Health Sciences Programmes

Prof Deborah Murdoch-Eaton, University of Leeds Dr Cynthia Sikakana, UCT

# CV

**Deborah Murdoch-Eaton** is a Professor of Medical Education within the School of Medicine, Leeds, UK. As a practicing paediatrician, Deborah's achievements in the field of teaching and learning reflect close contact with the purposes and challenges of working in an ever-changing health service. Her interests focus around developing students' individuality and potential and she is particularly interested in how medical students acquire generic learning skills – the so-called "transferable skills". Her publications reflect the innovations in challenging students to learn in differing environments.

She has a strong interest in Internationalism. She has recently taken the chair of the Faculty of Medicine & Health International Committee, and membership of the university Faculty International Representatives; The University of Leeds is committed to fulfilling its purpose "to advance and disseminate knowledge, and develop outstanding graduates and scholars to make a major impact on global society". Through active participation in these committees, Deborah never forgets her Zimbabwean roots, and strives to ensure that low / middle income countries, especially in sub-Saharan Africa remain high on the university's agenda!

She was awarded a National Teaching Fellowship in 2004 by the UK Higher Education Academy. She is using her NTF monies to fund travel to a number of African Countries including South Africa; this is for both consultancy and advice on curricular developments as well as leading an international project looking at the generic learning skills of students entering medical school (in which all 8 South Africa medical schools are participating from 2009!).

In the postgraduate education arena, she has worked as a PLAB assessor and chief invigilator for the GMC, is lead editor developing a distance learning course for paediatric neurologists, co-editor of Learning and Teaching section of Archives of Disease and Childhood, Education and Practice journal, and director of the Paediatric Educators Programme for the Royal College of Paediatics and Child Health, UK. Her work includes leadership on HEA subject centres and HEFCE projects on areas of curriculum development, feedback, undergraduate research skills development, and student support. With Pauline Kneale (from the Enterprise White Rose Centre for Excellence in Learning & Teaching), she is currently involved with a number of SA collaborators on curricular development projects, and knowledge transfer activities to develop models of facilitating enterprise skills; effective international health care needs innovative health care practitioners able to implement change in challenging work environments!

# Workshop 3. Improving OSCE Examiner Skills

<u>Prof Christina Tan</u>, University of Malaya <u>P. Rokiah</u> <u>F.A.A. Yang</u> <u>V. Anushya</u>

## C۷

Professor Christina Tan, Director of the Medical Education & Research Development Unit, University of Malaya. Christina Tan is a family physician by training, and is currently Director of the Medical Education & Research Development Unit, Faculty of Medicine, University of Malaya, in Kuala Lumpur, Malaysia. She also heads the Clinical Skills Unit in the faculty, as well as being chief coordinator for the Objective Structured Clinical Examinations at 3<sup>rd</sup> and Final MBBS levels.

She has a deep interest in medical education, particularly in curriculum development and assessment, and was twice awarded international fellowships in medical education, in 2000 (based in Albuquerque, New Mexico, USA) and 2005-6 (in Philadelphia, USA), and has on-going international links in USA and South Africa in training and mentoring medical educationists. Since 2000, she has been involved in many faculty staff training workshops in Problem-Based Learning and PBL Case Design, as well as OSCE Examiner Training.

# Workshop 4. Empowering Medical and Healthcare Students to be Change Agents

Prof Pauline Kneale, University of Leeds Prof Deborah Murdoch-Eaton, University of Leeds Prof Jannie Hugo, UP Dr Marietjie van Rooyen, UP Dr Brenda de Klerk, UFS Dr Di Manning, Wits Dr Enoch Kwizera, WSU

#### C۷

**Pauline Kneale,** Professor of Applied Hydrology with Learning and Teaching in Geography. Pauline has dual research interests in hydrology and in learning and teaching. Pauline has a significant track record on working with various aspects of student skills which has led to her work on enterprise, intrapreneurship and entrepreneurship. She is Director of the White Rose Centre for Excellence in Teaching and Learning Enterprise at Leeds.

For learning resources see www.leeds.ac.uk/wrcetle/ and www.geography.leeds.ac.uk/people/p.kneale/ Recent publications

Kneale, P.E, Bradbeer, J. and Healey, M. Learning Styles, Disciplines and Enhancing Learning in Higher Education, in Sims, R.R. and Sims, S.J. *Learning Styles and Learning: A Key to Meeting the Accountability Demands in Education* 115-128, 2006

Kneale, P.E. Teaching and Learning for Employability: knowledge is not the only outcome, in Fry, H., Ketteridge, S. and Marshall, S. (Eds). *A Handbook for Teaching and Learning in Higher Education, enhancing academic practice*. 3<sup>rd</sup> Ed. Routledge, London 99-112, 2008

McEwen, L., Monk, J., Hay, I, Kneale, P.E. and King, H. Strength in Diversity: Enhancing Learning in Vocationally-Orientated, Master's Level Courses, *Journal of Geography in Higher Education*, 32, 1, 101-119, 2008

Kneale P.E. Getting the Best from an International Year, *Journal of Geography in Higher Education*, *Directions*, 32, 2, 337-345, 2008

# Workshop 5. Writing 'extended matching' (R type) and '>1 correct answer' (n of N type) MCQs

Prof D Prozesky, WITS Dr Di Manning, WITS

# CV Workshop facilitators:

Di Manning and Det Prozesky work in the Centre for Health Science Education at the University of the Witwatersrand, Johannesburg. They have a special interest in assessment and are currently involved in several initiatives to improve assessment of health science students at Wits. Together with their IT colleagues they have developed a system for automating statistical feedback on 4 types of MCQ's which is used in quality assurance of exams.

Workshop 6. Withdrawn

# Workshop 7. Locating, grading and using web-based educational material

Prof Bruce Sparks, WITS Dr L Green-Thompson, WITS Dr Z Mahomed, WITS

**CV** Professor Bruce Sparks recently retired as Head of the Department of Family Medicine at Wits University. He is the Immediate World Past-President of WONCA, the World Organisation for Family Doctors, and is also a member of its Medical Informatics Working Party.

**CV** Zareena Mahomed is a graduate from the University of the Witwatersrand, South Africa. She has a degree of Bachelor of Medicine and Bachelor of Surgery (cum laude). She works at the Centre for Health Science Education at the University of the Witwatersrand. She is a facilitator for Problem Based Learning, a Clinical Skills Tutor, coordinator and examiner in the Objective Structured Clinical Examinations. She is also involved in the development of the Technology Based Education project in the Faculty of Health Sciences. She has a special interest in Health Science Education and will soon be commencing her Masters Degree.

# Workshop 8. Die "EINA", die "EISH" en die "YEBO GOGO" L-CAS. Developing and running longitudinal community engaged training opportunities for undergraduate students in an urban area.

Prof Jannie Hugo, UP Dr Marietjie van Rooyen, UP Dr Angelika Schutte, UP

#### **CV Jannie Hugo**

Jannie Hugo is a family physician and associate professor in the Department of Family Medicine at the University of Pretoria responsible for Community Engagement. Before that he worked for 17 years at Medunsa. He is the on the executive and several committees of the Medical and Dental Professions Board of South Africa, director of the Rural Health Initiative (RHI), a founder-researcher of the Madibeng Centre for Research (MCR) in Brits and a director of Enablemed, a managed health care organization.

He is married to Margaret, an occupational therapist and has 4 grown up children and one foster child. They live in the Magaliesberg near De Wildt.

His interest is education in primary care, the consultation, the management of primary care services, district and rural health and the development of district campuses in urban and rural areas. Research projects he is involved with relates to the integration of vertical programmes in primary care, the use of mobile phone technology in primary care and the development of Microbicides in the prevention of HIV.

# PRE-CONFERENCE WORKSHOPS: ABSTRACTS

# Workshop 1. The Secrets of Leadership in Health Sciences Education

Prof BB van Heerden, SU Prof Juanita Bezuidenhout, SU Prof Vanessa Burch, UCT

#### Abstract:

All Health Sciences educationists are, to a lesser or greater extent, leaders and managers. Most of us had no formal leadership training and some have had little leadership experience. Our educational activities often involve change and sometimes lead to conflict. We have to deal with many (and often difficult!) personalities on a daily basis, some of whom may have a negative view on what we need to achieve. What are the "secrets" that will enable us to manage ourselves, our superiors and colleagues and our jobs better?

This highly interactive full-day workshop aims to provide the answers by giving participants the opportunity to learn basic knowledge and skills related to personality and leadership styles, state-of-the art leadership and management strategies and tools, including those required for optimal management of conflict, change and oneself.

# Workshop 2. Detecting and Supporting Students in Difficulty in Health Sciences Programmes

Prof Deborah Murdoch-Eaton, University of Leeds Dr Cynthia Sikakana, UCT

#### Abstract

For staff involved in teaching, assessing or supporting students in the health sciences programmes

# Workshop 3. Improving OSCE Examiner Skills

Prof Christina Tan, University of Malaya: P. Rokiah F.A.A. Yang V. Anushya

#### Abstract:

The Objective Structured Clinical Examination (OSCE) is one method of assessing the adequacy of clinical skills of medical students, and their level of competence. It can be used to test a variety of skills such as history taking (communication and interpersonal skills), performing aspects of physical examination, undertaking emergency procedures, and interpreting investigational data. It can also be used to ensure an adequate depth and breadth of coverage of clinical skills expected of a graduating doctor.

Observations of examiners during actual OSCEs at many institutions have seen them engage in inappropriate behaviours, such as prompting, indicating to the candidate how they had performed in the station, and also teaching. There were also apparent differences in the way examiners use the mark sheets their departments had developed. As a result, it was realised that there needs to be a focus on examiner training to ensure consistency in marking the checklists and examiner behaviour. This training workshop, initiated in 2006 at the Faculty of Medicine, University of Malaya, Malaysia, to address these issues has subsequently been held at many institutions internationally to help examiners develop assessment rating skills and appropriate behaviour during an OSCE.

Participants will have an opportunity to observe two (pre-recorded) OSCE stations being conducted. They will assess these stations using the provided checklists. Discussion following this exercise will include a comparison of differences in their own scores with those of other participants and reasons for this, as well as any other issues that arise from this exercise.

# Workshop 4. Empowering Medical and Healthcare Students to be Change Agents

Prof Pauline Kneale, University of Leeds Prof Deborah Murdoch-Eaton, University of Leeds Prof Jannie Hugo, UP Dr Marietjie van Rooyen, UP Dr Brenda de Klerk, UFS Dr Di Manning, Wits Dr Enoch Kwizera, WSU

#### Abstract:

The training of healthcare students tends to place limited stress on preparing students for challenging and changing the workplace. Successful organisations, whether they are large hospitals, medium size clinics or small care homes recognise the need to evolve and grow to continue to be successful. Medicine and healthcare agendas progress when people challenge and change systems. This workshop will consider practical ways in which the empowerment of healthcare employees can effect change. Adding empowering, enterprising elements to the healthcare curriculum informs students skills and attitudes developing them to work effectively and adding to their employability.

In this workshop we will look at a range of learning materials that develop negotiation, marketing, networking, leadership, presentation, and other skills in the context of spotting opportunities to enhance and progress practice, and the self confidence to be proactive. The materials to be discussed have been created in a variety of contexts including for healthcare, medicine, dentistry and healthcare assistants

# Workshop 5. Writing 'extended matching' (R type) and '>1 correct answer' (n of N type) MCQs

Prof D Prozesky, WITS Dr Di Manning, WITS

#### Abstract:

The workshop aims to develop participants' skills in using these two types of MCQ's. They will start by discussing when these MCQs should ideally be used. This will be followed by familiarising themselves with the criteria for good MCQ's and an exercise in evaluating good and bad examples. The next step will be designing a few examples of both types themselves, which will be presented to the workshop for evaluation and feedback. Finally there will be a discussion on the use of statistics in assuring the quality of these MCQ's, again with practical examples and exercises. There will also be a demonstration of software that can be

used to present the MCQ's electronically.

Participants are asked to bring topics that they would like to assess with them. Throughout the workshop participants will be asked to share their experiences in using these two types of MCQ's.

# Workshop 6. Withdrawn

# Workshop 7. Locating, grading and using web-based educational material

Prof Bruce Sparks, WITS Dr L Green-Thompson, WITS Dr Z Mahomed, WITS

#### Abstract:

This interactive hands-on workshop, in a computer laboratory, will explore how to seek, access, evaluate and utilize existing interactive websites among the plethora of sites available internationally. It will also explore how to integrate such sites into health related curricula. Multidisciplinary participants who may be keen to use web based teaching in an ordered method as part of a curriculum will benefit from the workshop. At the end of the workshop the participants should be able to: List significant sites where health science education material may be located; Explore promising sites and locate seemingly relevant material; Apply a grading

process to learning material found; Discuss the role of such material in a curriculum; Discuss strategies for marketing such material to lecturers and students.

# Workshop 8. Die "EINA", die "EISH" en die "YEBO GOGO" L-CAS. Developing and running longitudinal community engaged training opportunities for undergraduate students in an urban area.

Prof Jannie Hugo, UP Dr Marietjie van Rooyen, UP Dr Angelika Schutte, UP

#### Abstract

The purpose of the workshop is to share our experience with implementing a longitudinal clinic attachment for medical students (L-CAS) at the University of Pretoria. The method of the workshop will be participatory knowledge creation.

The principles that guided L-CAS namely equity, continuity, longitudinality, community engagement, academic service learning and change management will be discussed.

Experience at UP as well as international literature will be presented.

While the facilitators present their own experience, the situation of the participants and their ideas will be shared and they will be assisted to prepare the outline of an intervention in their own faculty.

# **Oral Presentation Abstracts**

# Using evidence-informed decision making as a paedogogic tool in health science education

#### Mr. N. Naidoo CPUT Mr. L. D. Christopher CPUT

#### CONTEXT

The Bachelor's Degree in Technology: Emergency Medical Care (B Tech EMC) learners at the Cape Peninsula University of Technology undergo training in significant clinical interventions. The challenge was to design an academic programme that could rapidly transform independent advanced practitioners from being skills-based to evidence driven. This was motivated by variation in practice, a drive for greater value and transparency, a gap between evidence and practice (Figure. 1), and developments in information technology.

#### AIMS

To establish competence in post-graduate paramedic practice through evidence-informed decision making.

#### WHAT WAS DONE

The learners underwent applied training on evidence-informed decision making. The methodology employed generic research processes, namely to generate a clear question; to search for relevant evidence; to extract data for (meta) analysis; to appraise quality, and to synthesize appraised data.

Different types of evidence were considered following cognition on most appropriate evidence to answer the particular question. A critical appraisal involved systematically assessing the evidence for relevance, reliability and confidence.

#### **RESULTS/ IMPACT**

The evidence-informed decision making was systematic, transparent and critical. This is prudent as much literature is of limited relevance, poorly reported and potentially misleading.

By comparison, evidence-based practice is limited as it focuses on 'effectiveness', randomized control trials, and can be paralyzing as no decisions are made without evidence.

Evidence-informed practice aims to inform policy questions including the questions: What is the nature of the problem? What interventions are possible? How does the intervention work? and, Is the intervention effective?

All learners (N=6) registered for this subject successfully attained outcomes by publishable evidenceinformed policy briefs and a summative assessment. The process led to confluence between evidence and practice.

#### TAKE HOME MESSAGE

Evidence-based decision-making cannot answer most healthcare questions. Evidence-informed decisionmaking, as a pedagogic tool, aims to increase the questions that can be answered by a wider range of evidence. Experiential, theoretical and contextual knowledge can help to establish what is likely to be needed, possible and to work. Descriptive research can be used in problem characterization and process evaluations, all of which may be curriculum outcomes.

# When you can't be there: partners in the field

**Mrs JE Wolvaardt**, School of Health Systems and Public Health, University of Pretoria\*; **Prof J Blitz**, Dept of Family Medicine, University of Pretoria, **Dr G Bender**, Unit of Community Engagement, University of Pretoria.

#### Context:

A fifth-year module entitled "Health and Health Systems" underwent an educational shift to a service-learning module in 2008. Intensive evaluation was undertaken to describe the experience from the student's, service provider's and academic staff's perspective as the prevailing perspective is that of service-provision and not service-learning. The service placements were in 12 primary health care clinics and students were tasked with clinical work, a quality improvement project and a health systems review all linked to the theory via reflective essays and group reflection.

#### Aims:

The aim was evaluate the central teaching strategy of this module from the perspective of the service providers. This strategy aimed to promote academic service learning in order to advance: relevant and meaningful service with the patients at the clinic; enhanced academic learning; and a sense of social responsibility. A secondary aim was to collect evidence of the transformation of this module to apply for its designation as the first service-learning module in the medical curriculum.

#### Methods:

A questionnaire with 17 closed and 13 open-ended questions was developed based on a CHE tool. The last student cohort to rotate through the clinic distributed questionnaires to the clinic managers. Questionnaires were either returned via sealed envelope or faxed back to the university.

#### **Results:**

Eight of the 12 clinics participated. Clinics all described that they, the clinic, the staff and the patients benefited from the module. They stated that they would definitely (n=6) and probably (n=2) recommend other clinics to participate and that is was highly successful (n=5) and more successful than hoped (n=3). Examples of benefit to the clinic were "brought new information; design a diabetic tool for the clinic" and to patients "chronic patients had an opportunity for full assessment without time constraints for professional nurses".

#### **Conclusion:**

From separate evaluation we know of the very positive learning experiences of the students and this evaluation from the service-providers highlighted an unexpectedly rich range of service-provider benefits from enhanced service-delivery of medical care to lasting effects on the health system in terms of enriched learning by staff and the stimulation of quality improvement projects.

# Service Learning: experiences of the first year of community engagements by Central University of Technology Radiography learners.

#### Mr. Botha RW Central University of Technology

#### Service Learning is:

"a credit-bearing educational experience in which students participate in an organized service activity that meets identified community needs and reflect on the service activity in such a way as to gain further understanding of course content" (Bringle and Hatcher, 1 996: 222).

The purpose of the study in progress is to investigate and describe the Service Learning experiences of third year Radiography learners and community partners through reflective practice.

Service Learning is designed to foster a sense of civic responsibility in learners. Service Learning experiences must be relevant to the academic course of study and needs to be identified by the community rather than being imposed on them by outsiders (Ross and Deverell, 2004: 287).

Third year Radiography learners were divided into three groups, each with its own identified community. Learners visited their community, contact persons were identified and the groundwork for the two follow-up visits was laid. Since Radiography is very specialized and resource based, learners decided that we will concentrate on the dissemination of information related to mammography, ultrasound and bone densitometry. The FSDoH was our service provider and its needs were also addressed by spreading information related to services available.

Each group prepared and executed dramatized presentations, grade 12 learners evaluated them using a rubric; Radiography learners completed a structured reflection after the interventions. From the grade 12 assessments, it was clear that the presentations and slide shows were excellent, with an average percentage of 80%. Grade 12 learners indicated that this was new knowledge, most said that it was useful and empowering (they would be able to tell others) ; some indicated that they did not understand all the information and that elocution was a problem in some instances.

From the reflection reports, Radiography learners indicated that it was a positive experience: they could reinforce previous knowledge, be more involved in own knowledge creation, teamwork was excellent, it was confidence building and that they would like to get more involved in community initiatives.

From these it would seem that Service Learning is effective; it would be interesting to see to what degree reciprocity is achieved.

# An investigation into the first year experiences of health science students during the early transitional period

#### Mr. Parshotam, Kantilal, University of the Witwatersrand

On arrival at the university 1st year students face a number of challenges, both academic and non – academic, in making a successful transition from school to university. For this reason the first year at university has been the focus of research into the challenges experienced by first year students entering higher learning institutions and has been extensively referred to as the First Year Experience (FYE).

The first year at university is a critical year during which new students have to meet a number of new challenges that will influence successful transition into higher education. It has been observed that many students struggle to make to necessary adjustments to settle down and adapt to the nature and demands of university study. This problem is more acutely experienced by students from a disadvantaged educational background.

The transition period in the early stages of the first year is especially critical. It is argued that 1st year is a high risk year and that many students do not make the transition into university study adequately at the early stages of their studies and which impact negatively on their final results. Many students who are inadequately prepared at secondary school for university study, are more acutely confronted with the challenge to recognise the range of transitional challenges that they will have to adjust to.

Currently a range of student services and academic programmes are offered by the University to meet both the academic and non-academic needs of 1st year students. The Faculty of Health Sciences offers academic support for students from a disadvantaged school background through the Academic Development Programme (ADP).

In 2009, the experiences gained from this programme were extended to all health science students. In the intervention students were introduced to a range of learning skills and personal organisational skills, contextualised within the first year Biology content material early in the new academic year.

This research will report on the effectiveness of a series of interventions, situated in large classroom settings, aimed at facilitating the early transition from secondary to tertiary education.
# The Impact of Individual Counselling on B.Pharm. Students with Academic and Social Difficulties

Lindi A Mabope", Hannelie (JC) Meyer, Beverley Summers Department of Pharmacy, University of Limpopo

# Background

Most students are first time applicants into tertiary education and have learnt in a traditional method of "passive learning". They have diverse academic levels, aptitudes, expertise and social backgrounds. The BPharm programme at the University of Limpopo, Medunsa Campus offered in partnership with Tshwane University of Technology follows a dynamic, integrated, problem-based approach to education.

## Summary of work

Students are monitored, those with poor academic performance and/or social difficulties are identified. Counselling sessions are scheduled and students' performance, study methods and social difficulties explored. Action plans are formulated and remedial action implemented promptly. The impact of individual counselling on students' academic performance was explored.

# Summary of results

Difficulties identified during counselling included anxiety, poor understanding of questions, insufficient time to study, poor study methods, absenteeism, lack of motivation, financial problems, emotional problems and group dynamics. Student mentoring programme was implemented and referral to the Centre for Academic Excellence for consultation if necessary. Over a period of five years (2004-2008) 441 students received individual counselling; 308 (85%) passed their final examination; only 16% (71) of the counselled students did not improve academically.

## Conclusions

Majority of students counselled passed their final examination. The success of counselling students with academic and social difficulties at an early stage of learning is evident in the overall high pass rates of the BPharm students over the past ten years of the programme.

## Take home message

Early identification of students with difficulties. Encourage group-work; Study Skills; implement a Mentorship Programme; reinforce English Language Skills at an early stage of the Programme.

Keywords: Interventions, individual counselling, academic-social difficulties, pass-rates

# **The Enemy Within**

Prof Juanita Bezuidenhout, Stellenbosch University/NHLS; Me Martie van Heusden, Stellenbosch University; Prof Elizabeth Wasserman, Stellenbosch University/NHLS; Prof V Burch, University of Cape Town Dr Francois Cilliers, Stellenbosch University

# Context

Education in South Africa is characterised by historical inequalities that may lead to poor learning experiences and performance, especially amongst groups that experience isolation and disaffection. Exploring the nature of alienating and engaging learning experiences, taking into account social and cultural context, should provide valuable information that may be used to improve the quality of learning programmes in ethnically diverse settings.

## Aims

To determine the factors that impact upon student perceptions of engagement and alienation in a postgraduate programme at Stellenbosch University, South Africa.

## What was done

A cross-sectional case study of 17 postgraduate students, selected by purposive sampling, was undertaken using semi-structured interviews to explore aspects of alienation and engagement.

# Evaluation of results and impact

Students from academically disadvantaged backgrounds felt that they are unable to formulate academic arguments and have limited communication and computer skills. Nevertheless they feel better able to cope with adversity. Registrars actively engage in problem solving and critical thinking, but not all appreciate the value of workplace learning in developing these skills. A safe environment, teamwork, interaction, acknowledgement, positive role models, respect and a well-structured programme with clear outcomes and study guides promote a sense of empowerment. Reluctance to address issues, no channels for complaints, uninspiring/abusive consultants, erratic decision-making, inability to manage conflict, little interaction with the faculty and the absence of a well-structured programme are all alienating factors. Instances of subtle discrimination, usually race or gender-related are experienced by registrars from various groups, resulting in the belief that different rules exist for different people. The students felt that their studies have both a positive and negative personal impact, but mainly a negative impact on relationships with family and friends. Strategies for coping revolve around controlling oneself and one's environment.

## Take home message

Given the historical legacy of "apartheid" in South Africa, it is crucial that experiences of alienation and engagement of postgraduate students working in a service environment be actively addressed. This study identified specific factors that need to be considered when planning support systems that aim to enhance learning and improve throughput. It also provides baseline data that could be used to evaluate the impact of such interventions.

# Applying academic history and psychometric potential as multiple indicators for potential student success in an outcomes based environment.

Dr E J Smit. Central University of Technology

# Background to study:

2009 is the first year where Higher Education institutions are confronted with the product of a schooling system wherein the emphasis is on outcomes based education. Needless to say that pedagogues from all over South Africa have great apprehension about the quality of the students that entered Higher Education in 2009. A continuing study is underway to try and establish the validity of matriculation results as an admission criterion.

# Study objectives:

An ongoing study determines the correlation between the existing admission requirements, an abbreviated psychometric test, as additional indicator, and student performance, as success indicators in first year modules for health technology, in the current higher education environment. The applicability of these indicators is further enhanced by the analysis of data for 'outcomes based' students having started their first year modules in 2009.

# Summary of methods:

The same methodology was used, but the analysis for 2009 is done on the first year entrants of both Chemistry 1 and Radiography 1 in order to further improve validity and reliability of the results. Thus the score (on the CUT scoring scale, modified for the new HE outcomes based system) of the 3 main scientific subjects were used as the historical indicator of potential success, and this was again correlated with the results of an abbreviated psychometric test, testing mainly mathematical and English language ability as a cognitive indicator of potential.

# Summary of results:

It is obvious that the quality of student product ensuing from the outcomes based system as enforced by the Department of Education has not resulted in any significant improvement in the potential of these students to achieve success in their Higher Education studies. Results still show that there is a definitive difference in strength when the two indicators are used for previously advantaged versus disadvantaged students; the psychometric test indicator still remained constant over the period.

# Take home message:

As the coefficient of non-determination found between the historical (school performance) indicator and student performance is still high, it is concluded that HE institutions should benefit by examining the validity and reliability of admissions requirements in order to assure meaningful correlations of multiple indicators of potential for student success in first year studies of a medical or scientific nature.

# Reconsideration of the criteria for selection of medical students at the UFS

Dr. B de Klerk, School of Medicine, UFS; Prof. PPC Nel, School of Medicine, UFS; Dr. A Cliff, University of Cape Town: Prof. LVM Moja, Dean, Faculty of health Sciences

# Introduction and Aim:

Due to the changing of the evaluation systems used for grade 12 students in South African schools, universities were forced to start looking into other criteria for the selection process of medical students such as the HSPTs. The aim of this study was to assess the relationship between the HSPT's, school performance and academic performance during the first two years of study at the UFS.

**Method:** The study was a quantitative, analytical, retrospective cohort study. The study population was first year medical students of 2004 and 2005 and second year medical students during 2005 and 2006 of the UFS. The following aspects were covered in the collection of data and were statistically analysed to detect associations:

- Demographic information
- HSPTs results
- Academic performance results during first two years of study

**Results:** Of the school-leaving subjects included, only Biology and to a lesser extent, English appear to have any meaningful relationships with academic performance for the modules included in the analysis. Mathematics and Science (of the school-leaving subjects) showed no meaningful relationship with academic performance for the modules included in the analysis. The HSPTs are consistently more strongly related to academic performance than are their cognate Matric subjects. The PTEEP is consistently more strongly related to academic performance than is Matric English. The MACH and the MCOM are consistently more strongly related to academic performance than is Matric Physical Science

**Conclusion:** It is clear from the statistical analysis shown that the HSPT's give a good indication of potential and seems to be showing a much better correlation with performance in the years 1 & 2 of the UFS medical programme than the individual school marks of the student.

# Psychometrics of the student version of the Jefferson Scale of Physician Empathy (JSPE-S) in final year medical students in Johannesburg

# Dr. K.Vallabh

# Background:

In selecting medical students to medical school, there is interest in predictors other than examination scores. This is motivated by concern that the selection processes mainly based on academic attainment appear to disadvantage some applicants. There is increasing recognition that empathy and communicating skills are important for doctors. Empathy is believed to be measurable and teachable and has been formally incorporated in some medical curricula. The Jefferson Scale of Physician Empathy (JSPE) is the most widely researched instrument to assess empathy in the health care setting.

**Aims:** To assess empathy levels in final year medical students in Johannesburg and to examine the psychometrics of the student version of the Jefferson Scale of Physician Empathy (JSPE-S). Methods: Empathy level was assessed in 158 final year medical students using the student version of the Jefferson Scale of Physician Empathy (JSPE-S) at the University of Witwatersrand Medical School in 2008. Gender, age and prior degree/s were used as confounders.

**Results:** Potential empathy scores ranged from 20 to 140. The mean empathy score in final year medical students was 109.3 (SD 12.4). The mean empathy score was higher in female students than in male students (111 vs. 105) ((t = 3.13; p< 0.0021). There was no statistically significant difference in the mean empathy scores in various age groups. Empathy scores of students with prior degrees were also not statistically significantly different from the students with no prior degrees. The average inter-item correlation was 0.411 and Chronbach's α was 0.79 Factor analysis identified factors that were generally consistent with the grand conceptual aspects of the notion of empathy in the JSPE-S (viz; perspective taking, compassionate care and standing in the patient's shoes.)

**Conclusion:** The results provide evidence that the mean empathy scores and psychometrics of the JSPE-S among final year medical students in Johannesburg South Africa is similar to studies published amongst students in America and Europe.

# Transferable generic learning skills of students entering the Walter Sisulu University (WSU) MB ChB I programme: a comparison of 2008 and 2009 cohorts.

Prof EN Kwizera, Walter Sisulu University, South Africa; Prof DG Murdoch-Eaton, University of Leeds, UK; Dr S Whittle, University of Leeds, UK.

# Context:

Over the past 4 years, WSU has participated in a multi-institutional project looking at generic learning skills that school leavers bring with them to medical school. In South Africa, 2009 was a watershed year, in that the university entrants were the first products of a national outcomes-based school curriculum (OBSC).

# Aims:

There was a perceived need to compare the generic learning skills of matriculants entering the WSU MB ChB programme after the outcomes-based school curriculum, with those who had followed the older curriculum prior to matriculation in 2007; with the view to identifying any aspects that might require future attention of school and / or university authorities.

What was done: Matriculants entering the WSU MB ChB I programme in 2009 completed a questionnaire similar to that completed by all their predecessors since 2006, and which gave data on how often the students practised selected generic learning skills, and how confident they felt about their mastery of the skills.

# **Results or impact:**

The OBSC entrants had significantly higher lack of practice of presentation skills; and higher but not significant lack of practice of information handling skills. By contrast, the 2009 cohort had better e-mail practice than the 2008 or any other previous cohorts. The confidence about these skills by new WSU medical students remained low, particularly with statistics and organisational skills.

## Take home message:

The outcome-based school curriculum seems to have some effects, both positive and negative, on the generic learning skills it imparts to the learners. Continued monitoring of University entrants as reported here has potential to inform school and university programmes accordingly.

# The effect of extra-curricular activities (ECAs) on academic performance in the Graduate Entry Medical Programme at the University of the Witwatersrand

<u>Ms S Cajee</u>, <u>Ms B Chale</u>&#8208; <u>Matsau,</u> <u>Ms C Fernandes,</u> <u>Mr C Holdt,</u> <u>Mr S Nel</u>\*, <u>Mr M Patel,</u> <u>Ms M Ramaru,</u> <u>Ms M Tau</u> University of the Witwatersrand <u>CONTEXT</u>

Many students do part-time work to earn extra money which they use for a variety of purposes. Over the past few years academic staff in the Graduate Entry Medical Programme (GEMP) at Wits have received periodic reports of undergraduate medical students who have fixed employment on certain days of the week. Since the medical programme cannot be considered to be a part-time one there was increasing disquiet that this might be influencing academic performance.

# AIMS

To determine the effect of extra-curricular activities (ECAs) on academic performance in the Graduate Entry Medical Programme (GEMP) at the University of the Witwatersrand.

# METHODS

A descriptive study was carried out, using a randomized stratified sample of GEMP students in their third and fourth years of study in the 2008 academic year. A coded, anonymous self-administered questionnaire was used to identify the nature, amount and duration of ECAs undertaken by students, as well as the time spent on studying. These were compared to the marks obtained by the same students in block exams, using the Pearson's r statistic to determine the correlation between the two. In addition qualitative information was sought from students about their perceptions of the effect of ECAs on their marks.

# RESULTS

The analysis revealed that students spend an average of 7.6 hours per week on ECAs (especially part-time work, sport and socializing) and 9.4 hours on study. Contrary to expectations there was found to be a weak positive correlation between marks obtained and time spent on ECAs, and a weak negative correlation between marks obtained and hours spent in studying. None of these correlations was however significant. Among the numerous reasons that could account for these findings students mention the effect of ECAs on restoring personal equilibrium, and good time management for example by limiting ECAs in the period leading up to exams.

# CONCLUSION

In this study neither the time spent by students on extra-curricular activities nor the time spent on study showed significant correlation with academic performance.

# Putting the "Me" into HIV/AIDS Education

Ms Lorna Olckers, UCT Ms Lucina Reddy, UCT

#### Context

In 2005 an HIV/AIDS workshop component entitled "Me and HIV/AIDS" was integrated into the Becoming a Professional (BP) course within the Faculty of Health Sciences at the University of Cape Town. This workshop is a collaborative effort between Faculty staff and representatives from HAICU, the University's HIV/AIDS Co-ordinating Unit. It is compulsory for all first year Health Science students and is assessed within the broader BP course.

The aim of the workshop is to increase awareness and sensitivity about HIV/AIDS on a personal and professional level amongst first year Health Science students.

The workshop methodology includes facilitator-led small group sessions, plenary presentations and discussions.

In 2008, funding from an EU Grant given to the HEAIDS programme was distributed across institutions within South Africa. At UCT, a portion of this funding was used to conduct an external evaluation of the "Me and HIV/AIDS" workshops. The evaluation was conducted by Southern Hemisphere Consultants.

## Aims

The aims of the evaluation included to:

- Assess the impact of the "Me and HIV/AIDS" workshop on students
- · Identify the effectiveness of the workshop
- · Identify the most significant changes brought about in students
- Identify ways to improve the workshops

## Methods

A mixed method participatory evaluation was conducted including surveys and focus groups with first and second year students as well as interviews with facilitators, design team members and other Faculty staff.

## Results

Students were very positive about the workshops and rated all aspects as relevant.

Results from the evaluation showed evidence of increased knowledge as well as increased sensitivity towards persons infected with HIV. The material was rated highly with the course methodology identified as both different and interesting.

Challenges of logistics, assessment alignment and on-going funding were identified.

## Conclusion

The overall aims of the workshop were achieved with students, facilitators and staff being positive about the material and experience. Recommendations were made and included that these workshops be built on in an iterative way so that the focus on the "me" aspect not be left behind in first year.

# Quality assurance: quantitative analysis of staff development attendance (2006-2008) in the Faculty of Health Sciences, University of the Free State

Bezuidenhout, J. University of the Free State

# Abstract

Staff Development forms an integral part of not only quality assurance but also quality improvement within any institution. By training staff and addressing their needs as well as that of the institution, one address quality assurance. By improving staff through staff development one is not only improving quality but also empowering staff to become self-sufficient and to reach their potential. This study made use of quantitative techniques to identify the attendance of various staff development sessions and gives an indication of whether the needs of the respective sections within the Faculty of Health Sciences as identified, were addressed. It furthermore also indicates who attended the sessions offered and the frequency of attendance. Information gathered is used to plan future staff developments sessions and to address aspects of quality assurance and improvement.

# Context:

The Division Health Sciences Education is responsible for staff development in the Faculty of Health Sciences. The staff development sessions that are offered address the particular needs of staff within the Faculty. The needs of staff within the Faculty differs vastly and are unique in nature as it is directly applicable in their area of work and are mostly not generic in nature. Particular needs were identified through the various "Bosberaad" sessions held with the School of Medicine, School for Allied Health Professions and the School of Nursing in 2005 and August 2007. Emanating from this was the identification of the needs that existed and that were addressed in the sessions for staff development. Particular needs of departments were also addressed on an Ad Hoc basis.

## Aim:

The aim of the study was to see whether the different staff development sessions offered were attended and by whom. This will highlight whether the sessions offered were addressing the needs as identified and to address the issue of whether the "Bosberaad" sessions were indeed identifying the correct needs within the faculty. It was also used as planning tool for future staff development sessions. Quality assurance and improvement is also addressed.

## Method:

Data were collected by means of the Microsoft Access© database that was kept for all staff development sessions from 2006 till date. All staff within the Faculty registered on the database with their full particulars. This included: their title, full names, department where they work, particular school within the faculty or are they from outside the faculty namely the University or from elsewhere, e-mail address, phone numbers and personnel numbers. Staff registered for the different staff development sessions by means of e-mail or telephonically and this data is then captured on the database. The database calculates all the information in summarised format per individual/per department/per school and according to set criteria. Data were then carried over to Microsoft Excel© programme. The results are displayed by using graphs generated by means of the data carried over and are displayed per year from 2006-2008.

## **Results:**

The results indicated that staff development sessions were well attended. As the School of Medicine is the largest it shows the largest attendance.

# A quality assurance model for clinical assessments in internal medicine

## Dr Charles Cock UFS Dr Fanus van Tonder UFS \*Dr Madelein Koning UFS Prof G Joubert UFS

# Context:

This study had as its purpose the evaluation of the quality of the assessment of clinical competence in the Department of Internal Medicine at the University of the Free State in the "high stakes" final clinical exam. No preceding quality assurance model for clinical assessments exists.

# Aims:

Establishing a quality assurance model for evaluating clinical assessment and judging clinical assessments in terms of the model.

# Methods:

Establishing a model against which judgements can be made was by means of a literature review conducted in keeping with the interpretive philosophical assumption in qualitative research. Further research was conducted in a mixed qualitative and quantitative model. Exam marks were assessed by means of statistical analysis. A quantitative survey of assessors was undertaken of compliance with Biggs's (2001) model of quality assurance. Quantitative measurements upon questionnaires were in keeping with methodology as described by Klecker (2000). A Likert type scale was used with ratings equated to a score out of five.

## Results:

A model was established based on the principles of good assessment and notions of quality as per John Biggs's (2001) model of the reflective institution. Principles included were: reliability, validity, fairness, practicability, educational impact, authenticity and accountability. Notions of quality were: quality as value for money, quality as fit for purpose, quality as transforming, quality model (constructive alignment), quality enhancement and quality feasibility. Data was gathered from 26 internal and 3 external assessors. An average score of 3.8 was obtained in terms of principles of good assessment an average score of 3.3 in terms of the notions of quality. External assessor scores were on average 4.5 for principles and 4.0 for notions of quality - much higher than that of the internal assessors. The model displayed moderate correlation with traditionally used methodologies such as Cronbach's alpha for reliability.

## Conclusion:

There was good performance in terms of the principles of good assessment, but less so on the notions of quality. Areas identified for improvement according to the study were constructive alignment, institutional assurance of adequacy of resources and assessor training in educational theory.

# Using Quality Assurance to get faculty talking about educational practice

# Dr GE Pickworth, University of Pretoria

# Why the idea was necessary

Although newly appointed staff at the University of Pretoria are required to attend a five-day education orientation programme they usually do not have the power to implement change in educational practice on their return to the School of Dentistry. The main teaching method in the BChD learning programme remains didactic lecturing and many written tests and examinations pose questions at a recall level.

# Aim

Despite repeated request by the curriculum committee to consider a more problem-oriented approach both to teaching and assessment, the status quo largely remained. A strategy was sought to address this.

# What was done

The BChD curriculum committee mandated the Assessment Committee (AC) to perform a Quality Assurance (QA) review of the learning programme modules. The AC drew up a review process and evaluation criteria that were ratified by the curriculum committee. A module coordinator received the evaluation criteria and was asked, together with staff teaching in the module, to draw up a self-evaluation report. This self-evaluation of current practice was presented to the AC by the module team and was discussed. Strengths and weaknesses were identified and plans for improvement made.

## **Results and impact**

The self-evaluation criteria provided indicators for best practice and performed both a quality assurance and staff development function. The self-evaluation exercise forced staff to reflect on current practice. The focus was on the practices within a module rather than those of an individual. The module team were part of identifying the strengths and weaknesses within the module and this motivated them to improve their practice. The AC members were representative of the teaching staff and the process was one of peer review rather than by 'outsiders' such as in an accreditation visit. Through the self-evaluation presentations by the module teams, members of the AC were exposed to assessment and teaching practice in modules other than their own which opening up a discussion in the School about educational practices that had not happened before. The School requested that a short series of training sessions be implemented to help staff write questions for written tests and examinations at levels higher than recall.

## Take home message

Combining QA and staff development activities resulted in meaningful improvement in educational practice.

# Blogging as a reflective tool in physiotherapy ethics

Mr. M. Rowe, University of the Western Cape \*

# Context

The use of social software in higher education facilitates collaborative learning practices and mirrors the social constructivist principles of education by encouraging deeper engagement with both individuals and content. Reflection promotes higher order cognitive skills that promote critical thinking, and together with ethical reasoning has been shown to contribute to professional development and clinical practice. A blog is a service that allows a user to post ideas online, as well as to solicit feedback from others that serve to contribute to an ongoing discussion, which allows for a rich, diverse stream of ideas that provide further input into the reflective process.

# Aims

The aim of this study is to evaluate the use of blogging as a tool for enhancing physiotherapy students' reflective practice during an ethics module. By participating in an online, networked conversation on human rights in healthcare, students will discuss some of the problems inherent in the South African healthcare system, as well as recognise and acknowledge the different viewpoints of others.

## What was done

A blogging environment was created to allow only students and the lecturer access to post, read and comment on reflections. Articles relevant to the ethics module were provided for students to read and to inform their reflections. Students were required to read and comment on the reflections of their peers, facilitating an ongoing conversation around the topic. On completion of the assignment, students will be asked to evaluate the process.

## Impact

With the move towards a more networked society and the increasing use of online tools in education and practice, educators must take cognizance of new approaches to teaching and learning. The use of blogging as a tool for reflective practice has shown positive results in other disciplines but has not been evaluated in physiotherapy education.

## Take home message

Blogging as a tool for reflection brings advantages to the process of professional development that are not easily leveraged with any other medium. The characteristics of the platform allow for collaborative discussion, immediate feedback and encourages deeper engagement with the content, all of which facilitate more meaningful interactions and stimulate professional development.

# Digital story telling: understanding the process of reflection

Prof. JFM Hugo, University of Pretoria\*;
Dr. M van Rooyen, University of Pretoria;
Dr. J Sandars, University of Leeds;
Prof. D Cameron, University of Pretoria

# Background

Academic service learning presents students with a number of complex challenges. Encouraging active reflection assists students to make sense of their exposure to community engaged learning. Digital storytelling has been successfully used to assist medical students to integrate these reflections into a meaningful and memorable experience.

In the District Health block of Student Internship Complex (SIC) reflection is encouraged and recorded in several ways namely: a daily reflection journal, reflection on each obstetric patient (delivery, antenatal care and post natal care), reflection on patients seen, reflection on learning through relationships and reflection on skills learning. During the last week of the block students return to Pretoria where they go though all their reflections and integrate them into a reflective photo story that is presented to the group as the last activity of the block. Students receive orientation and guidance to prepare the story.

In reflective storytelling the process of reflection and creating the story is very important, more important than the final product. A clear understanding this process is important to evaluate its effectiveness and impact, to improve and promote its use.

## Aim of the study:

To improve the understanding of the process of reflection and the development of a reflective digital story by medical students during the SIC District Health Block.

## Method

The experience of students is explored through focus group interviews.

# **Study population**

Students that complete the SIC District Health block in 2009

## **Data collection**

The focus group interviews were conducted by the researchers after the presentations of the digital reflective stories at the end of the block.

## Analysis

Qualitative methods were used to analyse and integrate the focus group interviews.

## Results

The results of the study will be presented

# The Med-Web Project: an edu-health programme in the Wits Faculty of Health Sciences.

Professor D. Prozesky (University of the Witwatersrand),

Professor B. Sparks (University of the Witwatersrand)

Dr. L. Green-Thompson (University of the Witwatersrand),

Dr. M. Allen (University of the Witwatersrand)

Dr. Z. Mahomed\* (University of the Witwatersrand)

# Context:

There is a mass of share-able material available on the web in the field of health professions education: interactive modules, documents, visual material of various kinds, assessment questions and ideas. In the Faculty of Health Sciences at Wits these materials are being used sporadically or sub-optimally as lecturers or students hear about them by chance or stumble across them when 'googling' for material. It takes time to locate different sites and compare them. To overcome these problems, a new website portal project was initiated.

# Aims:

To develop a user-friendly, Faculty controlled website which brings together relevant, high quality web-based material for health-related learning.

# What was done:

A series of roadshows has been taking place to introduce the project to the academic departments in the Faculty. While this has been going on sites continue to be identified by Faculty academic staff and the project team. The material is screened by subject experts who decide whether its quality justifies inclusion, using an instrument iteratively developed to standardize the evaluation. Depending on the comments and ratings from departments, websites are then added to the main website portal page.

During the course of the project so far a number of challenges have arisen, some of which are not even now resolved. Innovative solutions will be presented which might help others in their endeavours.

## Impact:

Thus far approximately 130 sites or thematically distinct separate subsites have been evaluated in various departments, and the number is increasing constantly. As more material is constantly being identified and student and lecturer opinions are sought, a better organized website portal is being created. There is much scope for evaluation research of the impact of such an innovation on teaching, learning and assessment.

## Take home message:

There is room for improving teaching and learning by deploying available high quality web-based educational material.

# Harnessing the potential of online performance tasks to promote active learning: wishful thinking or a reality?

Mnr, AP, Hugo\*, School of Medicine UFS: Dr, AA, Beylefeld, Faculty of Health Sciences UFS

# Context:

The accreditation report in 2005 for the M.B.Ch.B.-programme at the University of the Free State encouraged the School of Medicine to promote e-learning in the undergraduate programme. The policy document "Open, Blended and Engaged Learning at the University of the Free State" states the intention of the UFS to enhance active learning in a blended learning environment. Aligned to these imperatives, stimulation of active learning is one of the intended critical outcomes of the M.B.Ch.B-programme. Performance tasks in an online environment have the potential to meet this challenge, provided the online learning opportunities are student centred and not only instructional in nature.

# Aims:

1) To identify and describe active learning opportunities in the online component of a module on general skills in the M.B.Ch.B.-programme.

2) To report to management on innovative teaching and learning practices that have the potential to stimulate active learning.

# What was done:

Learning opportunities in the online component of the module on general skills were examined for their potential to stimulate active learning. Three types of learning opportunities were identified, namely independent individual learning, group learning and social learning. All learning opportunities were evaluated in terms of their potential to engage students in actively constructing the knowledge, skills and attitudes that the School of Medicine values.

## **Results:**

In total there are 15 online learning episodes, 9 of which are individual learning opportunities shaped by self-, peer- and reflective-assessments. Six are group-based activities. These focus on the enhancement of students' research skills and provide opportunities to develop interpersonal and communication skills as well as attitudes across language/cultural barriers.

**Take home message:** Online learning opportunities in the module on general skills hold the promise for promoting active learning. The degree to which traditionally narrow ideas on teaching and assessment may be supplemented with online performance tasks and assessments to enhance students' learning experiences will be further explored by the authors in future.

# Audio-Visual in the teaching and acquisition of Language with Clinical Skills

# \*Ms Rae C. Nash University of Cape Town

# Context:

The MBCHB programme has broadened to address the issue of improved patient care. This includes the right of patients to be interviewed in their own language. Historically there have been very few indigenous language speakers trained in the MBCHB programme at UCT due to apartheid exclusion of black South Africans. Despite the more diverse student body since 1994 this has not ensured that the majority of patients are interviewed either by the medical officer or students in their own language. English is the language of instruction at UCT – the other two principal languages spoken are isiXhosa and Afrikaans in the Western Cape.

# Aim:

The integration of languages into the MBCHB programme has been successful with 1st language speaker tutors in the classroom situation.

(The intention is to extend the presence of 1st language speakers to the clinical bedside.) In spite of the integration of Languages into the Becoming a Doctor modules there still appears to be reluctance on the part of the students to address patients in their own language.

## What was done:

As further encouragement the CD ROMS, used as aids to Clinical Skills acquisition, have been expanded to include dialogue with the patient in isiXhosa (in the form of request and instruction). (Afrikaans will be addressed in 2009)

# **Result/Impact:**

Thus the student has not only direction for acquisition of the practical skill, but also has the voice over to include language element to that skill.

## Take home:

The broadened issue of improved patient care can be addressed at the very simple level of talking in the patients own language.

In this presentation the difficulties and the ultimate success of the process is discussed as well as our plan for developing the programme to include History Taking following the same format.

# Basic surgical skills training required by junior doctors to ensure competency as generalists

Dr Frank Peters, University of Pretoria

# Why the idea was necessary

The role and scope of practice of generalists in semi-urban (SU) and rural areas in South Africa is poorly understood and documented. In the absence of specialist support generalists are called upon to perform surgical procedures. It is therefore imperative for generalists to both be confident and competent regarding their ability to perform the surgical skills.

# Aims

To determine from generalists their perceptions of surgical competency, rating of the core surgical skills and their ability to train these skills to junior doctors.

To determine from interns their exposure to training of surgical skills and perceptions of their competence in performing these surgical skills

# What was done?

A quantitative cross-sectional study was conducted. Two different sets of questionnaires were developed and sent to interns, who completed their internship in 2008 in Mpumalanga and Gauteng, and generalists affiliated to the University of Pretoria. The data was recorded and analysed using Microsoft Excel.

# Evaluation of results and impact.

The response rate for interns was 31% (55/180) and 21% (50/240) for generalists.

Internships were mostly done in SU (62%) areas and most of the generalists were practicing in SU (82%) areas and 32% were trained as family physicians. Most of the interns perceived themselves to be competent in caesarean sections, excision of lumps and bumps and abscess drainage procedures. 81% of generalist identified lack of competence and training as important aspects of independent practice.

Interns working in urban areas felt most incompetent in performing the core surgical skills. The interns from the SU areas felt most confident in their ability to perform these skills.

The majority of the incompetent group indicated an intention to stay on at tertiary institutions for community service, while more than half of the competent group is going to do community service in rural areas.

The overwhelming perception of the generalists was that junior doctors need more training to be competent.

## Take home message

The training of interns should be supervised by senior doctors in an in-service training setting. Basic surgical skills can be taught in the family medicine rotation of internship, as well as in-service training by surgically skilled Family Physicians and generalists in semi-urban areas and district hospitals.

# Learning to help postgraduate students write

Dr AS Voce, Department of Public Health Medicine, University of Kwazulu-Natal

# Context:

Students in the Master of Public Health programme need to acquire proficiency in academic discourse, as represented in the final research dissertation. On examination, some dissertations are returned for correction, for not having demonstrated an adequate academic style. In the process of developing a research protocol to investigate academic writing amongst MPH students, I personally engaged in significant learning about academic writing, the representation of knowledge about academic writing, and the process of becoming a member of a new community of knowledge and practice. This for me mirrored the challenges faced by MPH students.

# Aims:

Describe the process of:

1. The researcher making meaning of academic writing, an unfamiliar field of knowledge, research and practice

2. Representing this meaning within a research protocol on academic writing

3. Becoming a member of a new community of knowledge and practice

## What was done:

I engaged in experiential learning and reflective practice. I observed and reflected on how my research protocol on academic writing changed, from initial to final iteration. I identified the critical questions that shaped the final iteration. I reflected on how the questions themselves evolved, and how they exhibited a changing understanding of academic writing and researching academic writing. I reflected on how the process of making meaning of academic writing contributed to greater conceptual clarity and simplicity in research design. Finally, I reflected on the process of becoming a member of a new community of knowledge and practice.

## **Results or impact:**

The process of making meaning of academic writing was influenced by a review of the literature, consultation with subject experts, and through writing itself. Critical questions shaped the framing of the problem statement, the focus of the research, the conceptual framework underpinning the study and the study design and its methodology. My understanding of academic writing changed from merely a technical skill to be mastered, to a socio-cultural competence that must be developed. Socio-cultural competencies are often tacit within a community of knowledge and practice. Entry into a new community requires making explicit the theories-in-use of that community.

## Take home message:

Strategies must be identified for explicitly developing the socio-cultural competencies of postgraduate students for improved academic writing.

# Student Contribution to Quality Health Care: A Review of the Quality Improvement Projects Undertaken by Final Year Medical Students

**Sondzaba NO\*;** University of Witwatersrand, Johannesburg **Couper ID** - University of Witwatersrand, Johannesburg.

# Context:

The Integrated Primary Care (IPC) block is a six-week preceptorship undertaken by final year medical students. It was introduced for the first time in January 2006 as part of the new GEMP (Graduate Entry Medical Programme) of the University of Witwatersrand. Students are placed in either rural or urban primary health care centres, based in Gauteng or the North West Province.

# Aims:

The purpose is to present a review of quality improvement projects undertaken by the final year medical students covering the period 2006-2008.

## What was done:

As part of the block's many activities, students are expected to audit the functioning of the health facility in which they are based. Following consultation with the local supervisor, the students then identify an issue that arises from the audit for a quality improvement (QI) project, which must be conducted during their placement. This is presented to the health facility management at the end of the rotation and submitted for assessment. The students rotated amongst the 14 sites used as training centres within the Gauteng and North West provinces. The students identified a variety of projects. This paper presents a review of all the QI projects presented by students in the three years (2006-8).

## **Results:**

Students undertook QI projects on a range of important issues which have had a positive impact in the sites in which they have been working. Some of the innovative approaches identified by the students have been adopted by the districts and are now earmarked for provincial roll out.

## Take home message:

Students have the potential to make a meaningful contribution to the provision of quality health care.

# In search of the professional voice: The professional communication practices of radiation therapists in the classroom and the workplace.

# B.D. Wyrley-Birch Cape Peninsula University of Technology

# Context:

The focus of this study was the professional communication practices of radiotherapists as clinical practitioners and as teachers of student/novice radiotherapists. This work on professional communication was based on practice and discourse theory as relating to a local context of professional practice and education. Professional communication was seen as a social practice which operates within educational, work and social discursive practices of radiation therapy. The study was undertaken at a higher education institution and a radiation oncology department in South Africa.

# Aim:

The research question asked what are the communication practices of radiotherapists in their professional practice and as higher education teachers.

# Methodology:

A case study approach was chosen as the most appropriate research strategy for capturing the authentic communication practices of radiotherapists in clinical and educational practice. The professional communication practices of ten student and five qualified radiotherapists were investigated through typical teaching and learning interactions in a work integrated learning curriculum. Communication interactions were observed, video-taped in the classroom, tutorial, and demonstration room; and observed and audio taped in the clinical workplace. The research participants, using the video footage as part of their reflections, were interviewed about their communication practices. All interviews were audio taped and transcribed. Analysis of the data was by means of thematic analysis where the data was coded and categorised by means of pattern matching.

# **Results:**

The findings from the study showed that the communication practices of radiotherapists include multiple 'languages of learning' which range from an 'academic language', to a 'professional language' and the necessary 'language' for patient care. Novice radiotherapists are required to master this professional language within their own 'language of learning' practice. A multilayered model of professional communication developed within the analysis process. This model identifies three genres of professional communication: intra-, inter- and extraprofessional communication with both formal and informal registers. Technical communication was further identified as a subset of intra- and interprofessional communication. Multilingualism was identified as a discursive practice within the professional communication of the radiotherapy classroom and workplace.

# **Conclusion:**

In conclusion, it is argued that the professional communication of radiotherapists comprises a continuum of communication practices that has significance for both professional and pedagogic radiotherapy practice, and it is shown that communication practices play an important role in the establishment of professional identity and expertise and enable the novice radiotherapist to find their 'professional voice'.

# Innovative teaching of clinical skills to medical students at the University of the Free State

\*Dr. J Lombaard University of the Free State Dr. L de Bruyn University of the Free State

# Context

In their training in the Clinical Skills Unit, pre-clinical M.B.Ch.B students of the University of the Free State are taught the art of performing a clinical consultation and clinical procedures. Students are required to prepare for each session by studying the subject matter before hand. A session, which lasts 4 hours, comprises of presentations and practise of clinical skills. The presentations may include video demonstrations of procedures or examinations of patients; practical demonstrations on simulated patients or manikins; medical animations, which include anatomy, physiology and pathology; and even virtual and interactive educational games which incorporate anatomy, medical terminology, physiology etc.

The third year medical class of 106 students is divided into 5 separate groups. During each group's session they are evaluated using the Class Performance System (CPS) as part of continuous assessment. This system is an assessment tool used in the classroom and provides instant objective feedback of students' performance.

## Aim

The aim of the study was to evaluate the impact of these innovative teaching methods on the students' knowledge of the skills taught.

# Methods

The third year medical class was assessed by a pre-test on the subject matter of session 7 using the CPS system. This pre-test comprised of eighteen Multiple Choice Questions on the surgical approach to the consultation of a patient with vascular, thyroid, breast and abdominal problems. The students then attended the demonstration of the relevant skills, practised the skills and were again assessed using the identical test. The results were analysed and the percentages were used for comparison between the pre and post-test results.

## Results

There was an increase in the academic performance of the students after active participation in the session.

## Conclusion

The innovative teaching methods used in presentations at the Clinical Skills Unit are associated with increased student academic achievement and may thus be interpreted as effective teaching methods.

# **Developing a Charter for Medical Professionalism**

Prof R Delport, University of Pretoria

Prof C Krüger, University of Pretoria

Dr M van Rooyen, University of Pretoria

Dr RR du Preez, University of Pretoria

Prof M Kruger, University of Pretoria

Dr G Pickworth, University of Pretoria

Ms I van Huyssteen, University of Pretoria

Prof I Treadwell. University of Pretoria.

## Context:

Continuous assessment of professionalism is vital for facilitating growth of students as professional practitioners. Furthermore, early detection and remediation of unprofessional conduct requires clear definition of un-appropriate conduct. In order to teach and assess aspects of professionalism The School of Medicine previously identified nine "golden threads" that embodied important non-physical, humanitarian knowledge, attitudes and skills that medical students should have at the end of the 6 year course. Outcomes for the "golden threads" were formulated and embedded in the curriculum. It however became increasingly evident that professional standards needed to be more comprehensible and that alignment with other documentations on professional conduct was lacking.

## Aim:

To develop a charter which would serve

- as a standard for professionalism within the School of Medicine,
- as a guide for teaching and assessment in the curriculum, and
- to identify and remediate misconduct.

## What was done:

A charter was developed based on the existing golden threads, the guidelines set by the Health Professions Council of South Africa for professional conduct, and the University of Pretoria Pledge for Medical Students. It was initially written in outcomes-based format and following feedback from lecturers it was reformatted for readability purposes. Student feedback will now be sourced and the next step will be the integration of the charter as guideline within the medical curriculum.

## Take home message:

The exercise of re-defining and validating all outcomes relating to professionalism is of extreme importance. This requires concerted action, rigour and effort The Charter proposes to present professionalism outcomes in a concise and understandable format. It also informs on how professionalism could become evident, thereby heightening student (and lecturer) awareness and assuring consistency in the teaching and evaluation of professionalism in medicine.

# **Empowering Students For Change: A Collaborative Enterprise Project**

Dr Marietjie van Rooyen, Prof Deborah Murdoch-Eaton; Prof Pauline Kneale, Prof Enoch Nshakira Kwizera, Dr Brenda de Klerk, Dr Dianne Manning, Prof Jannie Hugo, Prof Ian Couper.

# Context:

Enterprise is defined as "having an idea and taking advantage of the opportunities to make it happen". Many students and healthcare workers assume that only senior managers can change the workplace, potentially leading to lost opportunities. However, with self-confidence and knowledge anyone can enhance not only their working relationships but also their workplace culture, business process and effectively their personal life.

## Aims

A two-day interactive meeting was held to explore the development of enterprise skills within medical and health care curricula.

## What was done:

Undergraduate programmes at Universities of Pretoria, Walter Sisulu, Free State, Witwatersrand (SA) and Leeds (UK) were discussed, identifying areas of commonality suitable for enterprise development. Pertinent resource needs were identified for students, faculty and organisations, including the broad spectrum of private, public, community and NGO providers.

## **Results or impact:**

Placement objectives to facilitate thinking about enterprise and innovations, and raising awareness of enterprise skills development opportunities were discussed. A range of workshops and scenarios will allow participants to practise a number of these skills and self-confidence to operate in a more enterprising or entrepreneurial manner will be enhanced. By researching practice exemplars and inspirational role models, students should understand their potential to evolve practice, developing a 'can do' culture in both a local and international workplace. A primary advantage for all students will be opportunities to work on examples from their own contexts, and to explore and practice these skills in a safe environment. Access to examples from other countries has the potential to prepare for the reality of international placements.

The ESC (Empowering Students for Change) group was born. Plans to take the project forward include biweekly email discussions and resource development, as well as workshop and follow-up meetings at SAAHE. A funding bid to the Educational Partnerships Africa (British Council) is being prepared.

## Take home message:

Empowering students through the development of enterprise skills aims to generate a more enabling workplace culture where self-confident individuals have the skills to initiate change for improved healthcare delivery in challenging working environments. This collaboration has the potential to develop a range of materials for international use.

# Challenges faced by clinicians dealing with blood transfusion in the clinical setting: an ethical medico - legal perspective

Prof VJ Louw\*, UFS; Prof MM Nel, UFS; Prof JF Hay, , UFS.

# Context:

Virtually all doctors involved in direct patient care make use of blood and blood products on a regular basis. Therefore, it is imperative that the doctor be able to use this scarce, yet potentially dangerous resource in an appropriate and cost-effective manner. Despite the explosion in knowledge and the subsequent advances in technology, molecular biology and informatics, the one factor that has remained relatively unchanged, is that of human error. The human factor needs to be actively explored, and every possible way to strengthen this part of the chain considered.

## Aim:

As the teaching of transfusion medicine is limited during the undergraduate years, especially in the context of many universities adopting a shortened MBChB study period, it becomes critical to ensure that doctors are comfortable with the use of blood and blood products and the management of related complications. In order to ensure this, a postgraduate diploma in transfusion medicine could fill a particular hiatus in the knowledge market. This study endeavours to lay the foundation for such a programme by looking at all the major challenges relevant to its development and implementation. The aim of the research was to identify the various challenges faced by clinicians dealing with blood transfusion in the clinical setting with the view to ensuring ethical and safe practice.

## What was done:

A deeper insight was gained into the current status of transfusion medicine education with reference to the changing arena of transfusion medicine, which, in turn, led to motivation for further education of clinicians in transfusion medicine. The methods that were used and which form the basis of the study were comprised of a literature review and structured interviews.

## **Results:**

The challenges that had been identified were categorised under the following specific categories: lack of knowledge and training, ethical and medico – legal challenges, cultural perceptions and understanding, access, availability and cost-effectiveness and quality and safety.

## Take-home message:

A model for the academic development and implementation of a postgraduate diploma in transfusion medicine, specific to the South African context, will take these challenges into account with the view to ensuring ethical and safe practice.

# What generic graduate skills do radiography graduates at the Central University of Technology need for the world of work?

\*Mrs L. Beÿer, Central University of Technology

**Prof. A.C. Wilkinson**, Central University of Technology **Prof. H.S. Friedrich-Nel**, Central University of Technology

# CONTEXT:

The issue of Generic Skills has received considerable attention over the past few years as universities, in their response to calls for accountability, need to articulate and demonstrate the achievement of these (Barrie, 2005:1). In recent years, employers and their representatives consistently demand that their employees must possess a range of personal and intellectual attributes. These include attributes beyond those traditionally made explicit in programmes of study in higher education institutions (Harvey, 2000:7). Universities describe these graduate qualities differently, resulting in a variety of terms used to target the same attribute (Barrie, 2006:218). This diversity of descriptions prompts questions as to the extent to what stakeholders in the Radiography programme understand by the term generic graduate skills.

# AIMS:

One of the major goals was to explore what the stakeholders involved in academic and work-based learning as well as radiography students identified as generic graduate skills radiography students must obtain during their studies to prepare them adequately for the world of work.

# **METHODS:**

The main method of data collection consisted of focus group discussions, individual interviews and the analysis of students' reflection reports.

## **RESULTS:**

Findings from this study agreed on the importance of higher education to be informed of expectations from employees in order to respond to the need of preparing students adequately for future job tasks and contributions to society. In addition to this, the study also identified the particular generic skills stakeholders regard essential for students entering the profession. Recommendations that contribute to further programme development and possible improved practice were also made.

## **CONCLUSION:**

The research placed emphasis on the importance of higher education in preparing students for a changing world of work and contributes to further research on constructing a complete framework of generic skills for radiographers at the CUT.

# Motivation and career prospects of pharmacy students at Nelson Mandela Metropolitan University: A follow-up study

Prof I Truter\*, Nelson Mandela Metropolitan University

# Context:

South Africa is experiencing a severe shortage of pharmacists. The results of a survey conducted at Nelson Mandela Metropolitan University (NMMU) during July 2005 showed a disturbing picture for the future of pharmacy in South Africa.

# Aims:

The primary aim of the study was to determine the motivation for studying pharmacy, as well as the career prospects, of undergraduate pharmacy students at NMMU and to compare the results with those of the 2005 study.

# Methods:

A questionnaire was distributed during May 2008 to pharmacy students in all four years of study (132 students completed the questionnaire).

# **Results:**

Most of respondents (66.7%) were female. More than fourty percent (42.4%) of respondents were not South African citizens (72.7% of second-year and 51.1% of third-year students who completed the questionnaire were international students). Respondents were asked whether pharmacy was their first choice when they had made a career decision. Only a half of the respondents (66 students) indicated that pharmacy was their first choice, with many students indicating that medicine was their first choice but they were not accepted for medicine. Regarding their future as pharmacists, 81.1% of South African students indicated that they plan to practise pharmacy in South Africa and 12.2% plan never to practise in South Africa. Most respondents plan to work most of their career in hospital pharmacy (32.6%), followed by community or retail pharmacy (25.0%) and manufacturing pharmacy (22.0%). Three-quarters (69.7%) indicated that they were interested in postgraduate studies after completing their BPharm degree, of whom 61.3% were considering postgraduate studies (most plan to work overseas for a period of one to five years). Sixty percent (59.5%) of the South African respondents were considering emigrating after completion of their studies. The highest percentage was for final-year students, where 67.6% of the respondents indicated that they would consider emigrating.

# **Conclusion:**

The results of this study were nearly identical to those of the study conducted in 2005. The results of both these studies have important implications for the future of the pharmacy profession in South Africa in terms of human resources planning.

# The major outcomes of a Postgraduate Diploma in Transfusion Medicine

**Prof VJ Louw\***, HPE-Programme, Office of the Dean, Faculty of Health Sciences, UFS; **Prof MM Nel**, Head: Health Sciences Education, Faculty of Health Sciences, UFS; **Prof JF Hay**, Head: Department of Psychology of Education, Faculty of Education, UFS.

# Context:

Transfusion medicine form part of most doctors' daily activities. Undergraduate training in Transfusion Medicine is very limited and until recently, formal postgraduate training in Transfusion Medicine was nonexistent in South Africa. This study forms part of a much larger Ph.D. research project dealing with the development of a model for the academic development and implementation of a Postgraduate Diploma in Transfusion Medicine at the University of the Free State in Bloemfontein, South Africa.

# Aim:

The aim of the research was to determine the major outcomes necessary to compile a Postgraduate Programme in Transfusion Medicine.

## What was done:

A literature search, followed by in-depth structured interviews were done in 2008 to determine the major outcomes required. The results, data analysis and a description of the findings of the structured interviews will be dealt with during the presentation.

## **Results:**

A large number of factors were identified as major outcomes for such a programme. These were classified in eight sub-categories, namely basic sciences, blood banking, haematology, clinical medicine, blood conservation, blood safety, social skills and research. Important and specific factors were identified, that were not evident from the outset, that are critically important when developing a set of outcomes for a Postgraduate Diploma in Transfusion Medicine.

## Take-home message:

Outcomes for a postgraduate programme in transfusion medicine should not be chosen on an ad hoc basis, but require careful study of the literature and the input from a variety of role players.

# Educational by-products of an e-portfolio technological pilot project

\* Ms K Mostert-Wentzel, University of Pretoria; Mrs MD Scheepers, University of Pretoria

# Context

The Department for Education Innovation (EI) at the University of Pretoria conducted a pilot of the Blackboard (Bb) e-portfolio to explore the technical capabilities and educational aspects of the system. The department of Physiotherapy identified potential benefits to participate in the pilot, as an e-portfolio could be a centralised warehouse for records of professional activities of students needed by statutory bodies and for future employers of graduates. The current paper-based system was time intensive to maintain and use.

## Aim

To reflect on the indirect value of participation in a pilot of an e-portfolio system.

## What was done

With the assistance of EI, we developed a comprehensive template based on the outcomes to be reached by the e-portfolio. Due to the time constraints of the pilot, we included only two fourth year modules in the pilot. Each student populated an individual portfolio with 1) reflections on their learning during a) a clinical placement (unstructured) and b) use of the e-portfolio (structured), as well as 2) information on the type of conditions treated. We orientated students on the task and on using the e-tools.

## **Results or impact**

In addition to the expected outcomes that EI set for the e-portfolio pilot, our department gained unexpected value from the project. Students (n=38 of 39) reported more positive elements than negative, including improvement in transferable cross field outcomes, and the benefits of a portfolio even after graduation. Participation in the pilot sensitised lecturers (n=3) to the use of Blackboard. One of them started using the system for the first time. In addition to a centralised warehouse, lecturers identified potential areas of improving the overall programme, e.g. to extend the current verbal group reflections to individual written reflections, to introduce students earlier to structured reflection and to involve clinical supervisors to assist with learning and assessment using an e- portfolio.

## Take home message

The effort of participation in a pilot study of an e-portfolio system enriched other components of the curriculum and the different stakeholders in unexpected ways. Take the risk to walk an extra voluntary mile, when a safe low risk opportunity presents itself.

# The "MacPhail Model": a tool for promoting clinical reasoning skills in PBL tutorials

# Dr D.M. Manning\*, University of the Witwatersrand Prof D.R. Prozesky University of the Witwatersrand

# Context

The aims of problem-based learning (PBL) include development of clinical reasoning skills. PBL encourages the hypothetico-deductive model in which students generate hypotheses as to the causes of the patient's presenting complaints and then seek information to refine and confirm the most likely hypotheses. However, as novices students have restricted capacity for hypothesising because of their limited exposure to pathological and clinical content. They therefore require extensive scaffolding, preferably by facilitators experienced in clinical reasoning. Since a full complement of such facilitators is seldom available, we believe that both students and facilitators should benefit from a tool which models and guides them through the reasoning process.

# Aims

This paper describes such a tool which was adopted to support both the students in developing a systematic approach to clinical reasoning and the facilitators in guiding them.

# What was done

The "MacPhail Model" is an adaptation of a model used by a former professor in the Faculty. Students analyse the problem in a logical, step-wise process beginning with defining who the patient is and the nature of the presenting complaint. They are then guided through hypothesising about the possible causes of the various signs and symptoms by means of a series of anatomical, pathological, psychosocial and ethical sieves, thereby also reinforcing the biopsychosocial approach. When they return to the problem with new information in the next PBL session they are asked to revisit their hypotheses explaining how the new knowledge supports or refutes their hypotheses.

# Impact

The model is presented to students in the introductory PBL sessions during which they practice using it, and a copy of the model and the sieves is posted on the notice board in each PBL tutorial room. Instruction in using the model forms part of the facilitator training programme and a small copy is included at the appropriate places in the facilitator guide to reinforce its use. Both facilitators and students are thus better equipped to navigate through the problem and skill in hypothetico-deductive reasoning is enhanced

# Take home message

Clinical reasoning is a key skill in professional development and, like all skills, its attainment may be realised through careful modeling, reinforcement and practice.

# Students' learning in problem-based learning curriculum

Dr CP Slater, University of Cape Town

## **Context and Aim**

Studying in a problem-based learning (PBL) curriculum presents particular challenges to medical students who have recently left school. PBL is suited to the integration of knowledge across disciplinary boundaries and emphasises self-directed learning. Basil Bernstein's theory of educational transmissions enables one to characterise the effects of curricular change and the knowledge that is valued. Using aspects of Bernstein's theory, the aim of this study was to explore how students attempt to identify core knowledge.

# Methods

Twenty students in two PBL tutorial groups in a second year medical curriculum were observed while conducting PBL tutorials. Afterwards each group was interviewed about their learning objectives they had derived during the tutorials. The analysis of the transcripts was done by coding and constant comparison.

## Results

It emerged that students' ability to recognise core knowledge might be influenced by the curriculum's design and how it values certain forms of knowledge. The students interviewed had been exposed to visible pedagogic practices in high school, where teaching and learning were explicit. However the PBL curriculum in this study relies more on invisible pedagogic processes in which learning tends to be implicit. Students who appear to struggle with the identification of relevant core knowledge seem to rely on learning methods more suited to their past schooling than those valued by the PBL curriculum. These students appear to shift responsibly for their learning decisions onto agents that could be viewed as instructive or authoritative. Such students are likely to have a limited understanding of applied knowledge, and hence of core knowledge. A minority of students interviewed appeared not to struggle as they learned by determining the clinical relevance of knowledge and integrating it across disciplinary boundaries. They took responsibility for their learning and determined the relevance of new knowledge to practice.

# Conclusion

Students who struggle in a PBL curriculum may need to be supported in ways that foster an active learning approach rather than the mere memorisation of knowledge. Learners who reflect on their work in an interdisciplinary way to resolve their queries appear to cope better than those who struggle.

# The impact of changes in learning approaches on the academic performance of a group of GEMP I (MBChB III) students: quantitative and qualitative analysis.

# Ms, T, Sosznianin, University of the Witwatersrand;

Mr, T, Maswanganyi, University of the Witwatersrand;

Prof D, Prozesky\_University of the Witwatersrand

# Context:

During October 2008, 12 students who had expressed concern with their academic results during the course of their GEMP I (MBBCh III) year of study became part of a pilot project culminating in the current study. Following input from academic staff concerning these and other students in similar circumstances, a holistic approach was adopted for developing a 'Learning Excellence' programme that mainly focussed on learning and language issues.

# Aims:

To determine the impact of changes in learning approaches on the academic performance of a group of GEMPI students.

# Methods:

Components of the learning excellence programme were carried out in a learning intervention before the last block exam for the GEMP I, 2008 academic year. Analysis was then performed on the academic results of 11 students who participated in the learning excellence programme (participants) versus another group of poorly performing students who did not take part in the learning excellence programme (non-participants, N=12). The analysis of exam marks was carried out before and after changes to learning approaches. Participants will also be asked to undergo an interview to collect qualitative information.

# **Results:**

There was no significant difference in academic performance between participating and non-participating students before interventions (participants,  $53.39 \pm 2.00\%$  vs non-participants,  $50.40 \pm 0.97\%$ ; p>0.05). There was a significant improvement of academic performance in participants compared to non-participants after interventions (participants,  $56.49 \pm 2.07\%$  vs non-participants,  $51.32 \pm 1.79\%$ ; p<0.05).

# **Conclusion:**

Preliminary results suggest that the learning excellence programme could be useful in improving academic performance through improvements and better awareness of learning strategies among students. Further studies would be necessary to determine whether the learning excellence programme should be extended to all students in efforts to improve academic learning.

# Students view of integration in the MBChB III program at Walter Sisulu University

- M. Garcia-Jardon\*,
- E. Blanco-Blanco,
- E. Kwizera,
- A. Stepien and
- S. Vasaikar

# CONTEXT:

The Faculty of Health Sciences at WSU is one of the leading PBL schools on Africa. The MBChB curriculum is divided into three main phases: I or normal human structure and function, II abnormal structure and function and III clinical clerkships.

MBChB III course (phase II) has an integrated course of the main four medical disciplines taught during the year (anatomical and chemical pathology, pharmacology and microbiology). Integration takes place in tutorials and during the continuous and final assessment.

AIMS: To describe and explore how students perceive integration of the main four disciplines in MBChB III course for quality assurance.

# WHAT WAS DONE:

The subject (N=88) were MBChB III students who volunteered to fill in an anonymous structured questionnaire addressing their views on the integration of objectives, content, implementation and outcomes. Twelve closed questions were used for quantitative analysis of the students approach. The four additional open-ended free response questions included were processed by text analysis by two readers, to identify what the students considered as the most relevant course aspects, to have a negative and a positive impact on the teaching and learning process.

# **RESULTS OR IMPACT:**

Though majority of the students found that integration enhanced their analytical thinking, helped them reflecting how they were learning and to relate ideas from one discipline to other ones whilst keeping the proactive PBL setting 60% of respondents were unable to identity the program objectives of the block and only 49% of them were satisfied with the level of content integration of the four disciplines reached in the course. The open ended questions identified "excessive work load" and "insufficient preparation time" after the introductory tutorial session.

## TAKE HOME MESSAGE:

The results allowed us to identify the perception of students in advantages of integration; as well as areas requiring guidance and improvement. Integrated courses require students to be given a clear appropriate system of objectives for the expected level of integration, so that they can reassure their integrated learning instead of learning by disciplines.

# Effects of curriculum change on medical graduates' internship performance

Mrs K B Smuts\*, WITS Prof D R Prozesky, WITS Prof K D Hammond, WITS Dr E N Libhaber WITS

# Context:

The University of the Witwatersrand changed its medical curriculum in 2003 from a layered, six-year curriculum to an integrated, problem-based, four year graduate entry medical programme (GEMP) preceded by two years of basic and medical sciences at university level or a suitable undergraduate degree.

# Aims:

The study aimed to compare the internship performance of Wits graduates from the old and the new curricula on fifty seven items grouped into nine categories. These were identified during the development and validation of a model of the competent South African intern.

# Methods:

A stratified random sample of interns was drawn from the last graduates of the traditional curriculum, and a matched sample of interns from the first graduates of the GEMP curriculum. Both quantitative and qualitative methods were used. Each sampled intern, and his/her supervisor and a colleague completed a questionnaire. This was followed by an interview to link responses at the extremes of the Likert-type scale to undergraduate learning opportunities. A structured interview was also conducted with a randomly selected patient.

Statistical analysis was performed using the Cochran-Mantel-Haenszel Statistic for ordinal data. Comparisons were drawn between the preparedness of graduates from the traditional and GEMP curricula from the perspectives of the interns themselves, their supervisors, colleagues and patients. Interview data were analysed and reported using thematic analysis techniques.

# **Results:**

Detailed results of the comparative studies will be presented. Significant differences were reported by interns on six of the nine categories. Graduates of the GEMP curriculum felt less prepared in one category (fundamental theoretical knowledge) and better prepared in five categories (medical problem solving, holistic patient management, community health, communication skills and self directed learning). Supervisors reported significant differences in teamwork and personal attributes giving fewer low scores to the GEMP graduates. There were no significant differences between the scores for colleagues.

# **Conclusion:**

GEMP graduates felt better prepared in the areas which had been identified as reasons for curriculum change but less prepared in some of the basic sciences, particularly microbiology, pharmacology. These categories were not reported as significantly different by supervisors or colleagues but require attention in the curriculum.

# Initial perspectives of staff and students leads to timeous intervention in a newly implemented curriculum.

\*Dr AJ Louw, US; Prof J Bezuidenhout, US; Prof BB van Heerden, US; Me M van Heusden, US.

# Context and setting.

A process of curriculum revision for the MBChB programme at Stellenbosch University was started in 2002. As a result a new revised interdisciplinary curriculum (Foundation Phase) was implemented in 2008. Major changes included an interdisciplinary approach, contextualizing the natural sciences content within health sciences disciplines and teaching crucial generic skills.

# Aims.

To put quality assurance mechanisms in place to facilitate effective implementation of the new programme.

# Methods.

Student and faculty opinion regarding the new programme was obtained by conducting in depth semistructured interviews with lecturers and focus group discussions with students. All data, together with data from formal student course evaluation forms were analyzed.

# Results.

Student enjoyed the following: utility of the programme in general, support in mastering difficult basic concepts and the holistic insight it gave to them as health sciences students. Students appreciated the support, structure and presentation of the programme and were most positive when learning was based on real health sciences or clinical matters. They raised the following concerns: too many assignments, large volume of work and too many assessments. The lack of awareness of lecturers about duplication of content caused confusion and the teaching of generic and crucial life skills was not appreciated by all.

Some lecturers found it difficult to lecture to first year students and found that important content was omitted when they were unaware of the content of other modules. Lecturers were encouraged by the attitude and eagerness of students to learn but a lack of basic scientific knowledge in the first year was cause for concern. Quantitative data highlighted concerns about time scheduling, lack of time, administration and logistics, and the management of large classes.

On the basis of these findings the faculty implemented a number of measures including: streamlined courses by cutting out overlapping material, decreased lecture time, made more time available for group work, synchronized assessment and learning activities, designed workshops for lecturers and initiated discussions between module teams.

## Conclusion

Initial staff and student opinion can be successfully used to improve the quality of the learning experience of a new programme from its initial implementation.

# The DREEM in Zambia

Drs J. Schurgers, University of Zambia, (UNZA), SoM, Po Box 320296 Lusaka, Zambia

# Context

UNZA, School of Medicine set a Curriculum Review for the Mb ChB Curriculum in process in order to obtain international accreditation and for quality assurance. A need was felt to analyze student's perception of their educational environment as part of that, to identify areas for improvement within the Curriculum.

# Aims

The identified weaknesses in the educational environment will guide changes in the Curriculum in order to fine tune and enhance the learning environment for the students with the broader aim of quality assurance and delivering competent health professionals.

## Methods

In this explorative study, the Dundee Ready Educational Environment Measure (DREEM, Roff, 2004) questionnaire was administered to all students in all years of the undergraduate medical program (MB ChB), N=352. A quantitative analysis, through SPSS and Excel was done; the Mean as well as t-test for Equality of Means was determined The independent Sample t-test was done to identify significant differences between the different year groups, gender and pre-clinical and clinical years (p < 0.005).

One Focus Group Discussion was undertaken with a convenience sample of 12 students. Qualitative analysis of the DREEM scores on items in the different domains brought themes as guideline for the discussion.

# Results

The total DREEM score was 110.3 out of 200 (53 %). Year 2 has the lowest overall score, total 98/200, being least happy. Main results indicate that students feel that there is a lack of a good support system, that the teaching overemphasises factual learning and that teachers come across as too authoritarian which adds to the stress encountered.

## Conclusion

The score indicates a low appreciation of the students of their Educational Environment at UNZA, in comparison to other studies on the DREEM worldwide, with weaknesses mainly in the domains of social self perceptions and perception of teachers. This indicates a need for further studies to optimize the Educational Climate at UNZA, School of Medicine, aiming at improved quality of teaching & learning experiences. This could ultimately increase satisfaction and competency of students.

# Short course in Clinical supervision: Design, implementation and evaluation

Mrs E Archer University of Stellenbosch

# Context

Students in the programmes presented by the Faculty of Health Sciences need to demonstrate clinical outcomes. Health professionals supervise them in their various clinical contexts while gaining practical experience. These supervisors, contracted by Stellenbosch University, although experienced in their different professional fields, might not necessarily have teaching skills and expertise in adult learning. In an attempt to increase the quality of our students' clinical learning environments, the Centre for Health Sciences Education (CHSE) has developed and presented a Short course in Clinical supervision during 2008.In view of future courses it was vital to evaluate the course in terms of appropriateness and meaningfulness.

# Aims

The aims of the project was the following:

1. to get feedback from the course participants who attended the first course as well as the tutors involved in developing the course on how they experienced the course regarding the content, relevance and presentation strategies.

2. the feedback from both groups were used to recurriculate the course.

# Method

A retrospective qualitative study was done. After the first Short course (July – September 2008), semistructured interviews were held with a representative cohort of participants as well as tutors involved in the design and presentation of the course. Participation was voluntary. The recorded interviews were transcribed and the data analyzed. The feedback was used to effect appropriate changes to the Short course prior to its presentation in 2009.

# Results

• The coursework was manageable despite the fact that all participants were working fulltime.

- The content of the course was appropriate and assisted them to facilitate their students better.
- · Communication skills and their own confidence improved because of knowledge of teaching skills.

# Conclusion

The standard of clinical supervision of undergraduate students could be improved with Short courses in Clinical supervision. All clinical supervisors should be encouraged to complete this course before the University employs them as facilitators.
# Should discipline subminima be considered in assessment of an integrated curriculum?

Dr D.M. Manning, Prof D.R. Prozesky, Mr. T. Maswanganyi, University of the Witwatersrand

#### Context

An integrated curriculum such as the Wits MBBCh programme provides opportunities for students to exercise a selective approach to studying discipline-based material. The Faculty is concerned that students are able to pass the integrated assessments overall, while having minimal knowledge in certain disciplines. Previously our group reported preliminary studies in which we examined mean scores per discipline in the written assessments. The results indicated that there were indeed some differences and suggested that an expansion of the research was required.

#### Aims

The aim of the current study has been to carry out a more detailed analysis of the scores in all discipline areas to help establish whether there might be merit in considering introducing discipline-based subminima.

#### Methods

The study was a retrospective cohort study of the MBBCh IV class of 2008. All MCQ and short written questions in the assessments of that year were tagged according to discipline. For each discipline a weighted mean score was calculated and a frequency analysis carried out to establish the number of students scoring in each of four percentage intervals (0 to 25%, 25 to 50%, 50 to 75% and 75 to 100%) for that discipline. The numbers in the upper two intervals (i.e 50 to 100%) were combined, since 50% has been suggested as a possible discipline subminimum.

#### Results

In the larger preclinical disciplines which form the bulk of the learning content (Anatomical Pathology, Anatomy, Physiology, Microbiology, Pharmacology and Chemical Pathology) between 85 and 96%.of students achieved 50% or more. For the basic science and clinical disciplines which each make relatively small contributions to the total marks, the range was 39 to 98% and for the Community-Doctor, Patient-Doctor and Personal and Professional Development themes the range was 53 to 97%.

#### Conclusion

These results suggest that a number of students are indeed scoring below 50% for certain disciplines, particularly those contributing less to the total mark. Further analysis of the data should indicate whether these are the same students in each discipline or whether certain students appear to be learning selectively while still passing overall.

# Intergrating information communications and technologies (ICT) to enhance problem based learning

L. O. Amusa U Venda, D.Makaza, NUTS S. A Adeniran U Venda, Anke McCallum, FOTIM Nicholas Shelley FOTIM L. K. Ndaba U Venda

#### ABSTRACT

Professional preparation programmes in higher education in the 21<sup>st</sup> Century should ensure that students are exposed to the latest innovations in their chosen field. Introducing students to new ideas, societal trends and technical skills allow them to enter the workforce with assets that the current professionals do not possess. The changes affecting professional disciplines as a result of technological advances increase on a daily basis. These advances offer professionals more innovative, efficient and effective means of accomplishing important tasks and encourage them to be creative when designing and implementing new projects. At the same time, these advances challenge professional preparation programmes on how they can better provide instruction for their students. The University of Venda has adopted Problem Based Learning (PBL) in the quest to embrace new trends in pedagogy. Specifically in January 2008 the School of Health Sciences commenced with the introduction of PBL into the programmes of study at the five departments. This paper focuses on how the Centre for Biokinetics, Recreation and Sport Science at the University of Venda, in South Africa has been able to adopt the VUMA Portal and the Wiki as useful tools for providing instructions in their Problem Based Learning classes. The VUMA Portal and the Wiki are a Web 2.0, second generation of internet-based services that allow movements away from the static web pages to dynamic and shareable content. These usually include tools that let people collaborate and share ideas, opinions and findings, thus creating powerful ideas that could change the way people interact over the internet. The tools are made available by a non profit and non-governmental organization called the Foundation of Tertiary Institutions of the Northern Metropolis (FOTIM). The Centre, through an Intranet connection forms a Wiki Group on the VUMA Portal. A class of students goes through a short computer Microsoft application package deliberately tailored to the use of a Learning Management System, in this case the VUMA Portal and the Wiki. Lecturers at the Centre are trained to use the software. They create course/module websites on the Portal. The staff members then upload module descriptors, course calendars, assignments, handouts and other materials on the website. Discussion forums, chat rooms, web links to important databases specific to the modules are created or uploaded. The students can then upload files, assignments, participate in discussion forums with the lecturers and with other colleague students. The lecturers as the Course Managers control access rights to their course website. Thus our lecturers/facilitators have so far been able to use the VUMA-Wiki- to create interactive learning activities for students, draft assignments, conduct peer review, post and respond to questions on a given topic and create a Wiki as a presentation tool instead of using power-point. The students on their own can work together on a project (study group), provide a forum for discussing topics and obtain information relating to the modules. Thus so far, we have established that our students learn better and faster by using this innovation and have thus taken a full responsibility for their education. The innovation has contributed to the success so far achieved with the introduction of PBL.

Key words: Information Communications and Technologies (ICT), VUMA Portal and Wiki, Problem-Based Learning (PBL), Foundation of Tertiary Institutions of the Northern Metropolis (FOTIM).

### Mark discrepancies in computer-based assessments of true and false exams

**Ms. F. Haffejee**\*, Nelson R Mandela School of Medicine, University of KwaZulu-Natal **Prof. T. Sommerville**, Nelson R Mandela School of Medicine, University of KwaZulu-Natal **Ms. N.M. Cetywayo**, Nelson R Mandela School of Medicine, University of KwaZulu-Natal

#### Context

Multiple choice questions are a popular method of testing. These are objective questions that can test a large part of the syllabus in a relatively short time and are also easy to mark. A disadvantage is that they test recognition rather than problem-solving and this can lead to guessing – which can, however, be discouraged by deduction of marks for incorrect answers.

The Nelson R Mandela School of Medicine uses the type X format of multiple choice question where each item consists of a stem and a lead-in question, followed by a series of statements which are either true or false. These assessments are currently taken as a paper-based scanned version but the faculty is changing over to computer-based assessments.

#### Aim

The aim of this study was to investigate whether the score obtained in the computer-based version of the test differed from those of the paper-based version due to the configuration of the software that calculates the score.

#### Method

A previously used test, comprising 34 items with a total of 150 True/False statements, was used. (Each item had 3, 4, 5 or 6 statements). A sample of the marked scripts was chosen by random, stratified selection for re-assessment using a computer program.

#### Results

Five of the nine scripts showed variations in the marks obtained between the paper-based version and the computerized version. Two artificially-constructed answer schemes with the same total number of correct and incorrect answers in different distributions gave grossly different final scores.

#### Conclusion

Whilst the configuration options of the computer program allowed allocation of negative marks for incorrect answers, a negative score for an individual item was not carried over to the final score. This diminishes the penalty for guessing, and may even encourage strategic students to leave out parts of the curriculum when studying. We conclude that the carrying over of all negative marks to the final test score is essential.

# Implications of Whole Brain Learning on Assessment Strategies

#### Dr G.G.Wolvaardt, Foundation for Profesional Development (FPD)

#### Context

Annually the Foundation for Professional Development enrols 350 health care managers from the public and not-for- profit sectors in a one-year management development programme offered in collaboration with Yale University. Over the past four years the completion rate was consistently below 50%. In 2008 an action research project was implemented to determine if taking learning style preferences into consideration could improve completion on this course. Given that 90% of the enrolled managers are health care professionals we believe that the findings of this study would also be relevant to health education in general.

#### Aims

To assess the learning style preferences of one intake of the course in Gauteng and based on those results, redesign the assessment strategies of one of the core modules (Resource Mobilisation and Donor Relations) to take learning style flexibility into consideration.

#### Methods

The Herrmann Brain Dominance Instrument (HBDI) was utilized to determine the individual learning preferences of 25 students enrolled on the FPD/Yale Advanced Health Management Programme. The existing assessment strategies were evaluated in the context of learning style flexibility and a series of changes were made to ensure that the assessment strategy would cover all four identified learning style preferences.

#### Results

The historical pass rate on this module was 46% based on a single assignment that required students to write a donor proposal. This type of assessment favours left hemisphere learning style preferences namely the analytical and organizational quadrants. The assignment therefore did not take into account right hemisphere preferences such as interpersonal and holistic learning. The HBDI survey showed that the enrolled students reflected all four learning styles with a substantial number showing right brain dominance. A new assessment strategy was designed that increased the number of assessment to four assignments reflecting the four preferences. In spite of the increased workload, the pass rate shot up to 72%.

#### Conclusion

Health care professionals increasingly represent all four learning style preferences and the historical view of the left brain analytical scientist does not hold true. A major obstacle to academic success is not workload but rather inflexible assessment strategies.

# Correlation between continuous assessment, final exam and final mark for MB ChB III at Walter Sisulu University.

Authors: ME Garcia-Jardon, EV Blanco-Blanco, EN Kwizera, A Stepien, and S Vasaikar

#### CONTEXT AND SETTINGS:

The regular course in the MB ChB III programme at WSU integrates Anatomical Pathology, Pharmacology, Chemical Pathology and Microbiology. The course is organized in four blocks which are assessed by 2 components: -1 Continuous Assessment (CA), which contributes 60% of the final mark for the block. It includes two Modified-Essay-Questions (MEQ) papers and assessment in the tutorial process (TUT) (formative on weekly basis and summative at the end of the block). The latter constitutes 20% of the block mark and the MEQs contribute 40%; -2 End of Block exam (EOB) contributes 40% of the final mark. It includes the Individual Process Assessment (IPA) (30%) and the Objective Structured Practical Examination (OSPE) (10%). We decided to try to identify the capability of each component of assessment in MBChB III integrated course and then identify students in need of special academic support.

#### WHY THE IDEA WAS NECESSARY:

Identifying the assessment components' capability to predict the final results will assist in identifying, at the mid-block assessment, those students in need of special academic support.

#### WHAT WAS DONE:

To identify the correlation between each of the different components of the continuous assessment and the final examination performance in each of the four blocks; a retrospective, descriptive and analytical based study on the integrated marks of all the MB ChB III students at WSU in 2007 was done. Assessment Marks were stratified according to blocks and type of assessment (MEQ, TUT, OSPE, IPA) to be scrutinised by regression analysis versus their correspondence with the final marks for each block. Correlation Coefficients were used to assess the degree of association between each of the assessment components and the final mark.

#### **EVALUATION OF THE RESEARCH AND IMPACTS:**

The Modified Essay Questions (MEQ); followed by the practical exam (OSPE) are the two most predictive assessments of the final marks. Both correlate significantly with the final mark and can thus be used to facilitate the early implementation of a supportive system for students with poor performance.

TUT and IPA block marks did not show significant difference as blocks progressed showing a negligible or no correlation with the final marks. Weak students were identified; some of them were given advice by individual disciplines and coordinator, whereas some others were referred to psychiatrists and or psychologists for management/recommendations to Faculty.

#### **RECOMMENDATIONS:**

Tutorial activities should be standardized to ensure the reliability of the continuous assessment. We still have to find ways to implement standardization for such continuous assessment process.

# The value of service level agreements in an integrated course: managing the Graduate Entry Medical Programme (GEMP) at the University of the Witwatersrand

Prof DR Prozesky University of the Witwatersrand

#### CONTEXT

In an integrated, problem based programme such as that of years 3 and 4 of the undergraduate medical degree course at Wits University the management of the programme is usually given to an educational/ administrative unit. This is a departure from the traditional programmes where individual discipline-based departments take responsibility for lecturing, practical and exams. When the new GEMP was introduced at Wits there was considerable enthusiasm shown by a group of academics for the reform; however it was noted that this enthusiasm slowly decreased as the years went by, leading to increasing difficulty in for example obtaining questions from academic departments for integrated exams and clinical examiners for OSCEs. It was as if departments no longer considered themselves primarily responsible for teaching and assessing their disciplines.

#### AIMS

Since the educational unit in this case (the Centre for Health Science Education - CHSE) has no line authority over the academic departments which contribute to the programme a way had to be found to remedy the situation described above.

#### WHAT WAS DONE

The first step was to delineate in detail the responsibilities in the programme of the contributing departments, the CHSE and the Dean of Students. This delineation was based on what each unit had contributed previously to the programme. This was followed by a Faculty level decision that each of these bodies would be presented with a detailed list of its responsibilities at the beginning of each year, together with a request to sign what was called a service level agreement (SLA) to carry out these responsibilities.

#### **RESULTS/ IMPACT**

The initial response to the documents presented was threefold: a positive response agreeing to the proposed SLA; no response at all (i.e. ignoring the documentation); and a negative response indicating that 'professionals do not need this kind of coercion'. In practical response however there has been a significant improvement in timely provision of items (e.g. test questions for integrated exams) and personnel (e.g. PBL facilitators and case coordinators).

#### TAKE HOME MESSAGE

The problem of lack of departmental ownership in integrated curricula can at least partly be remedied by a system of yearly service level agreements.

### Assessment of Criteria for Awarding Credits for Continuing Professional Development

Prof François P R de Villiers, University of Limpopo

#### Why was the idea necessary:

Of the three phases in a professional's career, namely, undergraduate studies, postgraduate specialisation, and lifelong learning, the last is the least well regulated. Previously known as Continuing Medical Education, the term Continuing Professional Development (CPD) is preferred. In South Africa, CPD is in its second incarnation as a programme of the Health Professions Council of South Africa, and is now well established.

#### Aims:

The aim of this study was to discover how CPD points are regulated in South Africa.

What was done: The requirements to earn one CPD point (general), as well as one Ethics CPD point were established. Journals offering CPD points upon completion of a questionnaire based upon the journal contents were selected, and several issues of each were subjected to content analysis, as follows: articles were analysed by measuring the length of the article in column-centimetres. The total number of words were calculated. Available CPD courses were examined to establish how programmes based on attendance, those based on distance learning and hybrid programmes were assessed and accredited.

#### **Results:**

Attendance by a practitioner at a course where CPD points are offered earns one CPD point per hour which (s)he attends. No assessment of the quality of the educational offering is made. There is also no attempt to assess the health practitioner's retention of the material. If the CPD points are Ethics points, the practitioner will earn two CPD Ethics points per hour which (s)he attends, again irrespective of the quality, and with no assessment. The presenter will earn double the points. Content analysis of journals revealed that in South African Family Practice, the average number of words to earn one CPD point was 2638, while in the South African Medical Journal it was 3380 words. For hybrid courses the points earned by attendance are simply added to those earned by assessment.

#### Impact:

This study established the fact that attendance at meetings and courses are treated differently from distance learning educational programmes.

#### Take home message:

A developer of a distance learning programme can benchmark it against current practice standards. The discrepancy between passive attendance of courses and active learning required by a distance learning programme is highlighted.

# A training programme for social gerontology in the South African context from a postmodern perspective

#### V Roos, A Herbst, J Hoffman, P Greeff

#### Context:

Gerontology in South Africa is an under-explored area in terms of training and research. The North-West University in collaboration with the United Nations International Institute on Ageing presented the first training programme: *An Introduction to Social Gerontology in South Africa,* from 8-13 December 2008 to address this need.

#### Aim:

The general aim of the course was to create awareness in the participants regarding the needs as well as the potential of older persons, as human beings, who have the right to manage their own lives and who can participate actively within their own communities for as long as possible.

#### What was done?

The training programme was based on educational principles from postmodernism and social constructionism. Experiential learning was utilised to ensure reciprocal learning processes and participative action research was used to evaluate the process and outcomes of the training. Participants represented non-governmental organisations, policy makers, health care professionals from different disciplines and residential care managers, involved with older persons. The training content was based on the Madrid International Plan of Action on Ageing.

#### **Results:**

The participants were challenged to consider alternative conceptual paradigms. Current research were presented in a participative manner on themes relevant to population and individual ageing. The training programme was concluded with presentations by the participants that illustrated their ability to apply knowledge and insights gained to address contentious issues in complex communities. The presentations suggested innovative and appropriate interventions with a possible impact on micro-, meso-, and macro levels. Networking were promoted and sustained even after the training had been concluded.

#### Take home message:

This training programme illustrated the notion that participants had the potential to become autonomous learners who can construct relevant knowledge as it is needed in their day-to-day lives and that learning was optimised within the interpersonal contexts of the training.

# Assessment of foreign-qualified doctors' clinical skills using an OSCE

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#### Context

Doctors who qualified outside of South Africa and wish to register as medical practitioners with the Health Professions Council of South Africa (HPCSA), are required to pass a licensing exam. The first component of this exam is a written exam consisting of two parts – one on clinical practice and the other on medico-legal and ethical issues. If the candidate passes both parts, s/he is invited to the Objective Structured Clinical Examination (OSCE). Since 2002, the HPCSA contracted the South African Family Medicine Education Consortium (FaMEC) to provide this exam.

#### Aims

To analyse the performance of foreign-qualified doctors using an OSCE designed to test their clinical skills to practise as generalists in the public service in South Africa

#### What was done?

The process of blueprinting the OSCE, and the design and vetting of the stations is described.

The performance of the candidates is analysed in terms of their demographic characteristics i.e. nationality, age, university that conferred undergraduate medical degree, language of instruction, countries in which they have practiced, length of time in practice, postgraduate medical qualifications and discipline of clinical practice

#### Results

The analysis may form the basis for:

decisions by the HPCSA on access to licensing for practice in South Africa for some groups of foreignqualified doctors;

the design of a curriculum for a training programme that would prepare foreign-qualified doctors for practice in the public sector of South African ambulatory health care.

#### Take home message

Analysis of the results of an OSCE that has been blueprinted against the requirements of a clinician in South African ambulatory heath care may be used in curriculum development of a training programme for foreignqualified doctors.

# Clinical supervision of dental students: A staff training workshop programme

#### Soraya Harneker

#### Context:

In Paediatric Dentistry part-time staff is appointed to assist with the teaching and clinical supervision of the dental students. At the start of the academic year the staff is invited to a presentation meeting to introduce them to the duties and tasks required for the job. They are also given a pack of notes with the guidelines for performing the duties and tasks. The meeting is usually poorly attended. There is a general apathy among the staff in that they do not read the guidelines. Problems are then encountered during the clinical supervision of students and impacts negatively on the students' clinical training.

#### Aim:

To introduce clinical supervision duties and protocols to the part-time staff through an interactive workshop.

#### What was done:

At the beginning of the academic year, staff was informed of their selection as a clinical supervisor for the undergraduate students in Paediatric Dentistry. The staff member's successful appointment to the position was dependent on their *attendance* of the workshop.

An introductory talk was given and then the participants were given a worksheet that had two case scenarios. The cases focused on professionalism of supervisors in clinical teaching situations. The participants had to evaluate the positives and negatives of the supervisor's role in the clinical scenarios created.

#### **Results:**

The participants attended the workshop but were more at ease and eager when the interactive part was conducted. The atmosphere was vibrant with discussions and comments as the participants freely engaged in the discussions and reflected on the case scenarios presented. In the plenary discussion the participants concluded the *expected* behaviour of staff as professionals in the clinical teaching environment.

In the evaluation of the workshop: all the participants responded that they found the workshop valuable. It helped them to "know how to handle clinical scenarios". They thought the cases were relevant and did not feel threatened or defensive that the cases were about them or that they were being told what to do.

#### Take home message:

The workshop presented a non-threatening, interactive and participatory learning methodology for introducing supervisors to the expected professional conduct in the clinical supervision of dental students.

# Evaluation of the integrated primary care block for final year medical students

#### Prof ID Couper\*,

Ms NO Sondzaba; Division of Rural Health, University of the Witwatersrand, Johannesburg

#### Context:

The Integrated Primary Care (IPC) block is a six-week rotation for final year medical students at Wits which is undertaken in either a rural or urban district in Gauteng or North West province. It takes place in a variety of settings such as health care centres, clinics and district hospitals. The block is planned managed and examined by a team with representatives from 7 disciplines, coordinated by the Rural Health Division. It is task-orientated and learner-driven, with a focus on the integration of knowledge and skills in the consultation of the undifferentiated patient. Objectives focus around clinical care, health promotion and disease prevention, the health care team, a biopsychosocial approach and the health care system.

#### Aims:

To evaluate the IPC block in on an ongoing basis in order to assess its impact on students and improve its delivery.

#### Methods:

All students completing the block (about 30 per rotation) are requested to complete pre- and post-placement questionnaires, in which they self-assess their level related to the objectives of the block, and record their attitudes to a range of issues around district-based and rural health care as well as their opinions on aspects of the block itself. Responses before and after the block are compared where appropriate.

#### **Results:**

The results of the 2006 evaluation will be reported. 187 responses students participated. Students showed improvement in relation to all the objectives of the block. The block was positively evaluated. Attitudes shifted in a number of areas.

#### **Conclusion:**

The block is highly successful as a learning experience and is enjoyed by most students.

### Service-learning in a rural community. An inter-professional practice example.

\* Mr O Khondowe, Stellenbosch University; Ms F Waggie, University of the Western Cape

#### Context:

The South African Higher Education Policy (1997) advocates for inter-professional programmes and collaboration between higher education institutions and communities. Inter-professional education within a service-learning paradigm provide students with the skills and tools needed to operate successfully in the ever-changing health care context in order to provide better, effective and quality health care. An inter-professional service-learning module was designed and implemented during 2008 in a rural community. The course was specifically designed within a service-learning paradigm that allowed students to experience learning and working inter-professional service-learning course was rooted in the primary health care approach, and provided a comprehensive inter-professional health care plan. Students were exposed to health, social needs and challenges of individuals and groups at the primary care level.

#### Aim:

To explore the experiences and perceptions of all the stakeholders involved and identify some key factors that contributed to the challenges and successes of the program.

#### Methodology:

A combined qualitative and quantitative methodology was employed. Final year undergraduate students completed inter-professional practice pre and post-questionnaires. All stakeholders were interviewed face-to-face. Interviews were video recorded and transcribed verbatim. Finally, inferences were drawn from both quantitative and qualitative data.

#### **Results:**

After the intervention, students reported a better understanding and importance of inter-professional practice, processes involved and had a better perspective of inter-professional practice. Health care users including their carers were contacted and interventions were successfully done in inter-professional teams. However, long-term goals were limited by the short span of the programme.

#### **Conclusion:**

The inter-professional practice programme created an environment where students can learn and practice in interdisciplinary teams and improved students' perception of the practice. Such practice should be continuous in order to create long term goals. A well-coordinated programme and involvement of all stakeholders is key to successful implementation of inter-professional practice.

# Introduction of a new clinical assessment: did it achieve the aim

Dr L Green-Thompson, Drs Z Mohamed, O Oyedele, Prof D Prozesky; University of the Witwatersrand

#### Context

The Graduate Entry Medical Programme at Wits University has introduced early clinical exposure to medical students in the MBBCh 3and 4. This comprises a series of weekly visits to the hospitals in the teaching hospital complex over the two years. Clinicians reported a lack of clinical reasoning in students who attended formal clinical rotations in MBBCh 5. An observed clinical assessment was introduced in 2008 based loosely on the mini-CEX described by Norcini et al to remedy this perception. The assessments were held over a six day period with a group of 7 examiners with each student being assessed on a single case.

• to establish which methods students used to revise the clinical skills which they had been taught over the preceding two years in anticipation of the exam

• to assess the students attitudes toward the exam

#### Methods:

Students were asked to complete a questionnaire with a series of quantitative and qualitative questions.

#### **Results:**

Students were examined on patients from 7 disciplines. The total number of candidates for the exam was 191. The mean mark for the assessment was 85.1% (std dev 10). Two students were reexamined after not achieving a satisfactory performance. 89% of students completed the evaluation questionnaire. 76% students read their clinical notes, 60% read a clinical text book and 31% spent additional time in the wards examining patients. 79% of students strongly agreed or agreed that the assessment was a valuable experience.

Some comments from the questionnaire:

• I revised all the previous work. I actually felt that I gained some knowledge in the last 2 years. I am more prepared for next year.

• hospital experience was non existent because doctors viewed us as a nuisance.

#### Discussion:

Students have generally had a positive response to this assessment. The assessment achieved the desired aims of getting students to revise their clinical skills learning form the previous two years. this is noted in the following comment advising students who follow:

Go through the examinations on hospital days, because unless you are used to the process, reading through the notes just before the exam doesn't help the practical parts

# Phelophepa health care train: Pharmacy students' experiences

#### Prof Ilse Truter, Nelson Mandela Metropolitan University

#### Context:

South Africa has many rural areas without adequate health care services. Pharmacy is one of the worst affected, because there are virtually no pharmacies in rural areas, resulting in a shortage or total lack of supply of essential medicines to the sick and most needy people. The Phelophepa health care train started in 1994 as the first and only primary health care train in the world. Every year pharmacy students from five universities in South Africa work in groups of two on Phelophepa for a one-week period.

#### Aims:

The aim of this study was to explore and report on the experiences of pharmacy students at the Nelson Mandela Metropolitan University who worked on Phelophepa during 2008.

#### Methods:

A qualitative research methodology was followed. Content analysis was done on 14 reports that students submitted as well as on their reflection about their week on Phelophepa.

#### **Results:**

The most important theme that emerged was that Phelophepa was a life-changing experience. Students were of the opinion that after working on Phelophepa they understand that they can make a difference, they realise how much knowledge they are already equipped with that they previously thought was of a theoretical nature only and they understand the importance of the compulsory community service year in South Africa before they can register as pharmacists. It also taught them how to work as part of a health care team with other medical disciplines, how to gain more experience in dispensing, how to perform basic pharmaceutical interventions, how to give prescribing support to other health care professionals, how to promote health awareness to the community, and also experiential exposure to the Essential Drugs List (EDL) and Standard Treatment Guidelines, which are in accordance with WHO recommendations. Negative experiences included the fact that they were taken out of their comfort zone, they worked long hours and they did not always agree with the nurses' prescribing, especially with respect to antibiotics.

#### **Conclusion:**

Overall, the students' experiences were overwhelmingly positive. Phelophepa not only provides a necessary service to patients in rural South Africa, but also serves an important educational role.

# Evaluation of a health education programme in schools

#### Prof. JM, Frantz, University of the Western Cape

#### Background:

School-based health education programmes are important as they provide the learner with the skills and knowledge that will enable them to make informed health decisions. The physiotherapy profession is actively involved in health education and health promotion using schools as a setting for health promotion. Physiotherapy students do health education as part of their community block during their clinical rotation; this project was seen as an opportunity for students to address health issues in a school setting and thus improve the skills of the physiotherapy students as facilitators and the knowledge of the learners.

#### Aim of the study:

The aim of the study was to evaluate the effectiveness of a pilot health education programme focusing on creating awareness and thus improving knowledge about the risk factors for chronic diseases of lifestyle.

#### Methods:

A pre-test – post-test design was used to determine the effects of the intervention on the knowledge of the learners and a qualitative evaluation was used to explore the views of the learners regarding the intervention. The health education programme was conducted once a week for 40 minutes and ran over a period of 5 weeks. Quantitative analysis was done using SPSS for descriptive and inferential statistics. The qualitative analysis was analysed into categories and themes.

#### **Results:**

93 grade 11 and 12 learners participated in the study. Among these learners the following risk factors for chronic diseases of lifestyle were present namely smoking (35%); drinking (81%); physical inactivity (59%) and poor diet (24%). Following the health education programme, knowledge relating to diabetes, hypertension and stroke increased from a mean score of 13.1 to 18.9. The qualitative evaluation highlighted the need for continuation of the programme and extending it into communities. Learners also stated the need to improve the skills of facilitators to facilitate groups.

#### **Discussion and Conclusion**

The findings indicated that risk factors for chronic disease are present among young people and knowledge relating to these risk factors can be improved using a health education programme.

#### Take home message

Health education programmes implemented by health professionals can be effective in improving knowledge. The challenge associated with providing learning experiences is the need to equip the health professionals with the appropriate skills.

# Model for education of reflective neonatal nurses in SA context

<u>\*</u>Dr C Maree, University of Pretoria; Prof C Van der Walt, University of Northwest Province; Dr G Van Rensburg, UNISA

#### Aim and context:

A model is presented for the post-basic education of reflective neonatal nurses in a South African context.

#### Methods:

The model is developed following a qualitative, explorative, descriptive design. Methods of data collection included theoretical enquiry, focus groups, peer review. Qualitative content analysis was done.

#### **Results and conclusion:**

The model is described in terms of the South African higher education and nursing education framework, neonatal nurses as students, reflective learning, programme outcomes, the role of the educator, and educational approaches and content outline of the educational programme.

# Competencies of reflective paediatric nurses

#### Ms. S. Rossouw, University of Pretoria

Competencies are general descriptors indicating a certain excellence in performing skills and applying knowledge within a marked value system. The curriculum in paediatric nursing should be competency-based and focused on the cutting edge changes influencing paediatric nursing practice. Approaching paediatric nursing education from this viewpoint ensures the development of a reflective paediatric nursing practitioner who displays these complex qualities and differentiates herself in clinical practice.

# Access with success: Challenges faced in an extended curriculum at the University of the Free State

Dr H Bezuidenhout; Dr L Naude; Mrs A Sharp

#### Context

Access with success in higher education institutions in South Africa poses various challenges to educators and administrators. In an effort to provide students who are not sufficiently prepared for higher education with a better opportunity to be successful in their studies, the Faculty of Humanities, University of the Free State introduced the extended B.A. and B.Soc.Sc. programmes during 2005. These programmes support students by including compulsory developmental modules to their mainstream curriculum.

#### Aims

Preliminary results indicate that the through-put rates in the extended programmes are currently still not satisfactory. It is evident that students experience problems in understanding the relationship between the developmental modules and the mainstream modules and, as a result, integration does not take place. Therefore, the purpose of this project is to establish a support system for students in their first year of study, and assist them in integrating developmental skills with the academic content of the mainstream modules.

#### Implementation

In 2009 the focus is on first-year students. Two developmental modules, namely Basic Skills and Competencies for Lifelong Learning and Language for Academic Purposes, as well as four mainstream modules, namely Psychology, Anthropology, Communication Science, and Sociology form part of the first year of the project. In order to facilitate the needed integration Academic Facilitation Sessions (in small groups of approximately 25 students each) are conducted. These sessions are resource-based, with an activity driven, interactive and discussion-based methodology. Various resources are used as sources of support and motivation for novice learners. A systemic approach to knowledge construction is followed where the students have the opportunity of using many different resources to construct their own meaning in a social context. This encourages the students to develop meta-cognitive processes and empowers them to be active and autonomous learners. The design of the learning activities is based on the experiential learning cycle of David Kolb, focusing on students' experiences, as well as reflection on these experiences.

#### **Results or impact**

In order to assess the process, as well as impact of this project, a mixed methods research approach will be utilised.

Qualitative information will be obtained from focus groups conducted with the students, facilitators and coordinators involved in the project. Furthermore summaries of conversation sessions between roleplayers, as well as evaluation forms will be analysed by means of thematic content analysis. The focus will be on themes relating to experiences, benefits and challenges to all involved.

Quantitative data will be gathered from first year students by means of biographical questionnaires, as well as a battery of surveys pertaining to constructs such as age, gender, ethnicity, home language, language of instruction, matriculation marks, language proficiency, time invested in studies, educational level of family of origin, locus of control, academic self concept,etc. This information will be used to obtain descriptive data regarding students in the extended curriculum. (At the end of 2009, this information will be used in conjunction with academic results and data from students in the mainstream curriculum. Predictors of academic success, as well as differences between students in the mainstream and extended curriculum will be determined by means of regression analyses and multiple analysis of variance respectively).

#### Take home message

This presentation will give an overview of the challenges faced and lessons learnt thus far in the process. The presenters are looking forward to the opportunity to share the intermediate results of this work in progress and trust that this forum will provide a valuable platform to share ideas and receive feedback on this endeavour.

#### **Reference list**

Cross, P. (1998). Why learning communities? Why now? About Campus, 3(3), 4–11.

Johnson, B., & Onwuegbuzie, A. J. (2004). Mixed methods research: A research paradigm whose time has come. Educational Researcher, 33(7), 14-26.

Kolb, D.A. (1984). Experiential Learning: Experience as the source of learning and development. Englewood Cliffs, New Jersey: Prentice Hall.

Letseka, M.; & Maile, S. (2008). High university drop-out rates: a threat to South Africa's future. HSRC Policy Brief, March 2008. Retrieved on March 30, 2009 from http://www.hsrc.ac.za/Document-2717.phtml

# Mainstreaming HIV into physiotherapy education and practice.

#### <u>Dr H Myezwa</u>

#### Context

This study centres on the issues concerning HIV/AIDS and physiotherapy education, curriculum and practice. In particular what HIV input should be included in a physiotherapy curriculum? Four initial steps informed the study and included a comprehensive literature review that placed the literature into the International Classification Of Function disability and health (ICF) framework and provided a comprehensive description that would concern physiotherapists.

Two studies informed the clinical picture and were both cross sectional and descriptive. Study I sought to establish the level of referral to physiotherapy by retrospectively examining the patient records of patients admitted with HIV related conditions over a period of one year. Of the 732 patient records reviewed, 139 (19%) had diagnoses considered suitable for physiotherapy and 3% were referred to physiotherapy.

Study 2 aimed to obtain a relevant overview of the functional and participation picture of people living with HIV/AIDS. Two groups of patients were studied i.e. an in-patient group and an out patient group. Following this an audit of all the curricula from all eight universities was conducted. All these studies informed the fourth study which is reported on.

#### Aims

To outline a framework of HIV/AIDS input into a physiotherapy curriculum. The specific objective of this study was to determine the clinicians' and academics' perceptions regarding HIV curriculum and practice.

#### What was done?

This was done by integrating the results found so far and verifying and enriching this data by gaining clinicians and academics insights and perceptions around HIV based on their clinical experience and in the academics case their educational experience. Focus group discussions were conducted and a qualitative approach was undertaken for data analysis. A framework for curricula content emerged from this exercise.

#### **Results or impact**

Themes emerged and were subjected to further abstraction to identify further links. In this process similarities and relationships were discussed and concluded on. A taxonomy of micro meso and macro issues emerged. A framework for curricula content was developed from this exercise.

#### Take home message

What the clinicians and academics felt was important for inclusion in the curriculum is well outlined however, gaps and misconceptions need to be adressed.

### Does learning approach determine the outcome in the Anatomy courses?

#### Dr. G. Milanes-Rodriguez\*, Dr. JL Bernal-Muñoz, Prof. M. Garcia-Jardon

#### CONTEXT:

There is much subjective discussion but few scientific data that explores how students approach their individual learning of Anatomy. In this study, a questionnaire that explored the ways in which students approach the learning of Anatomy, was distributed to second year medical student's (n=110) at Walter Sisulu University. Ninety one (82.7%) of students completed the survey.

#### AIMS:

To correlate the students' learning approach with the results of the OSPE exam in the Neuro-anatomy block of MBChB II students.

#### WHAT WAS DONE:

A semi-structured questionnaire exploring the conditions and ways by which students learn anatomy was applied. The block marks for the final OSPE in Neuro-anatomy were correlated with the student's approaches to the learning of anatomy. Logistic regression was used for the estimation of the odds ratio with 95% confidence intervals.

#### **RESULTS:**

The popular approaches to learning anatomy were various combinations of memorization, visualization and trying to gain deep understanding. Our results showed that the probability of obtaining >50 percent in the end of block OSPE was 1.11 for memorization, 1.83 for understanding, 3.68 for memorization and visualization, and 6.37 when all the three strategies were utilized. Superficial approach to learning anatomy (memorization) is associated with a lower probability of achieving >50 percent in the OSPE, whereas the use of deeper approaches to learning (understanding, visualization) are associated with higher probability of obtaining >50 percent.

#### TAKE HOME MESSAGE

Learning strategies that combine superficial and deep approaches are associated with a higher probability of obtaining >50 percent.

Student's motivation for deeper approach to learning in Anatomy during their SDL must be emphasized.

# Evaluation of community based education and service courses for undergraduate radiography students at Makerere University, Uganda

Mr. Mubuuke AG(presenting Author)-Makerere University; Assoc. Prof. Kiguli-Malwadde E-Makerere University; Dr. Byanyima RK-Mulago Hospital; Mr. Businge F.-Makerere University

#### Context:

The Faculty of Medicine, Makerere University is the eldest Health Professions training Institution in East Africa. It has been training health professionals since 1924. In 2001, a Bachelors degree in Radiography was started. For a longtime, the University had a traditional curriculum and after a curriculum review, it decided to change to a Problem Based Learning (PBL)/Community Based Education and Service (COBES) curriculum. During COBES, radiography, medical, nursing, dentistry and pharmacy students are sent to community health facilities where they are expected to participate in community services alongside other Primary Health Care activities. This study was carried out to get opinions of teachers and students of radiography regarding this community based training.

#### Aims:

To evaluate the significance and relevance of Community based education and service to radiography training.

#### Methods:

Cross-sectional descriptive study using self-administered questionnaires and Focus group discussions.

#### **Results:**

91.4% of both students and teachers affirmed that this community training is significant and relevant to radiography. 71.4% of the students had participated in X-ray services and 39.2% in ultrasound services during COBES.68.6% of the students reported that they needed to be more prepared for the COBES training.

#### Conclusion:

Both students and teachers have embraced COBES as being relevant to radiography training for the Ugandan situation and probably for the rest of the world.

# The development and validation of an evaluation instrument for bedside teaching

Prof M Veller (Wits); Dr L Greeen-Thompson (Wits); Dr P A McInerney (Wits)

#### Context:

The benefits of bedside teaching have been described and documented and include the demonstration of communication skills, the findings of the physical examination, the teaching of the humanistic aspects of clinical medicine and opportunity to role model professional behaviour, as well as the opportunity to observe the learners (Ramani et al 2003; Aldeen and Gisondi 2006). Bedside teaching forms the core approach to teaching and learning in the third and fourth years of the GEMP programme at Wits. Students are divided into groups of approximately 30 students and rotate through the various clinical disciplines. Little, or no attention, has been given to the evaluation of bedside teaching in these years of study.

#### Aims:

The purpose of the study was to design and validate an evaluation form for the quality of bedside teaching.

#### Methods:

An evaluation form was designed and 12 groups of approximately 10 students were asked to complete the form after they had experienced a teaching session in one of the three academic teaching hospitals in the Wits complex. Crohnbach's alpha was calculated for each individual item in the form as well as for each subset / cluster.

#### **Results:**

The overall Crohnbach's alpha was 0.9627. Each subset had a Crohnbach alpha > 0.8

#### **Conclusion:**

The results revealed that each item was relevant and thus the evaluation instrument can be used with confidence to evaluate bedside teaching.

# Evaluation of the integrated primary care block for final year medical students

#### Prof ID Couper\*, WITS Ms NO Sondzaba - WITS

#### Context:

The Integrated Primary Care (IPC) block is a six-week rotation for final year medical students at Wits which is undertaken in either a rural or urban district in Gauteng or North West province. It takes place in a variety of settings such as health care centres, clinics and district hospitals. The block is planned managed and examined by a team with representatives from 7 disciplines, coordinated by the Rural Health Division. It is task-orientated and learner-driven, with a focus on the integration of knowledge and skills in the consultation of the undifferentiated patient. Objectives focus around clinical care, health promotion and disease prevention, the health care team, a biopsychosocial approach and the health care system.

#### Aims:

To evaluate the IPC block in on an ongoing basis in order to assess its impact on students and improve its delivery.

#### Methods:

All students completing the block (about 30 per rotation) are requested to complete pre- and post-placement questionnaires, in which they self-assess their level related to the objectives of the block, and record their attitudes to a range of issues around district-based and rural health care as well as their opinions on aspects of the block itself. Responses before and after the block are compared where appropriate.

#### **Results:**

The results of the 2006 evaluation will be reported. 187 responses students participated. Students showed improvement in relation to all the objectives of the block. The block was positively evaluated. Attitudes shifted in a number of areas.

#### **Conclusion:**

The block is highly successful as a learning experience and is enjoyed by most students.

# FORMATIVE FEEDBACK: IS IT WORTH THE EFFORT?

#### Jeanette du Plessis; Central University of Technology

#### **Background:**

In a current study in the Radiography pre-graduate diploma course at the Central University of Technology, Free State (CUT), we attempt to identify the students' perceptions regarding the importance and implementation of formative feedback on assessment activities. This has become essential due to the lack of improvement in assessment marks, and this after extensive effort from the facilitators to give good quality feedback after every formative assessment activity.

#### Study objectives:

The aim of the study is to identify misconceptions among the students regarding the role of formative feedback. In additions students need to be sensitised to the seriousness of acting on feedback in order to improve future assessment marks.

#### Summary of methods:

Questionnaires was distributed among the students in the Radiography programme (first-, second- and third year). Questions regarding formative feedback were also included in the agenda for discussion at focus group meetings held on a quarterly basis with each of the year groups.

#### Summary of results:

Results so far show that many challenges exist to sensitise and educate students to take the information from formative feedback seriously in order to improve their achievement. Likewise, they need to be sensitised regarding the effort from the facilitator and the time going into formative feedback processes.

#### Take home message:

The study, thus far, is an attempt to identify possible misconceptions among students regarding the importance of formative feedback. Subsequent methods to improve the utilisation of formative feedback on assessment activities among the Radiography students at the CUT will be investigated as an ongoing action research project.

# Portfolio-based assessment of general skills: development and evaluation of an interim solution.

#### Mnr., AP Hugo\*, School of Medicine, UFS ; Dr., AA Beylefeld, Faculty of Health Sciences, UFS

#### Context:

Portfolios offer a variety of benefits in educational settings. Online portfolios complement these advantages. The School of Medicine at the University of the Free State uses paper-based portfolios to summatively assess critical outcomes in the Module MEA153 on general skills since 2000. In 2007 this module was relocated to a blended-learning environment. On a directive from the E-learning office, Moodle was selected as Learning Content Management System. Moodle potentially offers a variety of electronic portfolio solutions. These solutions were inhibited by delays in the development of a native Moodle portfolio module. The UFS decision to move away from Moodle as LCMS created a transitional period where improvements and upgrades were neglected. Consequently the authors developed and investigated an interim electronic portfolio as a possible assessment solution. At first, a database-driven web interface was formatted into an electronic portfolio to reduce assessment "housekeeping" aspects. In 2008 the portfolio was enhanced to what may be described as a reflective assessment portfolio with artefact collection.

#### Aim:

To describe the development of the electronic portfolio and report student evaluations regarding acceptability and effectiveness of the assessment method.

#### What was done:

An exploratory investigation into the design and effectiveness of the electronic portfolio was done to describe the development and improvements that took place from 2007 to 2008. Students' perspectives regarding the reflective assessment portfolio was captured through a module evaluation questionnaire in 2008 (n=139). Structured and free-text responses were collected.

#### **Results:**

Structured response ranges were, negative (10%), indifferent (37%) and positive (53%) in 2008. Openended responses (2008) indicated that student-centred portfolio management compelled students to keep abreast of performance tasks and assignments related to skills development.

#### Take home message:

The authors, in their respective roles of developer and module leader, are convinced that the interim solution may be retained with good effect until a native electronic portfolio solution in the preferred e-learning environment, as prescribed by the UFS, is in place.

Prof. DJH Niehaus, Dr. Esme Jordaan, Dr. R Gunther, Dr. L Koen

#### Context

Nonverbal communication skills play an important role in the doctor-patient relationship.

#### Aim:

Our aim is to develop a rating tool for non-verbal communication that will be used in an ongoing study aimed at establishing whether proficiency in non-verbal communication correlates with academic performance and facial affect recognition.

#### What was done:

Video interviews conducted by late rotation psychiatry students as part of their portfolio were rated according to a 5-point rating scale comprising 8 dimensions of non-verbal communication. Inter- and intra-rater reliability was assessed. The academic performance records of each student were analyzed in preparation for the statistical modeling required to assess the relationship between academic performance and non-verbal communication skills.

#### **Results:**

Sixty students partook in phase 1 and 2 of the study and more than 120 patient exposures were rated. Good intra-and interrater reliability was demonstrated. The academic performance analysis showed a correlation between the outcome of the oral examination and the portfolio mark.

#### Take home message:

The development of the non-verbal behaviour rating scale and the analysis of the academic performance of the medical students now allow us to investigate the relationship between these variables and facial affect recognition. This is the next step in a process which aims to improve the overall non-verbal proficiency in medical students.

# Learning outcomes for community physiotherapy in South Africa

\* **Ms K Mostert-Wentzel**, University of Pretoria, **Dr FAM Wenhold**, University of Pretoria; **Prof J Frantz**, University of the Western Cape

#### Context

Prior to 2003 most physiotherapy services in the public sector in South Africa (SA) were hospital-based. The implementation of compulsory community service for newly qualified physiotherapists prior to registration at the Health Professions Council of SA necessitated the revision of community-based practice teaching components in the curricula of undergraduate programmes across the country.

#### Aim

To determine current learning outcomes of community-based practice teaching modules in undergraduate physiotherapy programmes in SA.

#### What was done

Document review was undertaken of the community-based practice teaching module(s) of all undergraduate physiotherapy programmes in SA. A list of themes was compiled and the frequency with which each theme was covered by the different institutions was determined.

#### Results

Twenty-six themes were identified. All eight institutions aim to empower graduates with knowledge and skills to work at primary health care level, undertake health education to prevent diseases, and address issues relevant to disability and the determinants of health. Other themes included the ability to implement services relevant to the health needs of communities and health promotion programmes (n=8), to work in a community setting (n=8) and to demonstrate accountability to the community, structure of the health care system (n=5), levels of health care delivery (n=4), health legislation and policy in SA (n=3), the role of physiotherapy in community development (n=2), the role of physiotherapy in occupational health (n=2) and home visits (n=3). A striking finding of the document review was that although common themes were identified across the programmes, few have articulated these as core learning outcomes.

#### Take home message

To a greater or lesser extent, SA training institutions' curricula reflect changes in the health care system. The information gathered in this study lays the foundation for developing a national consensus statement regarding core learning outcomes for community-based physiotherapy in SA.

# Clinical Associate Curriculum: An Integrated, Problem Solving Approach

#### <u>Prof K Hammond</u> – Wits , \*Dr A Truscott – Wits

#### Context

Following recommendations in the Pick Report on Human Resources for Health, The National Department of Health recognised the urgent need for a new category of mid-level health professional, designated Clinical Associate, to work within the Health Service in district hospitals. Three Universities agreed to develop training programmes. Courses began at Walter Sisulu University and at the University of Pretoria in 2008 and at the University of the Witwatersrand in February 2009.

#### Aims

To develop at the University of the Witwatersrand a course structure the principle of which would be to integrate knowledge of biomedical, behavioural and clinical sciences and clinical practice, and to develop communication and psychomotor skills, so as to understand diseases and to assess and manage patient conditions, as required to fulfill the role of a Clinical Associate.

#### What was done

A three year integrated curriculum was developed, focusing in first year on the individual patient, in second year on the family in health care and in the third year on the hospital and the community. Using mind maps, a problem solving approach including biomedical, psychosocial and clinical sciences and using mind maps was introduced; this formed the foundation for the learning process. Throughout the course, the emphasis is on the use of clinical sciencies and the study of district hospital patients to develop knowledge and analyse medical problems seen in primary care.

#### **Results or impact**

The first block of teaching, now completed, gave an introduction to molecular and cellular structure and function in the context of a patient with diabetes. For the next and subsequent blocks, mind maps have been developed for specific scenarios and the problem solving process will be applied to the different systems of the body. These will be described and our experience with this learning method will be discussed.

### A Multiprofessional curriculum review process: Lessons from the coalface

Prof S Amosun, UCT; Ms M Duncan, UCT; Ms N. Hartman; UCT Dr V Janse van Rensburg; UCT Ms E Badenhorst, UCT.

#### Context:

The UCT School of Health and Rehabilitation Sciences launched an extensive intra- and cross-programme curriculum review project in 2007 to address national health and higher education policy imperatives and prepare for the first cohort of OBE school leavers entering tertiary education in 2009.

#### Aim:

The aim of the paper is to describe, from the perspective of the review management team, the critical success factors that have proven useful in launching and keeping the project on track.

#### What was done:

The project involves four professional programmes namely audiology, occupational therapy, physiotherapy and speech and language pathology, working collaboratively on intra- and cross-programme curriculum transformation. Stakeholders are addressing educational and contextual drivers including the need for increased access and throughput of students from educationally under-resourced backgrounds, social responsiveness and training contextually relevant primary health practitioners in a climate of centraluniversity imposed cost constraints.

#### Lessons learnt:

This paper will share lessons learnt by the curriculum review project management team in conceptualising, directing and containing a complex socio-educational process involving many stakeholders with disparate and contradictory ideas, priorities and practice approaches. It will also address intra- and extra-institutional obstacles to the attainment of identified curriculum objectives. The paper will be of interest to educators involved with multi-professional curriculum design, intervention programmes or the development of a shared learning platform in the current South African higher education and health service arena.

# They went, they saw, they learned: students' reflections on community clinic visits

#### Dr. A.A. Beylefeld - University of the Free State

#### Context:

Learning is most effective when occurring in context. Similarly the transfer of skills from lecture hall to workplace is most likely when the educational situation closely resembles the work situation. In the School of Medicine, UFS, first-year students are required to make connections between discipline-based knowledge they acquire in a core module, the ability they develop to think critically about their learning in a fundamental module, and economic and social realities of the Free State region. To this end, provision is made for real-world experiences in the form of clinic visits, whereupon students are expected to write reflectively about their learning.

#### Aims:

To determine whether the expected outcome of integrating disciplinary core learning with the skill of reflection was achieved. Evidence was sought that exposure to a challenging situation resulted in, not only extended knowledge and understanding of social issues, but also in awareness of uncomfortable feelings, critical analysis and communication thereof, thus demonstrating attitudes that the School of Medicine values in student doctors.

#### Method:

A qualitative interpretive approach was used to design a content analysis of students' reflective writing assignments completed in 2006 to 2008. Texts were examined for statements pertaining to appreciation of community needs and students' future role in addressing those needs. Statements were coded and sorted into three inter-related categories: understanding of social issues, awareness of personal biases and commitment to contribute to positive change.

#### **Results:**

From many sentences starting with "I realized ….." it is clear that the clinic visit was a clarifying and empowering experience. Powerful observations were made on the quality of services, and patients' response to that. Statements on how actual circumstances differ from what they expected indicate that students had to confront subjective perspectives. Their plans for making a difference show that the learning episode provided a platform to prepare for future community-located experiences.

#### **Conclusion:**

Reflective writing helps students to make sense of community-located experiences. While the findings may not be generalisable to other similar student populations, they are invaluable in gaining insight into UFS medical students' experiences and attitudes in primary health care settings.

# What is the point of getting students to reflect?

J Blitz University of Pretoria D Cameron University of Pretoria L Wolvaardt University of Pretoria A-M Bergh, University of Pretoria

#### Context

Academic service-learning is a particular from of community-based education (experiential learning pedagogy) that focuses not only on what the students can learn in a community, but also fosters the softer skills of social responsibility, good citizenship and integrated learning. It does this by ensuring that the students deliver meaningful service in order to achieve their curricular learning objectives.

Integral to service-learning is the requirement that students reflect on their experiences of both service and learning. As a result, one of the aspects of assessment in this module required completion of a reflective journal.

An integrated Family Medicine and Public Health module in the 5th year medical curriculum at the University of Pretoria moved from being delivered using a predominantly didactic method to using the method of academic service-learning.

#### Aims

To analyse the students' reflective journals in order to understand what impact the academic service-learning experience had made.

#### What was done

Qualitative analysis of the students' reflective journals was undertaken looking for evidence of the development of soft skills and how the experience had changed the way students approached their own learning and professional development.

#### Results

Academic service-learning used in the module did enhance students' sense of social responsibility and their integrative and reflective learning skills. It resulted in a resurgence of their enthusiasm for the study of medicine by eliciting their sense of being able to make a contribution to communities.

#### Take home message

Academic service learning appears to be an efficient way to foster the development of soft skills. The use of a reflective journal as an assessment tool provides a degree of evidence of this development.

### Evaluation of teacher's skills by Medical Students in Faculty of Health Sciences, Walter Sisulu University, Mthatha.

Prof. Banwari Meel - Walter Sisulu University

#### Context

The students' evaluation is crucial in the examination for grading students, and promoting at the higher levels in degree courses. It is also important to evaluate teaching of a lecturer by students for the quality improvement. This will help in congruent relationship, which helps in the satisfaction of teacher as well as students.

#### Objective

To assess the teachers performance in the classroom by students in Forensic Medicine.

#### Method

On 21 October 2002, MB.ChB 3 students have asked to assess teaching performance of a lecturer by completing performa in the classroom for their free and anonymous opinion for the purpose of quality assurance.

#### Results

Forty-eight students were present out of 62 on that day in the classroom and this make attendance 83%. The subject knowledge was marked as good 40%, very well 26%, excellent 30%, and poor by 2%. Teaching skill graded as well 50%, very well 34%, excellent 12%, and poor 2%. Overall evaluation about subject teaching as good 48%, very good 38%, excellent 12%. No student had marked as poor. Students results were fall in the Gaussian probability model.

#### Conclusion

Teaching evaluation by students in Forensic Medicine is evaluated satisfactorily, and the result was statistically reliable and valid.

#### Significance of this study

It motivates teacher, and improve the quality of teaching.

### Methods to evaluate the quality of written assessments

#### Dr S Fourie, MEDUNSA Dr B Summers, MEDUNSA

#### Context:

Internationally there are increased challenges for accountability and quality assurance in the teaching and assessment of student learning. Validity, reliability, difficulty, depth of knowledge and degree of discrimination are important criteria for the measurement of the quality of assessments.

#### Aims:

The aim of this presentation is to discuss quantitative methods used to evaluate these quality criteria in written assessments. These methods have been used in the integrated, modular and problem-based learning (PBL) and OBE BPharm programme of the University of Limpopo (Medunsa Campus) and Tshwane University of Technology.

#### Methods:

Content validity is measured by matching the questions with the learning objectives for the area of the curriculum tested in the relevant assessment. The percentage of learning objectives covered by the questions is calculated. Reliability is measured by two methods: Internal consistency is determined by Cronbach's Alpha and reproducibility is evaluated with the equivalent forms approach, in which the marks of the same students are correlated between pairs of similar examinations. The Difficulty and Discrimination Indices of questions are calculated using item analysis techniques. The depth of knowledge of questions is analysed across the six levels of Bloom's Taxonomy.

#### **Conclusion:**

These methods can be used both in the traditional and problem-based learning strategies. The type/s of question that can be evaluated by each method will be highlighted.

# Readiness of the rural paramedic for difficult airway management: Implications for emergency medical care education

Mr. E Cameron (CPUT) [B Tech EMC]; Mr. N. Naidoo (CPUT) [B Tech EMC, HDE, MPH]

#### CONTEXT

One of the hallmarks of advanced life support is advanced airway management by orotracheal intubation. Although intended to be life-saving, the inherent complications of this procedure may strain the ethical rules of beneficence and non-maleficence. Airway management competence includes management of an airway with a high probability of failure. Emergency education appears to be the intervention with a greater predictive value for airway patency. The rural paramedic, due to remoteness of quality systems, and receiving facilities are vulnerable to airway challenges.

#### AIMS

The study aimed to evaluate the readiness of rural paramedics when faced with a difficult airway.

#### METHODS

A qualitative, descriptive study was employed as methodology, using anonymous, voluntary questionnaires amongst rural paramedics of the Western Cape Provincial Emergency Medical Service. Convenience sampling was applied and Microsoft excel was used for descriptive statistical analysis.

#### RESULTS

Fifty-eight questionnaires were provided and 37 were returned. The mean number of intubations per month was 2.78. One of two used introducers routinely, whilst only 22% used this adjunct when unsuccessful after first attempt. Knowledge of and use of systematic *aide memoirs* was indicated by 56%. Whilst 78% were trained to use alternative airway devices, only 6% carry such equipment. This has the effect of undermining the training on alternative interventions. Inadequate sedation (65.7%) was the largest perception of modifiable difficult airway cause.

In terms of equipment availability, only 59.4% of respondents had the benefit of an end-tidal  $CO_2$  monitor, whilst none had an oesophageal detection device. Both are critical confirmatory tools for testing patency of airway devices, without which, misplaced airway adjuncts may go undetected, placing patient and practitioner at clinical and medico-legal risk respectively.

#### CONCLUSIONS

All paramedics should attend continuous professional development activities on airway management. New and update training on airway management should include the use of acronyms which provide for systematic difficulty prediction in assessing airways. Use of alternative airway devices should be mooted. All paramedics must have an alternative airway device (such as supra-glottic devices) available when intubating. Sedation assisted intubation versus alternative methods warrants particular contextualisation. Evidence should distinguish best practice from current practice in airway management teaching.

# Training Trainers in Health and Human Rights: Implementing curriculum change in South African health sciences institutions

**D. Elena Garcia,** Stanford University School of Medicine, 300 Pasteur Drive, Stanford, Californi Laurel Baldwin-Ragaven, UCT Leslie London UCT

BACKGROUND: The complicity of the South African health sector with apartheid policies has prompted the inclusion of human rights competencies in the curricula of future generations of health professionals. To further this aim, a Train-the-Trainers course in Health and Human Rights was established to equip faculty members from health sciences institutions across South Africa with the necessary skills, attitudes and knowledge to teach human rights to their students. Since inception in 1998, the course has trained over 160 individuals. This study sought to follow-up this cohort to determine the extent of implementation following the course, what facilitated initiating educational activities in human rights as well as what obstacles were encountered with regard to substantive curriculum change and reform.

MATERIALS AND METHODS: A survey including both quantitative and qualitative components was distributed in 2007 to past participants of Train the Trainer courses held from 1998-2006 via telephone, fax or electronic communication.

RESULTS: Out of 162 past participants, 46 (28%) completed the survey. Half of these respondents (23) implemented a total of 33 formal human rights courses into the curriculua- at their institutions. While the majority of respondents (67%) were still employed in academic settings, others worked in the non-academic sector. Additionally, 72 extracurricular activities were offered by 21 respondents, not all of whom had successfully implemented formal curricula. Respondents were more likely to implement curricula if there was evidence of institutional support. Allies for human rights curriculum incorporation were most commonly coworkers; and, institutional support took many forms. Particularly important was support from Departmental Heads and faculty Deans. Commonly cited barriers to implementation included: lack of budget, time constraints and perceived apathy of coworkers or students. Respondents overall reported personal growth and reflection since taking the Train the Trainers course and had positive perceptions of their work in human rights.

CONCLUSION: Courses in health and human rights which target health professional educators provide the historical context, educational tools, and personal motivation to incorporate human rights teaching and learning at their institutions. Even those outside the academic setting have found ways to formally teach human rights. Extracurricular or co-curricular approaches have been employed in addition to, and in some cases in lieu of, formal curriculum reform. Despite institutional barriers, coworkers are vital allies in teaching human rights to health sciences students, and training of fellow staff members and those in key leadership roles is perceived to be vital to future reform efforts.

# Intra Workshop Speakers <u>CV's</u>
# Workshop 1: Developing your teaching portfolio

#### Dr Patricia McInerney

**Trish McInerney** is a nurse-midwife with more than 25 years of teaching experience. Her PhD completed at Wits in 1999 is entitled "The Development of Community-based, Problem-based Learning Curriculum in the Undergraduate Degree in Nursing with Special Emphasis on the Childbearing Woman in Women's Health." Currently she is employed as the Education Development Officer in the Faculty of Health Sciences at the University of the Witwatersrand.

#### Workshop 2: Interactive Teaching: Planning and Design

#### Prof Bill Burdick and Ms Mary-Beth Scallen

William P. Burdick, M.D., M.S.Ed. is Associate Vice President for Education at the Foundation for Advancement of International Medical Education and Research, and Co-Director of the FAIMER Institute. He is Clinical Professor of Emergency Medicine at Drexel University College of Medicine and has been recognized for teaching excellence with the Lindback Award and the Trustees' Award. A graduate of Oberlin College, Cornell University Weill School of Medicine, and University of Pennsylvania Graduate School of Education, Dr. Burdick completed training in Internal Medicine at Boston City Hospital and is certified by the American Board of Internal Medicine.

#### Workshop 3: Designing a communications skills OSCE station

#### Prof Christina Tan and Prof Julia Blitz

Christina Tan is a family physician by training, and is currently Director of the Medical Education & Research Development Unit, Faculty of Medicine, University of Malaya, in Kuala Lumpur, Malaysia. She also heads the Clinical Skills Unit in the faculty, as well as being chief coordinator for the Objective Structured Clinical Examinations at 3<sup>rd</sup> and Final MBBS levels. She has a deep interest in medical education, particularly in curriculum development and assessment, and was twice awarded international fellowships in medical education, in 2000 (based in Albuquerque, New Mexico, USA) and 2005-6 (in Philadelphia, USA), and has on-going international links in USA and South Africa in training and mentoring medical educationists. Since 2000, she has been involved in many faculty staff training workshops in Problem-Based Learning and PBL Case Design, as well as OSCE Examiner Training.

# Workshop 4: Teaching and assessing evidence based searching for health science students

#### Dr Glenda Myers

Glenda Myers [BA H Dip Lib (Witwatersrand); BBibl Hons, MBibl (Unisa); D Litt et Phil (RAU)] has worked in public, special and academic libraries in the fields of Africana, Medicine, Engineering and Science and Technology. Her field of expertise is in evidence-based electronic information retrieval for healthcare practitioners. Glenda is currently registered for an M Ed in Educational Technology at the University of the Witwatersrand, and is employed as the Witwatersrand Health Sciences Librarian at the Faculty of Health Sciences, where she is involved in teaching and examining 3<sup>rd</sup> and 4<sup>th</sup> year medical students in EBM electronic information retrieval skills. She is associated with several Research Methodology courses offered by the Faculty. In 2007 she was awarded a Faculty of Health Sciences Service Excellence medal.

Glenda has delivered papers at numerous local and overseas library, e-learning and medical conferences. She currently chairs the Southern African Online Users Group (SAOUG) and SANHIP (South African National Health Information Partnership), and is a member of the International Programme Committee for the 5th International Evidence Based Library and Information Practice (EBLIP) Conference, to be held in Stockholm, Sweden, June 29th – July 3rd 2009.

# Workshop 5: Are clinical skills laboratories really necessary?

#### Prof Paul Bradley and Dr George Draper

Paul Bradley is the Director of Clinical Skills at the Peninsula Medical School. He trained in general practice in Chester in the north west of England and returned to be a partner in the same practice after completion of his training. He subsequently was involved in the Department of Primary Care at the University of Liverpool and was an Associate Advisor in General Practice for Information Technology. He then moved full-time to the University of Liverpool in 1996 where he was responsible for setting up the clinical skills program as part of the new undergraduate curriculum. After a short spell at the University of Dundee he joined Peninsula Medical School in 2001. At Peninsula Medical School he is responsible for developing and implementing the clinical skills learning programme. The course begins in the very first week of the first year of the undergraduate programme and runs throughout the whole 5 years. It uses a variety of innovative and established educational techniques to deliver a learning programme designed to meet the needs of young doctors in the 21<sup>st</sup> Century. It culminates in a series of simulated emergency management scenarios involving 5<sup>th</sup> year students working as teams in complex clinical situations.

His research interests are in the acquisition and retention of clinical skills and in the use of high fidelity simulation as a vehicle for learning of complex interactive team based skills.

# Workshop 6: Approaches to research-led evaluation of outcomes

#### **Rev Dr David Taylor**

David Taylor is Deputy Director of Medical Studies at the University of Liverpool, where he is responsible for assessment, quality assurance and research. He has been responsible for, and published several papers concerning, the evaluation of curriculum reform. His most recent interest is in prescribing errors, and the ways in which the educational process can help avoid them. If anyone has a few free minutes he will be delighted to talk them through the topic of "developing an instrument to assess professionalism", which is the title of his MA dissertation!

# Workshop 7: Bringing Human Rights into focus

#### Ms Veronica Mitchell, Mr Michael Rowe and Ms Sue Statham

**Veronica Mitchell** is a physiotherapist who is presently a Masters student in Higher Education at the University of Cape Town. She facilitates several undergraduate student courses in the Health Sciences Faculty at UCT, including Problem Based Learning.

While teaching a multidisciplinary group of 1<sup>st</sup> year students, Veronica realized the potential impact of human rights teaching in medical education. Inspired by participation in Prof Leslie London and Prof Laurel Ragaven-Baldwin's Train-the-Trainer course in 2004, she pursued further training through the Human Rights Education Association, USA and Equitas, Canada. In 2007, with the support of the School of Public Health, Veronica initiated a pilot project facilitating health and human rights workshops with 3<sup>rd</sup> year students in their Women's Health block in the Obstetrics and Gynaecology Department. These workshops have been described by students and clinicians as a "highlight".

**Michael Rowe** is a physiotherapist and currently a doctoral student and lecturer at the University at the Western Cape. In addition to teaching various applied subjects, he is responsible for the Professional Ethics in Physiotherapy module, taught from  $2^{nd} - 4^{th}$  year. His research interest is in curriculum development within an e-learning framework.

**Sue Statham** is a physiotherapist who has been working in the Primary Health Care approach for more than 14 years. She has been actively involved in teaching students in the clinical environment and planning service delivery using the WHO, United Nations, and South African Rehabilitation policy as guidelines. She initiated a community based rehabilitation project in Bishop Lavis and is involved in numerous other projects that involve a community based approach.

Sue is currently involved in a research project which aims to use a human rights based approach to evaluate rehabilitation services. The importance of a human rights based approach was highlighted by participation in Prof Leslie London and Prof Laurel Ragaven-Baldwin's Train-the-Trainer course in 2009. This work will take a leading role in further developments on both the education and research aspects of her work.

# Workshop 8: Helping students make the most of feedback

#### Dr Sue Whittle

Dr Sue Whittle is a lecturer in biochemistry in the Faculty of Biological Sciences at the University of Leeds, involved in undergraduate teaching across undergraduate Biochemistry programmes, and in the early years of the integrated medical course (MB ChB). She has extensive experience of course development and administration, and the provision of pastoral care and academic support for students.

Her research interests centre around the development of students' transferable skills, both before entry to university and during undergraduate study.

# Workshop 9: Interactive teaching: Communication Skills

#### Mary-Beth Scallen and Bill Burdick

**Mary Beth Scallen** is a professional stage actor, arts educator and educational consultant. She lives in Pennsylvania in the United States and this is her first visit to South Africa. She has coached business executives, teachers and medical professionals on successful verbal and physical communication skills, and ways to make their students take enthusiastic charge of their own learning. She works for FAIMER, The People's Light & Theatre (a professional company outside of Philadelphia) and the University of Pennsylvania.

**William P. Burdick**, M.D., M.S.Ed. is Associate Vice President for Education at the Foundation for Advancement of International Medical Education and Research, and Co-Director of the FAIMER Institute. He is Clinical Professor of Emergency Medicine at Drexel University College of Medicine and has been recognized for teaching excellence with the Lindback Award and the Trustees' Award. A graduate of Oberlin College, Cornell University Weill School of Medicine, and University of Pennsylvania Graduate School of Education, Dr. Burdick completed training in Internal Medicine at Boston City Hospital and is certified by the American Board of Internal Medicine.

### Workshop 10: Creating Open Educational resources

#### Mr Neil Butcher, Prof Marion Jacobs and Mr Greg Doyle

**Neil Butcher** is based in South Africa, from where he has provided policy and technical advice and support to a range of national and international clients regarding educational planning, uses of educational technology and distance education, both as a full-time employee at the South African Institute for Distance Education (SAIDE) from 1993 to 2001 and as Director of Neil Butcher & Associates. He has worked with various educational institutions, assisting with institutional transformation efforts that focus on harnessing the potential of distance education methods and educational technology as effectively as possible. Neil has travelled extensively through Africa conducting research on higher education, distance education, and educational technology for a range of organizations. He is currently working as an OER Strategist with SAIDE on its new OER Africa Initiative, which is funded by the Hewlett Foundation and is managing the Partnership for Higher Education in Africa's Educational Technology Initiative.

Neil has developed a range of instructional materials for various types of educators, including education policymakers, development agency staff, teachers, and universities. In the field of IT applications, he is leading the development of South Africa's national education portal for the Department of Education – www.thutong.org.za. He has managed a range of online database and web development projects for various organizations, including a student portal for the Federation of Tertiary Institutions of the Northern Metropolis (FOTIM), Higher Education South Africa, International Association for Digital Publications, UNESCO, and the Southern African Regional Universities' Association.

**Greg Doyle** started off his career as a high school teacher before moving to the University of Cape Town, where he has been for the last 8 years. From his position at the Centre of Educational Technology, he moved to fill one as the IT Education Manager at the Faculty of Health Sciences. As such he is involved in projects ranging from online and distant courses, to podcasting, video conferencing and lately Open Educational Resources

# Workshop 11: Communication skills: Sources of error during verbal, non-verbal or written communication

#### Prof Ara Tekian

Prof Ara Tekian is Associate Professor and Director of the International Affairs in the Department of Medical Education at the University of Illinois at Chicago College of Medicine (UIC-COM). He holds a PhD in neuroscience from the American University of Beirut, and MHPE from UIC-COM. Prior to joining UIC, Dr. Tekian established the Medical Education Unit at King Saud University in Riyadh, and was its Director from 1983-1990. He has served as a short-term consultant to WHO-EMRO for more than two decades and established a number of medical education departments/units in the Eastern Mediterranean countries. He joined DME in 1992 and participates in teaching in the Masters in Health Professions Education (MHPE). In 1996, he was awarded an honorary degree by the Tashkent University in Uzbekistan. Dr. Tekian was the winner of the 1997 Teaching Recognition Program Award selected by the UIC Council for Excellence in Teaching and Learning. Dr. Tekian consults both nationally and internationally and has organized and conducted over 120 international workshops in more than 35 countries and 55 cities. He is the senior author of the book "Innovative Simulations for Assessing Professional Competence: From Paper-and-Pencil to Virtual Reality" published in 1999. Currently, he is the Vice President (VP) for the American Educational Research Association (AERA) Division I - Education in the Professions. His current research interests include curriculum planning, student assessment and innovative testing methodologies, simulations, selection and retention of underrepresented minorities in medicine, and international health professions education.

# Workshop 12: Writing computer-based assessments of clinical skills (ACS)

#### **Dr Lionel Green Thompson**

Lionel Green-Thompson is an anaesthetist currently working as the clinical co-ordinator in the Centre for Health Science Education at the Wits Faculty of Health Sciences. His role is to co-ordinate the teaching and assessment for the clinical year of their undergraduate medical training programme.

# Intra-conference Workshop Abstracts

# Workshop 1: Developing your teaching portfolio

#### Dr Patricia McInerney

#### Abstract

The workshop "Developing Your Teaching Portfolio" will provide background on what the teaching portfolio is about and why it is necessary to develop one. The different sections will be identified and information given as to what should be included in each section. There will be some "hands-on" work as participants will start to develop their philosophy about teaching. At the end of the workshop, participants will leave with a rough draft of what they need to collect in order to finalise their portfolio.

# Workshop 2: Interactive Teaching: Planning and Design

#### Prof Bill Burdick and Ms Mary-Beth Scallen

#### Abstract

Participants will be able to describe the relevance of interactive teaching to the fundamental elements of learning. Drawing on their own experiences as learners and teachers, they will design an educational session that builds on the principles of learning and interaction, with feedback from the group and workshop facilitators.

### Workshop 3: Designing a communications skills OSCE station

#### Prof Christina Tan and Prof Julia Blitz

#### Abstract

This workshop is based on the need for assessment of communication skills in health professions curricula. The OSCE is recognised as one of the methods suited to assessing these skills. Participants will have the opportunity to discuss the problems that they have come across in designing OSCE stations that assess communication skills. They will be asked to suggest objectives for communication skills OSCE stations, which will then be used by groups to design stations. A selection of the stations will be role played so that participants can give feedback and suggestions on how to improve the stations. This ensures that each participant will leave the workshop with a peer-reviewed ready-to-use communication skills OSCE station. It would be helpful if participants familiarise themselves with either (or both) of the following tools for communication skills assessment prior to the workshop:

Makoul G. The SEGUE Framework for teaching and assessing communication skills. *Patient Education and Counselling* **2001**; 45(1): 23- 34

Kurtz S, Silverman J, Benson J, Draper J. Marrying content and process in clinical method teaching: enhancing the Calgary-Cambridge guides. *Academic Medicine* **2003**;78(8): 802–9

# Workshop 4: Teaching and assessing evidence based searching for health science students

#### Dr Glenda Myers

#### Abstract

The hands-on workshop on teaching and assessing evidence-based searching for health science students will enable participants to develop a well-built clinical question from a case scenario; conduct a competent PICO evidence-based search strategy; use open source PubMed to locate relevant full text electronic literature; develop a plan for teaching health science students to compile their own clinical questions and search the literature; and will also enable participants to develop an OSCE station to assess this skill. This is a highly practical course aimed at both enabling delegates and their health science students to understand the relevance of searching the literature in the practice of

evidence-based medicine; and to apply this skill as a life-long competence.

# Workshop 5: Are clinical skills laboratories really necessary?

#### Prof Paul Bradley and Dr George Draper

#### Abstract

The target audience are Clinicians interested in the development of clinical skills and simulation based teaching and learning - electronic and otherwise. At the end of this session participants will have an overview of the historical and current imperatives to develop clinical skills teaching and learning programmes. They will have an understanding of some of the approaches to these programmes that enable them to provide basic and on-going support to learners and how this can relate to skills application in the live clinical environment. Some key theoretical underpinnings of clinical skills and simulation based learning will be explored to deepen understanding of the educational issues involved.

# Workshop 6: Approaches to research-led evaluation of outcomes

#### **Rev Dr David Taylor**

#### Abstract

We are faced with the twin imperatives of improving the educational experience of our students, and publishing. In this workshop we will discuss the opportunities and threats that this tension bring with it. I will bring a couple of scenarios of my own (prescribing and curriculum change), and talk about the various problems we faced, including "controls" and "ethical approval". Workshop participants will be invited to take part in short "case study" type exercises, either to decide where I went wrong - or to plan something for their future!

# Workshop 7: Bringing Human Rights into focus

#### Ms Veronica Mitchell, Mr Michael Rowe and Ms Sue Statham

#### Abstract

South Africa's history of human rights violations is well documented, especially in the field of healthcare. The issues raised during the Truth and Reconciliation Commission allowed us to develop a deeper understanding of the complicity of healthcare practitioners in human rights abuses, and helped to put into place policies to prevent their recurrence. However, ethical and human rights dilemmas in health are as relevant today as ever before.

As educators, our responsibility is to incorporate a human rights approach into our teaching, guiding our students and colleagues towards an awareness of social and distributive justice that is reflected in actual practice. Recently, the role of human rights in healthcare has been brought to the fore with the announcement by the Health Professions Council of South Africa of a mandatory accumulation of 5 Ethics CPD points per year, further acknowledging the importance of human rights in health.

This workshop has the following intended outcomes:

1. To describe and illustrate the link between human rights and health in promoting and protecting well-being in a holistic manner for all.

2. To provide a space where dialogue on human rights issues can be openly discussed.

3. To illustrate how to integrate a human rights approach into our educational practice, and how to support students and colleagues in interpreting health through a human rights framework.

4. To interpret case studies involving human rights dilemmas that health personnel face in practice.

The workshop will include presentations, discussion and groupwork that will allow participants to actively engage with the subject matter. The intention is that participants will leave with an increased awareness of the opportunities for incorporating a human rights approach in their respective curricula.

# Workshop 8: Helping students make the most of feedback

#### **Dr Sue Whittle**

#### Abstract

Feedback to students on their work is widely regarded as one of the most important mechanisms for helping them improve their performance in future assignments. It is also considered a key factor in assisting students in taking responsibility for their own learning, and so preparing them for lifelong learning. However, the provision of effective feedback to increasing numbers of students can be problematic. Ensuring that students engage with and use the feedback they receive is also an issue in many institutions.

This workshop will start with a brief review of the literature in this area. Participants will be encouraged to share their experiences of provision of feedback, and the problems encountered in engaging students effectively with this process. The use of assessment-specific feedback sheets to help staff deliver feedback which actively addresses the intended learning outcomes of the assignment will be considered. The concept, and usefulness of 'feed forward' will also be discussed.

The outcomes of a study involving first year biological sciences students at Leeds University, which aimed at improving student engagement with feedback will be reported. This study involved the introduction of dedicated feedback sessions for the return of laboratory reports, and included the use of self-marking to assist students in understanding what is required from these reports at university level. Guided reflection was utilised to help students consider their previous experiences of receiving and using feedback, and relate these to their future role as independent learners.

# Workshop 9: Interactive teaching: Communication Skills

#### Mary-Beth Scallen and Bill Burdick

#### Abstract

This workshop will offer participants an increased understanding of the most effective verbal and non-verbal communication choices available to them as classroom facilitators. They will experience and discuss a variety of interactive teaching techniques designed to stimulate students' cumulative, contextual and active learning.

# Workshop 10: Creating Open Educational resources

#### Mr Neil Butcher, Prof Marion Jacobs and Mr Greg Doyle

#### Abstract

This workshop will build on the keynote presentation by Neil Butcher to explore the powerful concept of Open Educational Resources (OER) and its application in Health Education in South Africa. It will help participants to understand in more depth how technology is driving OER as a global phenomenon, and how they can become part of this exciting new process. It will teach people about the Creative Commons licensing framework, its range of options, and how this creates new legal mechanisms for sharing health education content. Most importantly, this workshop will propose the launch of a special interest group of South African health educators as part of a new Global Health OER initiative currently being funded by the Hewlett Foundation. It is targeted at any health educators interested in developing and/or using OER to improve their teaching and learning processes and to join global networks of resource development.

# Workshop 11: Communication skills: Sources of error during verbal, non-verbal or written communication

### Prof Ara Tekian

### Abstract

Communication is a critical component of the health care system and a fundamental underpinning to patient safety. Communication, traditionally defined as a simple exchange of information, or a "message" between a "sender" and a "receiver," is now considered a complex process with verbal and nonverbal components, requiring interpretation and inferences of meaning, synthesis of information, and translation into situational context. In our current culture, communication takes on many forms—including oral and written—and is often presented by intermediaries (think of those hundred or so e-mail exchanges each day). In recent years, attention has focused on the frequent occurrence of clinical errors in hospital- and office-based medical practice. Although it was common practice in the past to cover up such mistakes, today it is widely accepted that patients should be informed when errors occur. The Joint Commission for Accreditation of Healthcare Organizations makes this an explicit requirement. Communication—whether verbal, nonverbal, written, and via technology (phone messages, e-mails, etc.)—is a core component of both medical error and quality improvement. During this workshop we will look more closely at how each of these elements plays a role in the evolving story of medical error. The goal of this workshop is to understand the importance of communication between doctors and patients and how poor communication can be a source of error. You will watch some videos and identify sources of error, and discuss ways of disclosing errors.

#### Useful references:

1. Rosenstein AH, O'Daniel M. Managing disruptive physician behavior: Impact on staff relationships and patient care. *Neurology* 2008;70:1564-1570.

2. Reader TW, Flin R, Cuthbertson BH. Communication skills and error in the intensive care unit. *Curr Opin Crit Care* 2007;13:732-736.

3. Roter DL, Frankel RM, Hall JA, Sluyter D. The expression of emotion through nonverbal behaviour in medical visits. Mechanisms and outcomes. *J Gen Intern Med.* 2006 Jan; 21 Suppl 1:S28-34.

4. Haig K, Sutton S, Whittington J. SBAR: A shared mental model for improving communication between clinicians. (2006). *Journal of Quality and Patient Safety* 32(3):167-175.

5. Frankel, A., Gardner, R., Maynard, L., Kelly, A. (2007). Using the communication and teamwork skills (CATS) assessment to measure health care team performance. *The Joint Commission Journal on Quality and Patient Safety*; 33(9):549-558.

### Workshop 12: Writing computer-based assessments of clinical skills (ACS)

#### Dr Lionel Green Thompson

#### Abstract

The assessment case studies are a computer based assessment of clinical reasoning. They are used as part of the summative assessment process at Wits University. Originally developed in Hong Kong as a formative assessment exercise, these have been adapted to good effect for summative purposes. The format of questions used is the multiple choice questions. These cases have enabled the use of material from a wide spectrum of clinical and basic science disciplines as well as the theme

based teaching from area such as ethics, personal and professional development and patient doctor relationships. Participants in the workshop are invited to bring along a suitable case from their practice to construct an assessment. An opportunity will be provided to create assessments in the workshop as well.

# Poster Presentation Abstracts

# **Curriculum Innovation**

# Children's Rights, The Hierarchy of Vulnerability, and the Best Interests of the Child

François P R de Villiers; SAFRI Fellow 2008, Department of Paediatrics and Child Health, Medunsa Campus, University of Limpopo

#### Why was the idea necessary:

The Convention on the Rights of the Child lists rights applicable to children. Survival rights include the rights to life, freedom of thought, and the right to a name and a nationality. Protection rights include measures to protect children from abuse and sexual exploitation and those with special needs and orphans. Rights concerned with development include the rights to health, education and leisure. Despite the acceptance of Children's Rights in SA law, violence against women and children is rife, but there is inadequate recognition of child abuse and neglect.

#### Aims:

To transmit concepts such as the Rights of the Child, the Hierarchy of Vulnerability, and the Best Interests of the Child to health professionals by means of a distance learning programme earning CPD points.

#### What was done:

The problem was researched and standards for the acquisition of CPD points in distance learning established. The manual was planned, including the content, the layout and the assessments. A manual of five modules earning five CPD points was written. The modules are: Introduction to rights and ethics; the South African Bill of Rights and children; the Convention on the Rights of the Child; the Best Interests of the Child standard; and the Hierarchy of Vulnerability, and vulnerability of children.

A pilot study will be performed with 15 medical practitioners, who will do a pre-test, study a module and do a post-test, and fill in a questionnaire assessing the module. The programme will be adapted if necessary. The programme will be marketed to all health professionals who are required by the HPC to earn Ethics points. After the first hundred participants have completed the programme and received their points, the programme will be evaluated. The participants' performance on the assessment will be statistically analysed, and they will complete a questionnaire evaluating the programme as a whole.

#### Impact:

It is expected that the enrolment will be high due to the need to earn Ethics CPD points.

#### Take home message:

This programme will improve the knowledge of health professionals concerning Children's Rights and related concepts, leading to increased recognition of child abuse. Further interventions will be needed to improve the management of child abuse.

# Health science students' attitudes and perceptions of an interdisciplinary schoolbased health promotion course

Ms F Waggie, University of the Western Cape

#### Context:

Common problems in schools suggest a great demand for health, welfare, and child protection services. The "full-service schools," as advocated by the Department of Education, embraces the idea that the school itself can play a vital role in introducing complementary health services. The interdisciplinary health promotion course of the Faculty of Community and Health Sciences at UWC allows students to apply health promotion theory practically in schools, as part of their orientation to working in communities.

#### Aim:

To evaluate the health science students' perceptions of a school-based interdisciplinary health promotion programme

#### Methods:

A sequential mixed methods approach was used. A self-administered structured Likert scale questionnaire was administered to 223 students. Qualitative data was gathered from focus group discussions with purposive sampling of students. Finally, inferences were drawn from both quantitative and qualitative data.

#### **Results:**

The majority of the students (75%) acknowledged that the course provided:

- an understanding of health promotion concepts and principles;
- good information about health promotion theory and practices;
- changed perceptions about health promotion and the importance thereof.

Most students (69.5%) were positive about the experience and felt that it allowed them to understand the role and contributions of the various health professions.

All the students agreed that:

• they had an important role to play in school-based health promotion;

• they perceived their main role to be educating the community around health issues.

This study identified strengths; areas for improvement; provided the evidence that will serve as the basis for future planning and enhancements; validated existing knowledge and; provided data to support the continuation of the curriculum activities.

#### **Conclusion:**

The school-based interdisciplinary health promotion course is perceived as a good approach in providing health science students with real life experiences in working in a school setting in a disadvantaged community, thus making the students aware of the importance of improving health in a community.

# A critical appraisal of the process of transformation in the Faculty of Health Sciences, University of the Free State: Management Perspective

**Mrs SCK Machedi**\*, HPE-Programme, Office of the Dean, Faculty of Health Sciences, UFS; **Prof MM Nel**, Head: Health Sciences Education, Faculty of Health Sciences, UFS

#### Context:

Most definitions of transformation have two things in common: an enquiry into the present and management of challenges in future. Transformation is a huge challenge to most institutions of higher learning worldwide. In South Africa the challenge is especially to redress inequalities of the apartheid era. Transformation in South Africa is based on the following principles: equalisation of opportunities, desegregation, academic freedom and institutional autonomy - and these formed the basis of this study.

The Faculty of Health Sciences at the University of the Free State has, in keeping with the efforts of the University, also initiated the process of transformation. Having been involved in transformation in the Faculty, the researcher deemed it necessary to evaluate the process and make recommendations.

#### Aim:

The aim of the study was to appraise the process of transformation in the Faculty of Health Sciences at the University of the Free State critically and to identify steps to overcome the barriers in a meaningfully progressive way.

#### Method:

In this study, qualitative research methods were used to describe and understand the process of transformation in the Faculty of Health Sciences at the University of the Free State. The target population included all managers, heads of departments and administrators (or their representatives) in the Faculty who have at least two years experience in the Faculty, had consented to participation in the interview and are broadly involved in student issues including teaching. Interviews using structured questionnaires were conducted to collect data concerning Management's perceptions of the Faculty's transformation process.

#### **Results:**

From the results it was clear that there are policies in place to facilitate transformation, but also that equity issues should be revisited and the process managed differently.

#### Conclusion:

Transformation does exist in the Faculty. It needs more attention, however, and a systematic strategy including a strong element of continuous evaluation as it competes with academic issues. It should be treated as an ally to academic issues and not as a competitor.

# Transforming the mice: Is there a need for the change?

Mr. CC Ezeala\_Kampala International University Uganda

#### Why the idea was necessary:

In Uganda there is a shortage of specialist biomedical scientists and the country relies on the services of expatriates. Current programmes in Medical Laboratory Sciences produce diplomates who are not able to readily access postgraduate education. Many cannot afford the lengthy full time undergraduate study currently required for postgraduate studies.

#### Aims:

In order to address these problems, a nation-wide needs assessment for a postgraduate diploma (PGD) programme in Medical Laboratory Sciences which would serve as a link between the existing diploma and the masters degree was conducted to determine

- i) stakeholders' recognition of the need for the programme,
- ii) if it is needed now,
- iii) why it is needed, and
- iv) the preferred modes of study.

#### Methods:

National stakeholders were identified and prioritized using a power/interest grid, and a questionnaire was developed, validated, and piloted. Questionnaires were distributed to stakeholders in the medical schools of Makerere University, Mbarara University of Science and Technology, and Kampala International University. Data were analyzed using quantitative and qualitative methods.

#### **Results and impact:**

A response rate of 83 % was recorded, 96 % agreed that the programme was needed, and 93 % wanted it implemented immediately. Reasons given for its need included up scaling of manpower, production of better qualified and more competent scientists, professional development for Medical Laboratory scientists, technological development in Uganda, aligning Uganda with current practices in other countries, and improvement of healthcare services. Many of the stakeholders have accepted this proposition and Kampala International University is rising to this challenge.

#### Take home message:

This study demonstrates the need for further training of medical laboratory technologists in Uganda and paves the way for appropriate programme development. This will address manpower shortages in the biomedical sciences by empowering Ugandan technologists to become competent biomedical scientists

# Developing a programme for emergency medicine in the undergraduate curriculum at UCT

Mr. JK Marcus\*, Clinical Skills Programme, UCT;

**Dr. A Kropman**, Division of Emergency Medicine, UCT; **Ms. RC Nash**, Clinical Skills Programme, UCT

#### Context:

Teaching in resuscitation has been asserted to be poor in undergraduate medical programmes. Newly qualified doctors are often the first point of contact in Emergency Situations and are relied on to begin the initial resuscitative efforts until more senior colleagues arrive. The "Saving Mothers" report recommendations include improvement in resuscitation clinical competencies and skills. We therefore embarked on expansion of the clinical skills programme at UCT to make provision for the teaching of emergency care and resuscitation skills.

#### What was done:

A programme was developed to extend into all the undergraduate years 1 through 6. All first year Health Sciences students are required to attend a Basic Life Support programme which includes lectures and practical sessions. MBChB students then have training sessions in years 3 to 6 to include pre-hospital care, advanced life support skills and procedural techniques related to Emergency Care. In years 3 and 4 there is formal assessment of these skills. At the end of year 6 there will be a final assessment of all knowledge gained over the years.

#### **Results or Impact:**

Work still needs to be done to evaluate the impact of this training on our graduates' emergency care competencies and skills.

# **Students**

# Factors impacting on academic success of African black physiotherapy students

**Dr, NP, Mbambo**, University of Witwatersrand\*; **Prof, J, Bruce**, University of Witwatersrand

#### Context:

In South Africa there are currently eight universities across several provinces that offer physiotherapy training. Most of African black students are admitted at the University of Limpopo, followed by University of KwaZulu-Natal and the remaining universities admit a few of these students. The success rate of these students is low with an average of 5 years to complete the degree. This is despite efforts of academic support by the different universities. In Historically White Universities the students seem to take even longer to complete the degree. There are several factors that are involved in the success or lack thereof in attaining a degree. Although it is seen as every student's responsibility to succeed at university, other role players such as the institution in its policies and ethos, the lecturers in their teaching, mentoring and nurturing role and parents are just as responsible.

#### Aims:

The aim of this study was to establish the factors that impact on African black students' success in physiotherapy.

#### Methodology:

One-on-one interviews were conducted with Heads of Physiotherapy Departments and physiotherapy graduates (1998 - 2006) were sent questionnaires with open-ended questions to establish their perspective of factors that impact on academic success. In this study, to analyze the responses from the questionnaires, content analysis method (Mayan, 2002) was adopted and the framework developed by Miles and Huberman (1994) was adopted to analyze the data collected during the one-on-one interviews.

#### **Results:**

Both lecturers and physiotherapy graduates mentioned that support and academic discipline had an impact on academic success. The graduates felt that university language policy, determination to succeed and social compelling factors had an impact. The HODs felt that prior knowledge of the physiotherapy profession had an influence on how a student performed during the training.

#### **Conclusion:**

A supportive environment has a positive influence on the success of students and students' discipline and will to succeed have also positive influence on academic success

# "Thou shallt know thy student". What pre-university attributes characterised the first-year medical students that were denied examination access in 2007, and what competencies did they lack?

\*Dr A.A. Beylefeld, University of the Free State; Ms M.P. Jama, University of the Free State

#### Context:

Student attrition is a complex matter representing loss to both institution and students. For the institution, the loss is mainly a financial one; students lose both money and "life"-time. Hence institutions have a responsibility to get to the heart of issues that undermine student success, so that they may ameliorate the problem.

Aim: The purpose of this snapshot study was to provide evidence of the preparedness/under preparedness of the 31 M.B.Ch.B. I-students who were denied access to first-semester examinations.

#### Method:

Swail's (2004) geometric model of student persistence was used to determine whether these students had a fair chance of succeeding. Data on school background, M-scores and financial standing were obtained from Faculty Administration. A questionnaire survey revealed students' IT competency. Proficiency in reading and comprehension was captured from the "Readers are Leaders" programme. Students' ability to integrate basic physics knowledge in a medical environment and their capacity to master medical terminology were calculated on the basis of test results. Reflective passages on clinic visits were analysed to determine their capacity to write effectively. Students' self-assessment scores for these passages were compared with facilitator marks, to determine if the students had realistic self-expectations.

#### **Results:**

Preliminary findings indicate that all but two students had public schooling backgrounds. The average M-score was 39. Almost 50% had outstanding fees. The average terminology mark was 40% and only four students obtained 60%+ for physics. The average scores for reading/comprehension and reflective writing were high (respectively 80% and 60%). Only 6 students considered their IT skills to be well-developed. Aligned with research indicating that low achievers tend to overrate themselves, 23 students gave themselves higher marks than the facilitator.

#### Conclusion:

This study confirmed that certain cognitive, social and institutional factors need to form a solid combination for academic progress and persistence to take place.

# A comparison between self reported competence and actual competence of MBChB III students in respect of specific basic clinical procedures

<u>Mrs E. Archer</u>, University of Stellenbosch; <u>Mrs A. de Villiers</u>, University of Stellenbosch\*

#### Context

The MBChB III students (±200) attended a training session at the beginning of the year in the Clinical Skills Centre. During this 3 hour session a few basic clinical procedures were demonstrated to them and they had the opportunity to practice the procedures on manikins, under the supervision of a clinical tutor.

During the course of the year the students returned in smaller groups during their Family Medicine rotation for formative assessment of these procedures, using a mock OSCE (objective structured clinical evaluation).

A project was done to look at the correlation between self reported competence and actual competence with the class of 2008.

#### Aims

the aims of the project were the following:

• To discover, through self assessment, what 3rd year medical students' perceptions are concerning their competence in specific basic procedures.

• To establish, through objective observation by clinical nurse tutors what the actual competence level of these students are in the performance of specific basic procedures.

• To make students aware of the value of critical self assessment concerning their practical skill competence.

• To discover a sustainable method of assessing students' practical procedures.

#### What was done?

A quantitative study was done using questionnaires. Firstly, students were expected to assess their own perceived competence before actually performing basic clinical procedures during a mock OSCE.

Secondly, clinical nurse tutors used checklists to rate actual student competence levels when performing the following 3 procedures: commencing an intravenous infusion, performing simple wound closure (suturing) and administering an intramuscular injection.

#### **Results/Impact**

We are in the process of analyzing the data and results will only be available at the SAAHE conference.

#### Take home message

In accordance with the literature, we expect a low correlation between the perceived competence and actual competence of students concerning their performance of practical procedures.

# Challenges of Mentoring in Medical Education: WSU Experience

#### Mammen, M.; Walter Sisulu University

The Faculty of Health Sciences at Walter Sisulu University (WSU) has a mentoring programme since 1994 and it makes profitable use of mentoring of novice (first year) medical students (mentees) by pre-trained seniors (mentors). The mentoring process is tuned to provide mentees with an environment conducive to promote learning and to enable the mentees to become successful learners. It also helps them to adjust to the new settings of a university. The Problem Based Learning (PBL) which was introduced in 1992 made demands arising out of the PBL mode of tutor-oriented and self-directed learning on the students. Traditionally, majority of medical students at the institution have been from economically poor households in rural settings and from academically disadvantaged backgrounds. They generally lacked the skills to cope with PBL's demands. Consequently, mentoring facilitate such skills, Lessons learned over the past 14 years have assisted to improve both the quantity and quality of mentoring. Improving on past inadequacies identified through feedback from mentors and mentees have played a significant role in improving the quality of mentor-mentee interaction and the profitability out of the process. The aim of the study was to assess the mentoring and its challenges in medical education at WSU. This study focuses on data gathered from independent self-evaluation reports through returned survey questionnaires by mentees and mentors in 2006 and 2007. The sample consisted of more than 300 mentors and mentees. 95% of mentees agreed that mentoring at WSU is a good supporting tool which assisted them to progress academically. Out of them, 10% also expressed the view that with certain modifications, it can fulfill more of its pre-planned objectives. 80% of the mentors reported that through the support they give to the mentees, they themselves develop problem-solving skills. The major challenges are (1) mentors (senior medical students) do not get sufficient time to assist mentees in the way they wish to. (2) senior students who excel academically do not participate in the mentoring programme.

# Evaluating the teaching of Family Violence topics to medical students

Mrs. GC Botha. University of Limpopo (Medunsa Campus)

#### Why the idea was necessary:

Victims of Intimate Partner Violence (IPV) commonly present to emergency facilities where Health Care Workers are the first port of call for intervention. Doctors, however, find it difficult to detect IPV patients due to a lack of training and uncertainty about their roles in detecting and managing victims. Challenges in implementing an effective training programme include a lack of clear objectives, absence of role-models and time constraints. Consensus regarding the format and content of a training programme at our Institution was lacking.

#### Aims:

The aim of the current study was threefold. Firstly, to determine current teaching practices regarding the detection and management skills of IPV at various institutions in an attempt to benchmark our curriculum. Secondly, to reach consensus internally regarding the teaching programme and finally to implement changes to the programme.

#### What was done:

Quantitative and qualitative data collection methods were utilised. Ethical clearance and informed consent were obtained. A questionnaire survey was undertaken at eight South African medical schools and in developing countries with fellows involved in the Foundation for Advancement of International Medical Education and Research (FAIMER). Data from the questionnaire was analyzed descriptively. An interprofessional team was formed to review results and determine consensus. The module team implemented recommended changes to the design of the module.

#### **Results or impact:**

Coverage of major content areas was different from some of the modules offered by other medical schools, but similar to those medical schools which teach extensively on the topic. Minor adjustments were made to curriculum content and the student guide, for implementation in 2009. Adjustments to the written assessment component now also include content from self-directed learning activities.

A clinician with forensic experience joined the teaching team. Ongoing meetings with staff in the casualty department led to an improvement in the supervisions of students. The nature of the interprofessional collaboration enriched team members and improved the quality of the training programme.

#### Take home message:

The process of evaluating and reviewing curriculum content has improved the local curriculum. It has also served to engage a wider range of stakeholders and enhance interprofessional collaboration.

# Exploring the learning experiences of mature students in a Problem based Learning (PBL) curriculum

\*Mrs C Rennie, University of KwaZulu Natal, Mrs J Van Wyk, University of KwaZulu Natal

#### Context

In 2001, the Nelson R Mandela School of Medicine changed its traditional 6 year didactic curriculum to a five year PBL curriculum. The current PBL curriculum is based on the SPICES model which aims to develop and promote a Student-centered, Problem-based, Intergrated, Community-oriented curriculum with Elective modules and Systemic approach to learning (Elizonder-Montemayor 2004).

#### Aims

Students start their MBChB studies from year 1 with varying school and tertiary educational backgrounds. It is hoped that this study would provide insight into 1) the learning styles, strategies, academic and social experiences of mature students and 2) the support and academic needs that students with postgraduate qualifications would require.

#### What was done?

Studies done by authors from the school, Singaram et al. 2008 and Mclean et al. 2006 have shown the positive effects of small group learning. In addition, McLean et al. 2006 showed that students interacting with skilled or more experienced peers were able to develop more cognitively. A mature student is defined as one who might have one or more years of undergraduate or postgraduate experience studying another field before applying for medicine (Singaram et al. 2008). The Nelson R Mandela School admits a large number of students with prior tertiary education experience, some with postgraduate degrees (Mclean et al 2006). Although there are reports on students' perceptions of learning in a small group tutorial (Singaram et al. 2008), none have elaborated on the postgraduate students' perspective of small group learning as a first or second year student in the undergraduate medical PBL curriculum.

#### **Results or impact**

This is a qualitative study that would look at the learning experiences perceptions of mature students in the PBL medical curriculum. Students will be purposively sampled (i.e. having one or more years of either undergraduate or postgraduate prior educational experience) from the 1st -4th yr MBChB program. The students would be invited to participate in individual semi- structured interviews, during which questions would be asked with regards to their perceptions of the curriculum, the small group tutorials and other aspects of their student learning would be explored for themes.

#### Take home message

This research is expected to yield knowledge about the challenges faced or academic experiences of mature students during the undergraduate PBL medical curriculum.

# Searching for new students - a life skills programme in high schools to increase up take of a rural scholarship scheme

#### Dr Colin Pfaff; Department of family Medicine, University of Witwatersrand

#### Context

The Wits Initiative for Rural health Education (WIRHE) scholarship has been an attempt to increase numbers of students of rural origin studying health sciences, in order to increase recruitment of health care workers working in rural areas. WIRHE scholarship accepted its first group of 9 students in 2004 and has aimed to enroll 12 students each year. However problems were encountered in finding sufficient numbers of suitable applicants, resulting in enrolling fewer students than there were places available. Lack of awareness of the project or of the correct application procedure and failing to find students with suitable academic achievement were persistent problems. It was felt that a more direct liaison with schools was necessary to identify greater numbers of potential applicants.

#### Aims

To increase the number and quality of applicants for the scholarship from rural schools in NW province. To expose grade 12 learners to life skills including vision and goal setting to help them with career choice and finding employment.

#### What was done

All 56 schools in Dr Ruth Segomotsi Mompati District was targeted. A week long life skills programme was offered to the top 10 learners or achievers in each school. This was held for 2 hours after school each day. Students were chosen by the teachers of the school. They were presented with material on goal setting, vision, choosing a career, relationships and communication skills. They were exposed to the scholarship scheme and the possibility of a career in health sciences. Two facilitators were employed for this process and the project ran for 3 months.

#### Results

In the first two weeks 34 learners have attended this programme. Problems encountered included long distances needed to be travelled by facilitators, difficulties around finding a suitable venue and poor communication by Department of education to certain schools about the programme. A full evaluation of the programme and selection for the scholarship will take place at the end of May and be reported on in this poster.

# Learning Excellence the for Graduate Entry Medical Programme

#### Ms Tatiana Sosznianin, University of the Witwatersrand

**Context** (why the idea or change was necessary)

Input from academic staff and students' own expressions of concern about their academic results (study effort in against test/exam results), during their first year of the Graduate Entry Programme (MBBCH year 3), suggested that learning and language issues should be addressed in an attempt to assist students to improve their academic performance.

#### Aims

A holistic approach to a 'Learning Excellence' programme, for students at all levels of academic achievement, was adopted. The aim of the programme is to provide holistic learning and language support in a lecture and tutorial format.

#### Note:

The case study research abstract submitted entitled 'The impact of changes in learning approaches on performance of a group of GEMP 1 students', links to this. The case study pilot represents one element of the 'Learning Excellence' programme.

#### What was done

From preliminary interviews with students and academic staff it is becoming apparent that a good proportion of even experienced students in their GEMP 1 year (the third year of their medical degree) generally do not apply a sufficiently in-depth understanding of learning and language skills to their studies, one which reflects an individualised, structured, time and effort effective learning strategy.

The holistic elements of the 'Learning Excellence' programme addresses this by facilitating students' understanding and practical application of the following basic elements. The poster will develop these themes and add details:

· Understanding how your brain learns – the neuropsychological level of learning

· Harmonising your 7 Intelligences - your individual profile for whole brain learning strategies

 $\cdot$  Developing good long-term memory – taking notes, making summaries, using mnemonics etc.

· Reading to understand and to remember – giving your brain time to make connections.

 $\cdot$  Building vocabulary of your field – tests, tools and techniques for enhancing medical terminology – Greek and Latin roots, the language of tests etc.

· Developing your academic writing – tools and techniques for reflective learning portfolio entries

 $\cdot$  Designing a revision tool customised to your learning style – mind maps, flow charts, pattern notes – A holistic visual representation, a revision tool to strengthen recall.

• Planning your study time and managing your return on investment – a personal contract and rewards.

· Getting into the learning zone – motivation and managing stress

#### **Results or impact**

This is a work in progress during 2009, to be evaluated at the end of the academic year.

#### Take home message

Developing students' holistic understanding of effective learning strategies in a context and content-focused practical approach should result in an improvement in study effort in, for test/exam results.

# **Assessors & Assessment**

# Outcomes of MBChC V– Phase IIIb in General Surgery Department at Walter Sisulu University.

Prof. ME Larrea Fabra\*; Dr. A Dhaffala; Prof. E Blanco Blanco; Prof. L Mazwai; Prof. OO Adekunle

#### Context:

The last year medical students have a six weeks rotation in General Surgery, in order to give them the integrated knowledge of surgical diseases including trauma; based on the principles of surgery they had from previous year. An analysis of results of one year marks was performed, to identify which were the most relevant aspects of teaching, according to successful and unsuccessful results.

#### Aims:

To identify which part of the evaluation mark predicts the final mark.

To correlate between every each of aspect that we include in the evaluation with final mark.

To recognize the positive and negative aspects in our teaching system for improving them in the future.

#### What was done:

A retrospective, descriptive and analytical study, based on the integrated marks of all the MB ChB V- III B, level V students at WSU during 2008 was done. Results from both semesters were reviewed. Analytical approach of the all components of assessment was done. Correlation Coefficients were used to assess the degree of dependence between each aspect of the continuous, partial evaluation and final mark.

#### **Results or Impact:**

Marks of 102 students in the MB ChB V programme at WSU during 2008 were analyzed.

Fifty one students in every semester, with 3 groups rotating (17 students each) in every one were included. According to our objectives, the statistical analysis showed that the best result correlation was of PA (r=0.747782). We had not negative results in our teaching system because all correlation coefficients were higher than 0.5

#### Take Home message:

The Progressive Assessment (PA) followed by the (OSCE) were the two most predictive assessments of the final marks. Although all aspects had a good correlation with Final Mark. his study we gave us the possibility of know when the student needs help before of the performance of the Individual Process Assessment (IPA) early. To continue the programme with clinical participation of our students is advised, since the training of them in clinical practice reflects the best result in the academic formation of our future medical doctors.

# Assessment- The Engine That drives Learning: A Case study of the NRMSM

Dr JM van Wyk, Nelson R. Mandela School of Medicine Institution

#### Context

Medical schools have been reviewing their curricula to prepare caring and competent health professionals in the midst of a knowledge and technology explosion. The implementation of problem-based learning curricula signaled attempts to make learning more significant, based on constructivist perspectives that emphasise social interaction for meaning making and understanding. Literature suggests that learning in PBL should be assessed by authentic, contextual real-life tasks that support and encourage students' learning. To this end, the Nelson R. Mandela School of Medicine implemented the progress examination (PE) to complement the aims of Curriculum 2001 (C2001). The potential formative function of the PE was specifically appealing to allow reflective, self-directed and deep learning.

#### Aim & Methodology

This study sought to examine whether the educational principles governing the implementation of C2001 also informed the implementation and adaptations of the PE. Using a qualitative case study methodology, the study investigated stakeholders' understandings of the PE and its goals and the lived experiences of its implementation as a suitable tool to assess students' cognitive learning. In addition, the study also investigated the possible factors that influenced the reform.

#### Results

Findings suggest that the PE was not suitable to assess students' learning in C2001. Despite perceptions of a strong educational need for curriculum reform and the apparent suitability of the PE, some members of staff lacked understanding, skill and confidence to apply and implement its aims. Staff failed to apply transformative practices of teaching and learning, while the principles of the PE and C2001 were not well diffused through the organisation. Members of staff expected the PE to differentiate between high and low performing students, while students came to regard the examination as just another hurdle in an already hostile learning environment. Factors such as the unstable and poor leadership, the restructuring of the health and education sectors, impacted on the implementation of the reform.

#### Conclusion

Curriculum and assessment reform is challenging for students and lecturers, requiring the transforming institution to actively prepare and support stakeholders in a conducive educational climate. This case study highlights the need for comprehensive planning for effective and sustained curriculum reform. Collaborative strategies and educational systems should be sought and implemented to sustain conceptual and practical reform.

# Does learning approach determine the outcome in the Anatomy courses?

#### Dr. G. Milanes-Rodriguez\*, Dr. JL Bernal-Muñoz, Prof. M. Garcia-Jardon

#### Context:

There is much subjective discussion but few scientific data that explores how students approach their individual learning of Anatomy. In this study, a questionnaire that explored the ways in which students approach the learning of Anatomy, was distributed to second year medical student's (n=110) at Walter Sisulu University. Ninety one (82.7%) of students completed the survey.

#### Aims:

To correlate the students' learning approach with the results of the OSPE exam in the Neuro-anatomy block of MBChB II students.

#### What was done:

A semi-structured questionnaire exploring the conditions and ways by which students learn anatomy was applied. The block marks for the final OSPE in Neuro-anatomy were correlated with the student's approaches to the learning of anatomy. Logistic regression was used for the estimation of the odds ratio with 95% confidence intervals.

#### **Results:**

The popular approaches to learning anatomy were various combinations of memorization, visualization and trying to gain deep understanding. Our results showed that the probability of obtaining >50 percent in the end of block OSPE was 1.11 for memorization, 1.83 for understanding, 3.68 for memorization and visualization, and 6.37 when all the three strategies were utilized. Superficial approach to learning anatomy (memorization) is associated with a lower probability of achieving >50 percent in the OSPE, whereas the use of deeper approaches to learning (understanding, visualization) are associated with higher probability of obtaining >50 percent.

#### Take home message:

Learning strategies that combine superficial and deep approaches are associated with a higher probability of obtaining >50 percent.

Student's motivation for deeper approach to learning in Anatomy during their SDL must be emphasized.

# Evaluation of teacher's skills by Medical Students in Faculty of Health Sciences, Walter Sisulu University, Mthatha.

#### Prof. Banwari Meel, Walter Sisulu University

#### Context

The students' evaluation is crucial in the examination for grading students, and promoting at the higher levels in degree courses. It is also important to evaluate teaching of a lecturer by students for the quality improvement. This will help in congruent relationship, which helps in the satisfaction of teacher as well as students.

#### Objective

To assess the teachers performance in the classroom by students in Forensic Medicine.

#### Method

On 21 October 2002, MB.ChB 3 students have asked to assess teaching performance of a lecturer by completing performa in the classroom for their free and anonymous opinion for the purpose of quality assurance.

#### Results

Forty-eight students were present out of 62 on that day in the classroom and this make attendance 83%. The subject knowledge was marked as good 40%, very well 26%, excellent 30%, and poor by 2%. Teaching skill graded as well 50%, very well 34%, excellent 12%, and poor 2%. Overall evaluation about subject teaching as good 48%, very good 38%, excellent 12%. No student had marked as poor. Students results were fall in the Gaussian probability model.

#### Conclusion

Teaching evaluation by students in Forensic Medicine is evaluated satisfactorily, and the result was statistically reliable and valid.

#### Significance of this study

It motivates teacher, and improve the quality of teaching.

# Assessment Design for problem based learning at the University of Venda

#### Mrs Makondelele Makatu; University of Venda

#### Context:

The School of Health Sciences at the University of Venda began to implement problem based learning (PBL) curriculum in 2008. All lecturers received professional training towards preparations and implementation of PBL. There is a PBL program for training new staff members. In the process of implementation, many challenges were encountered. Among such was assessment process that is relevant to PBL. Some continued assessing students in the traditional way.

Evidence indicates that active participation in learning is more satisfying than passive transfer of information from the teacher to the student and that active learning leads to enhanced learning and recall (Bransford, Brown & Cocking, 2000). The implication is that instruction has to be PBL based. Therefore, the assessment strategies have to change to fit the curriculum adopted. Nowak and Plucker (1999) argue that if instruction is PBL, even the assessment has to be PBL. Designing relevant assessment methods is important. According to Wiers, Van De Wiel, Sa, Mamede, Tomaz & Schmidt (2002), assessment is an important aspect of PBL curriculum design. That is because assessment should reward the study behaviour that is expected from students in a problem based curriculum

#### Aim:

To review literature on PBL and assessment; To identify assessment methods relevant to PBL; To propose ways that PBL assessment can be implemented.

#### What was done:

Different literature has been reviewed and PBL assessment methods have been identified and documented. The relevance of such assessment methods and how they can be implemented in tutorial sessions as formative and at the end of the block as summative assessment has been established.

#### **Results**:

The following assessment methods were found relevant: OSCE, Mini-CEX, Written test and examination (e.g. MCQ, Case Based Essay, etc.), Presentation in tutorials (Group and Individual presentation), Portfolio, Self Assessment (Learning summary), Peer assessment and feedback.

#### Take home message:

To present the design to different stakeholders.

# A parallel study of peer assessors and trained assessors contribution to clinical skills learning during a formative OSCE.

\*Mrs I Aubin University of Cape Town; Mrs Gillian Hanslo University of Cape Town.

#### Background:

A shortage of trained assessors required us to innovate with employing peer assessors in our second year formative assessment of medical students' clinical skills. This is the first OSCE experience of these students who are in the first half of their second year.

#### Summary of work:

The study describes the design of the OSCE formative assessment in which trained and peer assessors were employed and compares students' performance as assessed by peer and trained assessors. The student performance data is augmented by students' perceptions of the assessment process. These were obtained via a semi-structured questionnaire.

#### Summary or results:

The detail results of both student performance data and the questionnaire findings will be presented. The main findings relating to student performance are that peer assessors gave lower marks at each of the OSCE stations than trained assessors. In regard to the questionnaire, students were unanimous that the formative assessment was a positive learning experience and increased their confidence for the forthcoming summative.

#### Conclusions/Take home:

In resource constrained environments – the use of peer assessment can alleviate resource shortages and not compromise student learning as the study shows, especially since formative assessments are aimed at specifically facilitating learning.

# **Clinical Learning**

# Training Radiology postgraduates Using Case Reports at Makerere University

Dr E Kiguli-Malwadde, Makerere University\*; Dr M Kawooya, Makerere University; Dr Z Muyinda, Makerere University; Dr R Byanyima, Makerere University

#### Context

Postgraduate medical education is much sought after and has become an issue of global significance, appeal and dimensions. The Radiology training programme has been in existence at Makerere University since 1980. To date 30 radiologists have been trained. The training has a vibrant curriculum that is frequently reviewed. It is a 3 year programme with course work and a dissertation. In 1995 something new was introduced. Every candidate was required to write up 30 case reports over the 3 year period. These are spread over the semesters with a student producing 5 cases per semester which are assessed.

#### Aim

The aim of this was to develop students clinical reasoning capacity, develop their case writing skills and help students do in depth studying over the 3 years. Students are encouraged to write up case series and to report unique cases. It is believed that each case makes one an expert. Students follow up the cases and make note not only of the Radiology and Imaging results but other results as well. This helps to promote integration of Radiology with Clinical Medicine. The students are guided by the radiologists and the cases are assessed and given marks using a set of guidelines that were developed by a team of Radiologists. These cases train and asses a wide range of competences like Knowledge, comprehension, professionalism, personal attributes, critical thinking, health promotion, disease prevention skills, decision making and self directed learning, life long learning, literature appraisal and all 4 levels of Millers pyramid.

#### Take home message.

Case report writing is an innovative way of developing expertise for postgraduates.

# Factors that influence the academic outcomes of the M.B.Ch.B. III students in Clinical Skills.

#### \*Dr. J Lombaard;

Dr. L de Bruyn University of the Free State

#### Context

The M.B.Ch.B. III OSCE is an objective structured clinical assessment method where components of the clinical skills training, such as history taking, physical examination, performing procedures and communication skills are assessed. The students rotate through a series of stations, some that have examiners with checklist. The OSCE ensures clinical integration of subject matter.

#### Aim

The aim of this study is to determine what the student's perceptions of their Clinical Skills OSCE are, whether these perceptions are in agreement with the average class performance and whether the perceptions could be applied to improve the assessment in future.

#### Methods

Questionnaires were completed by 127 M.B.Ch.B. III students, immediately after their OSCE in May 2008. The questionnaires where bilingual and anonymous.

#### Results

The majority of students perceived the OSCE as fair, understood the questions and concur that the time allowed for the stations was adequate. This was the perception for both practical as well as unattended stations. In spite of this the class average was only 61%.

What became clear was that specific themes of stations significantly influenced the class achievement so that even though the students'perception of a specific theme was favourable, the corresponding class achievement for this theme was low.

The question that arises is whether students avoid certain themes during their preparation for assessment.

#### Conclusion

The authors are of the opinion that students have a favourable perception of the Clinical Skills assessment, and that individual themes may influence the average class percentage.

# Teaching interviewing skills: feedback to students lead to changes in teaching

**Mrs DM Hugo**. University of Limpopo Medunsa Campus\*; **Mrs D Pretorius**, University of Limpopo Medunsa Campus

#### Context:

At Medunsa second year medical students are taught interviewing skills in five week blocks, in groups of 30 to 40. Students should study notes and five prescribed chapters beforehand. A didactic and demonstrative preparation lecture are given, where they are motivated to practice the skill. A test is written early in the block. Each student does an interview with either patients or peers and a video recording with a simulated patient. A summative assessment is done on the video recording and practical interview.

Students seem to be highly stressed during the block. They are ill prepared when the block start, but do better as the block and year progress. Feedback given seems to be more than just teaching the skill.

#### Aim:

The evaluation of the feedback was to understand whether due to this knowledge, a review of the structure, process and assessment of the block was needed and whether more needed to be done in preparing the students.

#### Methods:

Over a two year period, feedback discussions were noted which took place during the review of the video recordings in class. A qualitative analysis was done of these notes by identifying and describing specific themes.

#### **Results:**

Results indicate that feedback discussions mostly focus on interviewing techniques and principles (create order from disorder, explore present and previous, and understand what patient means). It focuses on personal and societal issues (sexuality, violence, work and other values). Development of a professional attitude, conduct and ethics (legal obligations, ethical code, confidentiality, note taking, neatness and dress code), managing English(sentence construction, formulation of questions) and basic clinical science.

#### **Conclusion:**

• Feedback address the needs of students.

• Educational waste is created due to feedback not being followed up. It should be incorporated in other learning cycles.

• An effective learning prescription is needed, collaboration are needed with blocks involving communication, consultation and counseling.

• Attention is needed in personal, professional and more language development, before being taught interviewing skills.

• Formative assessment should be utilized in monitoring the growth of students.
# Can Regional and District Hospitals be used as clinical teaching sites for medical students?

Dr Samuel Malin, Faculty of Medicine, Mbarara University

Gad Rusaaza, Department of Community Health, Faculty of Medicine, Mbarara University

#### Context

Use of regional or district hospitals as sites for clinical teaching enables medical students to acquire a wider range of clinical skills and may encourage them to consider a career in rural practice. Mbarara medical school utilizes the adjacent Mbarara National Referral Hospital as its sole teaching hospital, yet there are four regional and one district hospital within a 120-km radius staffed with specialists. The teacher: student ratio in clinical disciplines at the Mbarara University main teaching hospital is about 1:30 and this falls below the recommended 1:15. In view of the above, this study set out to investigate the feasibility of using regional and district hospitals to compliment clinical teaching.

#### Aims

The aim was to explore the views of students, stakeholders and specialists at regional and district hospitals on the idea of placing medical students at the regional/district hospitals.

#### Methods

A needs assessment survey using a self-administered questionnaire was done among the fourth-year medical students. The medical students were purposely selected because they had recently completed their community placement and had also completed rotation in the major clinical disciplines. Focus group discussions were carried out with the purposely selected students. Key Informant interviews were held with stakeholders at Mbarara University and the regional/district hospitals.

#### Results

There was an overwhelming support of the idea of using regional hospitals as teaching sites. The 30 specialists at regional/district hospitals will improve the teacher: student ratio to 1:2-3 during placement in these sites. The students agreed that placement at regional hospitals will provide them with more clinical experience, allow them clerk more patients and will ultimately make it more agreeable for them to take up community placements. Foreseen challenges were additional financial resources required, supervision, need to train potential faculty and the timing of the placements.

#### Conclusion

Regional/district hospitals provide a hitherto untapped resource to address the unfavourable teacher: student ratio with additional advantages.

# MBChB II students' perception of their knowledge and skill in patient interviewing and assessment outcomes.

Mrs Deidre Pretorius, Dept Family Medicine, UL (MEDUNSA)\* Mrs. Margaret Hugo, Practice of Medicine, UL (Medunsa)

#### Context:

The interviewing block in Practice of Medicine for MBChB II students, consists of five sessions of five hours each. The students are trained on basic communication skills and person-centered medical history taking. The students are expected to use the mainly didactic information and successfully transform it into a skill. An interview with a simulated patient is video taped and assessed. This forms the block mark. In 2008 the students were of the opinion that they scored too low, and wanted better marks.

#### Aim:

To analyze the feedback of 2008 (n=179), and to determine the correlation between the students' perceptions of their personal knowledge and skills, and the marks obtained in the interviewing block. What was done:

The students rated their knowledge and skill between zero and ten. Zero meant no knowledge or skill, and ten meant perfect knowledge and perfect skill. These ratings were statistically correlated with the actual scores obtained for the video interview.

The students also had to rate the importance of the block as a clinical skill.

#### **Results:**

Eighty eight percent of students rated the importance of the block between eight and ten.

The Pearson correlation suggested that 21.5% of student's marks and perception of their level of knowledge (p= 0,215) correlated. Sixty eight percent of student's perception on their level of skill and the video score did not correlate (p=0.320). This suggests that MBCHB II students had an unrealistic perception with regard to their levels of interviewing knowledge and skill.

#### Take home message:

The students' unrealistic perception of their knowledge and skill, could contribute to lower academic outcomes. There are two main factors that may limit the transition from didactic information to the application of a skill:

• Student factors - low motivation and self discipline; academic immaturity; lack of previous exposure of basic consultation skills, and being overwhelmed by the video assessment.

• Facilitator & course factors - too high expectations of students after two weeks; training and/or assessment methods not reflecting the required outcome of the interview; not enough time to internalize a skill.

# Learning & teaching

## The Development of a Community Service Learning, interdisciplinary education and Primary Health Care module

**Ms MJ Nel**, Community Service Coordinator, Office of the Dean, Faculty of Health Sciences, UFS; **Prof MM Nel\***, Head: Health Sciences Education, Office of the Dean, Faculty of Health Sciences, UFS; **Dr J Bezuidenhout**, Health Sciences Education, Office of the Dean, Faculty of Health Sciences, UFS

#### Context:

Community service learning forms one of the corner-stones and is inextricably embedded in the mission of the University of the Free State. Where it is an established pedagogy which forms an intricate part of the strategic planning of the UFS. It has already been generally adopted and is well established.

In the Faculty of Health Sciences, UFS, community-based undergraduate education consists of learning activities that utilise the community extensively as a learning environment in which students, lecturers, members of the community and representatives of other sectors are actively involved throughout the learning experience. By doing so, health services are offered at clinics and community centres. However, there was no formal programme to teach staff how to teach and train students in such environments. The problem that was addressed is the lack of a formal staff development programme to teach health professionals in the Faculty of Health Sciences to render a knowledge-based community service via service learning.

#### Aim:

The aim of the research project was to enhance capacity-building in clinically-orientated and associated teaching and service learning in community settings. This was done by developing a new credit-bearing short programme on service learning, interdisciplinary education and primary health care.

#### What was done:

The use of Module HPE 705 (Community-based education) as a point of departure caused the rethink and change of the Module to a multi-professional and interdisciplinary approach to teaching in community settings. This was done with a view to build capacity as far as educational expertise in clinical-orientated and community settings is concerned. The module with it's content was developed as well as a module guide and learning material.

#### **Results:**

The module was developed as a web-based and blended learning credit-bearing short course based on best-evidence practice and is being implemented in 2009.

#### Take home message:

There is a greater awareness of the need to train health professionals as educators with the emphasis on a holistic approach to the roles of the lecturer in community settings. The importance of providing quality health professions education has been recognised for a long time, but perhaps never more than at present, within today's climate of increased accountability to the different stakeholders.

# Filling the gap in educational knowledge of trainers in community settings

Prof MM Nel\*, Head: Health Sciences Education, Office of the Dean, Faculty of Health Sciences, UFS

#### Context:

Community service teaching and learning (until recently referred to in the Faculty of Health Sciences, UFS as community-based education) denote a mutual linking of community service and academic training directed at addressing real needs in society, strengthening students' learning experience and enriching the teaching actions of lecturers. It provides the opportunity to render a health-related service, not only in hospitals, but also in clinics, community health centres and community settings.

Many staff development opportunities for academics exist in the Faculty of Health Sciences, although the two approaches that are followed, namely the skills development, competence-based approach and the development approach, a top-down management approach do not focus on transformative change. It might be of great value to add a self-evaluation process of education and training if community service teaching and learning is to be enhanced.

#### Aim:

The aim of the research was to identify lecturers' educational needs in order to improve the effectiveness of clinically-orientated and associated teaching with a view to ensure quality in service learning. The following objectives were pursued: Identifying the education-relevant knowledge, skills and attitudes that health professionals need in order to improve the quality of teaching and service learning; and developing a multidisciplinary self-evaluation research initiative whereby service learning teachers can reflect on their teaching practices

#### Method:

Semi-structured interviews and discussions on self-evaluation of service learning and teaching were conducted with 25 lecturers.

#### **Results:**

Strengths and weaknesses as a lecturer in community settings, their educational needs, self-evaluation, and how to fill the gap in knowledge, skills and attitudes were identified.

#### **Conclusion:**

From the findings of the interviews and group discussions, it was clear that the need exists to offer a creditbearing short course on community service learning, to present seminars and workshops, to develop a support system for lecturers as well as a multi-disciplinary self-evaluation research initiative whereby servicelearning teachers can reflect on their teaching practices. Emphasis on the self-review of teaching practices conducted by academics in community settings will enrich staff development in the Faculty but will also lead to enhanced student learning success with better health services to communities.

## The development of a critical reasoning process that provides an understanding of how ethics permeate the decision-making process in transformation in higher education

**Prof MM Nel\***, Head: Health Sciences Education, Office of the Dean, Faculty of Health Sciences, UFS; **Prof PPC Nel**, Programme Director, Programme Management, School of Medicine, UFS

#### Context:

"South Africa belongs to all who live in it, united in our diversity" (SA constitution). This means that this country does not belong to any cultural group nor is it the reflection of any particular cultural group. A society cannot function to its fullest if it ignores the ideas, contributions, efforts and concerns of any of its people. An institution in its process through enabling and monitoring transformation, has to pay attention to certain factors and issues, which characterise the new higher education dispensation in the country. This especially is important if it is to produce diverse, relevant and pragmatic professionals.

#### im:

The problem that had been addressed was the lack of understanding of how ethics plays a role in the process of transformation in a higher education institution. The aim of the research was to develop a framework that provides an understanding of how ethics permeate the decision-making process in Higher Education transformation.

#### What was done:

Based on a literature study an interview guide was compiled to conduct structured interviews with the view to identify the education-relevant knowledge, skills and attitudes that professionals need in order to improve the quality of the transformation process and the results there-of as well as to identify relevant ethical principles, virtues and values that might be helpful in resolving dilemmas.

#### **Results:**

A framework for the development of a critical reasoning process that provides an understanding of how ethics permeate the decision-making process in transformation in higher education was compiled.

#### Take home message:

A demand for equal opportunities, and for educational programmes, which are relevant for the immediate communities, the country and current times; new instructional approaches and educational structures as well as changing student and staff populations are the issues that characterise the new higher education dispensation. Ethical dilemmas arise when values, rights, duties, and loyalties conflict, and consequently not everyone is satisfied with a particular decision. The scope of ethics is not limited to philosophical issues but embraces economic, political, social, medical and legal dilemmas as well.

# The Value of Learning about Learning

#### Mrs C Adams, University of Pretoria

#### Context

Du Toit (2001) says that professional development includes becoming a self-regulated, flexible, reflexive practitioner, who can monitor one's own learning in accordance with the demand of the teaching profession. If I knew how I learn, could I help learners to learn more effectively?

#### Aim

The aim of the study was to determine:

- a) My learning/thinking style preference.
- b) Compare my learning/thinking style preference to my style of facilitating learning.

#### What was done

In order to identify my learning/thinking style I completed the HBDI®, administered through an accredited practitioner in South Africa, but scored in the USA. Using these results I compared my learning/thinking style to my lecturing style. I then used Herrmann's whole brain teaching and learning model in conjunction with the expectations of learners with thinking preference in the four quadrants in order to plan for lectures which I aimed at a more whole brain approach.

#### Evaluation

To assess my development as a more student-cantered facilitator of learning, I conducted learner assessment (colleagues and students); peer assessment and self assessment.

#### Results

Colleagues wrote a short reflection on the learning opportunity of which the response was positive. All felt that they had learned more about whole brain learning and how to possibly incorporate it into their curriculum.

For students' assessment, I administered a questionnaire of which the results are not available at present. From informal discussions with students, some commented that they felt less bored in my lectures and that they felt challenged to think in the lecture being actively involved.

Two peers, attended lectures presented by me and agreed that the lectures were well structured and thoroughly planned for, with the outcomes being specified. They also agreed that the learners were being challenged to learn, that they were involved in the learning.

Self assessment included reflection, of which I strongly feel I have moved in the right direction in becoming a more flexible lecturer who tries to provide learning opportunities that appeal to learners with different learning/thing styles.

#### Take home message

Yes, there is value in learning about one's own learning/thinking style preference and that it could aid in professional development of academics.

# The Show MUST Go On!

\*Prof Juanita Bezuidenhout, Stellenbosch University/NHLS;

Dr Johan Dempers, Stellenbosch University/PAWC, Dr Alwyn Louw, Stellenbosch University Dr Hans Strijdom, Stellenbosch University; Me Susan Beukes, Stellenbosch University Prof Ben van Heerden, Stellenbosch University; Me Martie van Heusden, Stellenbosch University; Prof Marietjie de Villiers, Stellenbosch University; Prof Charl Cilliers Stellenbosch University

#### Context:

In 2008 we launched a Foundation Phase that now constitutes the first semester of the medical, physiotherapy, occupational therapy and dietetics programmes at our Faculty of Health Sciences. There are 4 parallel modules, emphasising basic concepts and principles; Personal and Professional Development (PPD), Life forms and Function (Biology, Anatomy, Histology, Biochemistry and Physiology), Chemistry for Health Sciences and Health in Context (HC). PPD and HC focus, for example, on communications skills, academic reading and writing, speaking and listening skills in a 3rd language, psychosocial perspectives on health, health promotion and risk factors for disease, biostatistics and basic computer skills and health services and professions.

#### Why the idea or change was necessary

After the first round of Foundation Phase programme evaluation, it was clear that all the students did not understand the need for PPD and HC modules and would have preferred pure natural science subjects.

#### Aims

To develop an introductory session to the Foundation phase that will demonstrate its relevance, intentionality of the lecturers and the potential of generic skills' transfer.

#### What was done

During the first two sessions of the Foundation Phase, an 8 minute DVD introduced Norman, a generic student. The narrative of Norman's study antics illustrated, amongst others, the importance of motivation, effective study methods and student support services. A short play about a fictitious patient, who visited the hospital for a "blue" leg, was seen by the exemplary clinic doctor who even had time for a tutorial with the students, was referred to a surgeon for amputation, with disastrous results, followed. Students were then provided with the outcomes for the Foundation Phase, and in small groups, had to link aspects of the presentations with specific outcomes, followed by discussion.

#### **Results or impact**

Informal feedback and the buzz on campus indicate that the innovation had a positive impact on the students' understanding of the relevance of the Foundation Phase, their appreciation of the intentionality and the principles of transfer. The impact of this intervention will be measured once the Foundation Phase has been completed at the end of June 2009.

#### Take home message

A SHOW may be necessary to keep the show on the road.

## Does the small group tutorial in PBL need 'Spicing up'?

#### VS Singaram W Sturm

#### Why was the idea necessary?

The Nelson R. Mandela School of Medicine (NRMSM) implemented a 5 year PBL curriculum in 2001. PBL modules are part of the first 3 years. Each student group represents a mix of socio-cultural backgrounds. The groups meet twice a week to discuss a PBL case. Groups are reconfigured for every new module (5-9 weeks) Ensuring the effectiveness of the small-group tutorial learning is critical for the success of a PBL programme. Anecdotal evidence suggests that a phenomenon of PBL-related 'ritual' behavior, i.e. where students put on an appearance of being actively involved in the group work, is prevalent in our medical school and is a risk factor to learning for understanding.

#### Aims

To understand more fully the nature of the problem of dysfunctional tutorial groups as a step toward composing a solution.

#### What was done?

An action research cycle was initiated to identify the problems experienced by students in tutorials. A comprehensive survey consisting of open and closed questions was administered to 598 Y1-3 undergraduate students. The present report focuses on free responses concerning perceptions about small-group learning. Data was analysed qualitatively, coded and clustered into themes.

#### **Results and Impact**

Several themes emerged encompassing a variety of problems including withdrawing, sponging, shy, dominant behavior, poor facilitation, personality clashes, superficial discussions and poor formulation of learning goals. These results documented and confirmed the presence of ritualistic behavior in the tutorials. A comprehensive strategy to address these problems was the focus of the second action research cycle. One important outcome has been the need for feedback using an instrument for peer assessment. The assessment will be imbedded in a constellation of a multifaceted approach to spicing up, improving the quality of learning.

#### Take home message

Peer feedback has the potential to enhance group learning and revitalise the dysfunctional small-group tutorials.

# Becoming a PBL Facilitator: From Novice to Expert

#### Professor N.G. Mtshali, University of KwaZulu-Natal

#### Context

In 1994, the UKZN School of Nursing adopted a problem-based community-based (PBL/CBE) curriculum aimed at producing graduates who have transferable life skills such as meta-cognitive and self-directed learning as well as problem solving and critical thinking skills.

During a recent review process the need for continuous staff development, with specific focus on facilitation of learning, was identified. This was critical because effective facilitation lies at the centre of the success of a PBL/CBE programme. In the past years, the school has experienced high staff turnover which has resulted in loss of expertise and has threatened the culture of innovative teaching.

#### Aim

Development of a continuous training program for nurse educators to facilitate the acquisition of expected skills by learners.

#### What was done

This project consists of three phases. For the first phase an online needs assessment survey was conducted on nurse educators, using a 20 item, 4 point Likert scale.

#### **Results or impact**

There was a 60% response rate. The findings reflected mixed views about teaching and learning and the perceived roles of the facilitators. The majority of the facilitators encouraged dialogue during class interactions (61%), critical appraisal of information presented (66%), challenging of explanations provided by peers (58%) and critiqued resources used in preparation for class sessions (42%). In contrast, some facilitators required factual information during sessions (57%), couldn't stand silence (73%), were tempted to intervene, provide answers and conclusions (63%) and did not promote self assessment or evaluation of the facilitator (23%). All participants recommended capacity building for PBL/CBE facilitation and information from this survey has been used to develop interventions such as a staff development program, a facilitator's guide, a support group for facilitators.

#### Take home message

Becoming an effective PBL/CBE facilitator is a transformational journey and maintaining a culture of innovative teaching requires consistent support.

## What can DNA teach doctors about teaching?

<u>Dr CPG Nel\*</u>, HPE-Programme, Office of Dean, Faculty of Health Sciences, UFS, <u>Prof GJ van Zyl</u>, Head: School of Medicine, UFS, <u>Prof RS du Toit</u>, Head: Dept of Surgery, UFS

#### Context:

The implementation of a framework for achieving excellence as a clinical educator is presented. The generic framework was compiled to be flexible and with the potential for implementation in the School of Medicine at the UFS. The framework was designed to be adjustable and resilient in that it addresses the diversity of the needs of the different clinical groups in a School of Medicine.

#### Aim:

The goal of this study was to enable clinical educators to provide quality teaching and training, as well as to contribute to the learning successes of students. The aim was to compile a framework for achieving excellence as a clinical educator in the School of Medicine, as well as offering guidelines to implement the framework.

#### Method:

Quantitative and qualitative approaches were used to complement each other; to provide a better understanding of the research problem; as well as to enhance the interpretability of the research findings. The methods that were used comprised a literature review, questionnaire survey and a Delphi process.

#### **Results:**

Aspects which were discussed included the premise for the development of the framework, the points of departure with regard to the framework for achieving excellence as a clinical educator, the role-players who influence clinical teaching and training in a medical school, as well as the different aspects constituting the framework.

The researcher proposed that the implementation process of the framework be seen as a continuous helix (like a DNA helix) with various opportunities for developmental interventions. It is not a closed process to achieve excellence but a continuous, stepwise, sequential and dynamic process. A group of clinical educators or a clinical educator could - in consultation with staff development planners - identify a role/competency for intervention and develop a group or an own individualised plan, zooming in on this helix whenever necessary, but also in a planned manner where and when it is most relevant and applicable.

#### Conclusion:

With this study a contribution is made not only to staff development in the School of Medicine, UFS, but also to other medical schools in South Africa. The beneficiaries of this framework are the clinical educators, the students and, ultimately, the patients.

# **Monitoring & Evaluation**

# Clinical Demand and Educational Supply. Is there a balance?

#### Dr. TW de Witt University of Pretoria

#### Why was the idea necessary:

Medical schools are subject to the same pressure as universities in general to be accountable for the quality of education. The challenge to equip interns with adequate skills is exacerbated by various health system factors, such as increased demand for health services and a shortage of skilled health workers.

#### Aims:

This research investigated the nature of the clinical challenges interns face in everyday practice in Obstetrics and Neonatology and the degree to which undergraduate teaching prepared them to meet these demands.

#### What was done:

A web-based questionnaire survey of recent medical graduates was undertaken. Ethical approval and informed consent were obtained. 385 graduates from the University of Pretoria were surveyed. 180 responses suitable for analysis were obtained. Closed-ended items addressing skills and knowledge in Obstetrics and Neonatology determined the frequency of the clinical situations the interns faced, and how well prepared they perceived themselves to be. Open-ended items required interns to describe situations for which they felt well and poorly prepared, and why. Descriptive statistics were used to describe quantitative data. Qualitative data were analysed according to principles of thematic analysis.

#### **Results:**

Although the teaching programme was found to be aligned with the frequency of demand situations, certain gaps exist. The students perceived themselves well prepared for routine and emergency work in Obstetrics but under prepared for Neonatology. They did not feel confident resuscitating and managing sick babies. Reasons included a number of specific skills that they had no opportunity to practice, such as resuscitation and obstetric surgical skills. They felt the time spent during clinical rotation in Neonatology was not sufficient.

#### **Conclusions:**

This strategy is valuable in determining the alignment between curriculum and practice. Unusual working conditions and problems in the health care system create a context in which it is expected from interns to manage complicated obstetric and neonatal patients while still very inexperienced. This raises the question where hands-on skills such as caesarean sections, and advance management of sick neonatal should be taught, during the internship or during the student years.

## To be or not to be

**Bezuidenhout**, J., Division Health Sciences Education, Faculty of Health Sciences, University of the Free State.

Staff Development forms an integral part of not only quality assurance, but also quality improvement within any progressive institution. By training staff and addressing their needs as well as that of the institution, one addresses quality assurance. By improving the skills and knowledge of staff through staff development, one is not only improving quality, but also empowering staff to become self-sufficient and to reach their potential. This study made use of quantitative techniques to identify the attendance and relevance of staff development sessions.

#### Context:

The Division Health Sciences Education is responsible for staff development in the Faculty of Health Sciences, UFS. Staff development sessions are offered to address the varying and particular needs of staff within the Faculty, as identified during the "Bosberaad" discussions held with the three Faculty Schools (Medicine, Allied Health Professions and Nursing) in 2005 and August 2007 and on an ad hoc basis.

#### Aim:

To establish the attendance rate and constitution of the sessions offered, in order to determine the relevance of the sessions and the accuracy of the "Bosberaad" indications. The study was also used as a planning tool for future sessions, with quality assurance and improvement kept in mind.

#### Method:

Data were collected by means of the Microsoft Access<sup>©</sup> database for all staff development sessions from 2006 to date. The database calculates all the information in summarised format per individual/per department/per School and according to set criteria. Data were then carried over to the Microsoft Excel<sup>©</sup> program. The results are displayed via graphs for 2006-2008.

#### **Results:**

The results indicated that staff development sessions were attended well. Medicine is the largest School in the Faculty with the highest attendance rate.

#### **Conclusion:**

Staff development sessions are a definite must and should address the needs of the Faculty of Health Sciences. The sessions clearly ascribe to quality improvement and the principles of quality assurance.

# A mirror has two sides: quantitative and qualitative reflections on staff development sessions held (2006-2008) in the university of the Free State

<u>Dr Bezuidenhout, J.</u>, Division Health Sciences Education, Faculty of Health Sciences, University of the Free State.

Quality Assurance and – Improvement have become synonymous with endeavours in Higher Education Institutions in an ever-growing and competitive market in South Africa and worldwide. In this study, quantitative responses related to the information presented were obtained from all attendees of staff development sessions as part of the evaluation process. Qualitative responses and general comments were also collected in accordance with qualitative methodology. Responses were analysed in order to minimise future mistakes, to focus on the quality of sessions offered and also to bring about changes to improve the quality of forthcoming sessions.

#### Context:

The Division Health Sciences Education is responsible for Staff Development in the Faculty of Health Sciences, UFS. Staff development sessions are offered to address the varying and particular needs of staff within the Faculty, as identified during the "Bosberaad" discussions held with the three Faculty Schools (Medicine, Allied Health Professions and Nursing) in 2005 and August 2007.

#### Aim:

To determine whether the sessions offered were addressing the needs as identified by staff and if any changes were needed. The aim of the evaluation sheets used was to address principles of quality assurance and quality improvement.

#### Method:

Evaluation sheets were handed out at every staff development session. Attendees were requested to answer a set of questions of a quantitative nature and another set of questions of a qualitative nature that focused on their reflections on the session and their remarks. By summarising all the quantitative responses, one could ascertain whether the sessions addressed the needs of the attendees. The qualitative responses indicated any changes required.

#### **Results:**

From the responses it is clear that staff needs as identified are addressed. Comments from staff were included in an improvement plan to enhance future sessions by not only maintaining quality, but also improving the quality of staff development.

#### Conclusion:

Staff development is sound and well and adds value within the Faculty of Health Sciences.

# Students' feed back for the MBChC III Chemical Pathology teaching: Our experience at Walter Sisulu University.

E. Blanco-Blanco\*;

M. Garcia-Jardon;

Z. Gqweta.

#### CONTEXT:

The Faculty of Health Sciences at WSU is one of the leading PBL schools in Africa. Chemical Pathology is taught in the third year of the MBChB curriculum, in an integrated course, together with Anatomical Pathology, Pharmacology and Microbiology. Integration takes place during tutorials, practicals and during the continuous and final assessment. Students also receive discipline-based resource sessions for guidance to the specific learning approaches.

#### AIMS:

To describe the value of the student's feed back on the teaching in Chemical Pathology in the MBChB III programme.

#### WHAT WAS DONE:

The subjects were 93 MB ChB III students who responded to the end of block anonymous semi-structured questionnaire addressing their perceptions of the teaching. Closed questions were used for quantitative analysis of the students' views, to identify what they considered as the most relevant aspects to have a negative and a positive impact on the teaching and learning process. The questionnaire targeted the resource sessions, organization management, quality and feed back of assessments, and impact of the teaching on their personal development among others. The closed questions were answered using a Likert's scale. Also open questions on overall satisfaction for qualitative study were included and the full texts answers scrutinized by the authors.

#### **RESULTS OR IMPACT:**

Majority of the students found Chemical Pathology intellectually challenging and regarded the resource sessions as helpful to clarify issues they did not understand during the other teaching-learning exercises. Similarly, most of them felt the need for more time for self-directed learning, for practical exercises, and additional resources to develop their laboratory interpretive skills.

The open-ended questions helped to identify students' perception of the origin of the problems and possible solutions. The follow up of the student's views allowed introduction of adjustments and showed the students higher level of critical reflection.

#### TAKE HOME MESSAGE:

Follow up of students' feedback not only identifies teaching problems to be addressed but also help tutors to get a perception of their reflection on critical learning.

## Core Obstetrics Self-Test exercise for formative evaluation in clinical training

**Dr A Kent** University of Cape Town\* **Dr L Rogers** University of Cape Town

#### Context:

When medical students enter the clinical situation they sometimes feel swamped by new words, terms and phrases. The vocabulary and abbreviations used are not meant to confuse them but it takes time to adjust to and interpret the new language to which they are exposed.

The aim of this project is to supply the neophyte student with the core terminology necessary for him/her to better understand tutors, doctors and nurses in obstetrics when they enter the wards.

In addition to the glossary of terms, there is a built-in self-test facility which the student can attempt when he/she feels they are confident they have a working grasp of the database.

#### Aims:

The aims of the Core Obstetric Self-Test project are to

• provide a computer based glossary of words and terms for students to learn at the start their clinical careers

• give the student a self-test facility to gauge their competence when they are confident they have mastered the data provided

#### What was done:

The core obstetric syllabus was divided into topics and the abbreviations, words, phrases and terms were recorded and placed on the local Intranet at the University of Cape Town. Members of the Department of Obstetrics & Gynaecology submitted these data together with questions that would test the students' recall and a self-test facility was added using the Vula platform of the Faculty of Health Sciences.

The students were informed of this facility and invited to browse the databank and participate in the test early in their rotation.

#### **Results:**

The students have welcomed this innovation and its impact on their learning is being assessed. The students are able to take the self-test at any stage of their course since the results are formative and do not contribute to their final marks.

#### Take home message:

Students appreciate being given a core vocabulary at the start of their training in practical obstetrics.

They feel it gives them a quicker grasp of the situation and enjoy being able to test their competence in a non-threatening environment.









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