1st National Health Sciences: Education Conference
Hosted by the
Faculty of Health Sciences SU, South Africa

19 – 21 June 2008

Final programme and book of abstracts

SOUTH AFRICAN ASSOCIATION OF HEALTH EDUCATIONALISTS
Dear Colleagues

Welcome to SAAHE’s 1st National Health Sciences Education Conference. We are overwhelmed by the great interest in this event, with almost 200 delegates registered as I write this!

This conference, our first national event, is a joint venture between the Universities of Stellenbosch (SU), Cape Town (UCT), Western Cape (UWC) and the Cape Peninsula University of Technology (CPUT). Under the auspices of SAAHE, four regional health sciences education conferences have already been held - hosted by SU in 2004, the UCT in 2005, the UWC in 2006, and the CPUT in 2007.

The Organizing Committee has been working closely with the Scientific Committee to put together an exciting programme to inform you and stimulate discussion. For this conference we have accepted some 64 oral presentations, 50 posters and 12 workshops. We are particularly grateful to our guest speakers, who have incurred considerable cost to be here, not to mention the time and effort on their part.

This event could not have been possible without the help of many dedicated individuals. I thank all members of the organizing and scientific committee for their time and commitment. Your passion for health science education is remarkable and contagious! I also want to thank the congress secretariat, CONSULTUS. It has been a pleasure working with you!

We wish you all a very pleasant time and an outstanding congress. Cape Town is a glorious place to be - please enjoy something of our wonderful city while you are here. We are dedicated to making this conference a huge success and hope you find it a rewarding educational experience! Welcome once again!

Elize Archer
Chairperson: Organising Committee
ORGANISING COMMITTEE
Elize Archer (Chairperson: Stellenbosch University/SU)
Elmi Badenhorst (University of Cape Town/UCT)
Francois Gilliers (Chairperson Scientific Committee: Stellenbosch University/SU)
Marietjie de Villiers (Stellenbosch University/SU)
Angie Dunn (Cape Peninsula University of Technology/CPUT)
Athol Kent (University of Cape Town/UCT)
Wendy McMillan (University of the Western Cape/UWC)
Nelda Rousseau (Unistel ConsultUS)
Ben van Heerden (Stellenbosch University/SU)

CONGRESS SECRETARIAT:
For further information, please contact: Nelda Rousseau or Lindi Pretorius,
SAAHE Conference, Unistel ConsultUS, P O Box 19063, Tygerberg, 7505
Tel: 021 938-9082/9651, Fax: 021 933 2649 E-mail: lindip@sun.ac.za

CONSULTUS [III]
FOR CAREFREE CONFERENCING
INVITED SPEAKERS

Prof Janet Grant
Director - Centre for Education in Medicine, Open University, UK

Prof Page S Morahan
Co-Director of the FAIMER Institute, Co-Director of the Hedwig van Ameringen Executive Leadership in Academic Medicine (ELAM) Program for Women and tenured professor in Microbiology and Immunology at Drexel University College of Medicine, USA

Prof Deborah Murdoch-Eaton
Professor in Medical Education, University of Leeds, UK

Prof Christina Tan
Director of the Medical Education & Research Development Unit (MERDU), University of Malaya, Malaysia

Rev Dr David CM Taylor
Senior Lecturer in Medical Education and Deputy Director of Medical Studies (Quality Management), University of Liverpool, UK

Prof Ara Tekian
Associate Professor of Medical Education, Director - International Affairs and Director - Certificate Programs, Department of Medical Education, University of Illinois at Chicago, USA
GENERAL INFORMATION

REGISTRATION AND INFORMATION DESK
The Registration Desk will be located in the Hallway on the 1st floor of the Teaching Block, Faculty of Health Sciences, at the following times:

<table>
<thead>
<tr>
<th>DATE</th>
<th>TIME</th>
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<tbody>
<tr>
<td>Thursday 19 June 2008</td>
<td>07h00 - 09h00</td>
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<tr>
<td>Friday 20 June 2008</td>
<td>07h30 - 08h30</td>
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<tr>
<td>Saturday 22 June 2008</td>
<td>07h30 - 08h00 as well as during lunch and tea times</td>
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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 each 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 program. 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 15 points for attending and are required to register daily at the CPD Desk situated at the entrance of the lecture theatre.

EXCURSIONS AND ACTIVITIES
Our dedicated tour operators are Signature Tours. For a personalised excursion / tour please contact Jannie Loubser at: jannie@signaturetours.co.za  Phone: 27 21 975-1060

AIRPORT TRANSFERS
Transfers to and from the airport can be organised directly with Tourassist. Delegates are requested to contact Mr Calvin Johannes directly for all transfer arrangements at: AFRICAN END TOURS & CHARTERS, Cape Town, South Africa Telfax: 021 913 7789; Ofiice: 021 913 3837; Cell: 082 873 5196 Email: calvin@tourassist.co.za www.tourassist.co.za
TRANSPORT

Complimentary transport will be provided to the conference venue for delegates staying at the Bellvista Lodge and the Bellville City Lodge. Delegates are requested to be at the collection points at the following times:

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<tr>
<th>Collection Point</th>
<th>Date</th>
<th>Departure Time</th>
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<td><strong>Hotel</strong></td>
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<td>City Lodge</td>
<td>19 June 2008</td>
<td>06h50</td>
<td>SAAHE conference Venue (FHS)</td>
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<td>SAAHE conference Venue (FHS)</td>
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<td>Bellvista Lodge</td>
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<td>SU Faculty of Health Sciences (FHS)</td>
<td>19 June 2008</td>
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<td>Bellvista Lodge and City Lodge</td>
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<td>SU Faculty of Health Sciences (FHS)</td>
<td>21 June 2008</td>
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<td>Bellvista Lodge and City Lodge</td>
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<td>Social Function</td>
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<td>City Lodge</td>
<td>20 June 2008</td>
<td>Conference Dinner at Bloemendal</td>
<td>18h30, 18h45, 19h00</td>
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<td>Bellvista Lodge</td>
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<td>Bloemendal Restaurant</td>
<td>20 June 2008</td>
<td>Conference Dinner at Bloemendal</td>
<td>22h30</td>
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<td>Time</td>
<td>Event</td>
<td>Chair/Speaker</td>
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<td>07h00 – 09h00</td>
<td>Registration</td>
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<td>Tea and coffee</td>
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<td></td>
<td><strong>OPENING CEREMONY</strong></td>
<td><strong>Chair: Dr A Kent</strong></td>
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<tr>
<td>09h00 – 09h10</td>
<td>Welcome</td>
<td>Prof W van der Merwe, Dean FHS, SU</td>
<td>Main Auditorium</td>
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<tr>
<td>09h10 – 09h30</td>
<td>Opening Ceremony</td>
<td>Prof M Fourie, Vice-Rector (Teaching), SU</td>
<td>Main Auditorium</td>
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<tr>
<td>09h30 – 10h00</td>
<td>Opening address</td>
<td>Prof M Price, Vice-Chancellor Elect, UCT</td>
<td>Main Auditorium</td>
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<tr>
<td>10h00 – 10h45</td>
<td><strong>Keynote speaker 1</strong></td>
<td>Prof D Murdoch-Eaton</td>
<td>Main Auditorium</td>
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<td>Feedback misunderstood or just not recognised</td>
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<td>10h45 – 11h10</td>
<td>SAAHE Regional Meetings</td>
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<td>Main Auditorium</td>
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<tr>
<td>11h10 – 11h40</td>
<td><strong>TEA</strong></td>
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<tr>
<td>11h40 – 13h00</td>
<td><strong>POSTER SESSION</strong></td>
<td>Chairing persons: Dr A Kent, Dr FJ Cilliers, Dr WJ McMillan, Ms A Dunn, Ms E Badenhorst</td>
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19 June 2008, Thursday

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<tr>
<th>13h00 – 14h00</th>
<th>LUNCH</th>
<th>Venue: Auditorium foyer</th>
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**AFTERNOON SESSION DAY 1: WORKSHOPS**

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<thead>
<tr>
<th>14h00 – 16h30</th>
<th>Workshop 1</th>
<th>Workshop 2</th>
<th>Workshop 3</th>
<th>Workshop 4</th>
<th>Workshop 5</th>
<th>Workshop 6</th>
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<tbody>
<tr>
<td></td>
<td>Prof D Murdoch-Eaton</td>
<td>Prof J Grant</td>
<td>Dr DCM Taylor</td>
<td>Prof C Tan</td>
<td>Dr FJ Cilliers &amp; Dr WJ McMillan</td>
<td>Ms G Faris &amp; Ms B Draper</td>
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<tr>
<td>Venue:</td>
<td>4053 B</td>
<td>Main Hall CSC</td>
<td>K0004</td>
<td>F330</td>
<td>Exam Hall</td>
<td>Exam Hall</td>
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<tr>
<td>Chair:</td>
<td>Ms E Badenhorst</td>
<td>Prof J Bezuidenhout</td>
<td>Ms G Inglis-Jassiem</td>
<td>Prof FPR de Villiers</td>
<td>Dr GH Draper</td>
<td>Ms A Dunn</td>
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<tr>
<td>Topic:</td>
<td>Detecting students with difficulties</td>
<td>Clinical problem solving</td>
<td>Professionalism – moving beyond “motherhood and apple pie”</td>
<td>Improving OSCE examiner skills</td>
<td>Qualitative research in HSE</td>
<td>An innovative training session primary Health Care Nurses. The PALSA PLUS programme</td>
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<td>Time</td>
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</table>
| 07h30 – 08h30 | Registration  
Tea and coffee                                                   |                | Venue: Auditorium foyer      |
| 08h30 – 09h15 | **PLENARY KEYNOTES**  
Keynote Address 2  
Medical errors and patient safety: How could we teach and assess them at undergraduate Medical Education level? | Dr FJ Cilliers | Main Auditorium              |
| 09h15 – 10h00 | Keynote Address 3  
The assessor in assessment                                | Prof C Tan     | Main Auditorium              |
| 10h00 – 10h30 | TEA                                                                     |                |                              |
## 20 June 2008, Friday

<table>
<thead>
<tr>
<th>Parallel session 1</th>
<th>Parallel session 2</th>
<th>Parallel session 3</th>
<th>Parallel session 4</th>
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<tbody>
<tr>
<td>Theme: Assessment</td>
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<tr>
<td>Venue: Main Auditorium</td>
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<td>Chair: Dr LP Green-Thompson</td>
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<td>10h30 – 10h45</td>
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<td>Analysis of seven years of the progress test.</td>
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<td>Prof JJ Blitz</td>
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<td>Breaking bad news – can the film, Wit, help students to reflect on the complexities of dying.</td>
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<td>Prof DA Cameron</td>
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<tr>
<td>Educating for change: Physiotherapists in under–resource communities reflect on practice</td>
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<td>Dr SS Ramklass</td>
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<td>Locating palliative care education at the University of Cape Town Medical school—primary palliative care approach.</td>
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<td>Ms J Stidworthy</td>
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<td>Written questions as an effective means of enhancing an unfacilitated PBL process.</td>
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<td>Dr PAC Keene</td>
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<tr>
<td>Reflection: looking within to know better.</td>
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<td>Dr M van Rooyen</td>
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<tr>
<td>The use of information and communication technologies to provide support to physiotherapy students in SA.</td>
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<tr>
<td>Mr M Rowe</td>
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<tr>
<td>Self directed learning behavior in a dual entry, problem based medical curriculum.</td>
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<td>Dr DM Manning</td>
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<td>Experiences with the Angoff method of standard setting for high state exams in the MBBCh course.</td>
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<td>Prof DR Prozesky</td>
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<td>An electronic pre-hospital emergency care registry for the management of student paramedic clinical learning.</td>
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<td>Mr C Stein</td>
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<td>Do students and lecturers agree on the barriers and benefits of problem based learning?</td>
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<tr>
<td>Ms SB Statham</td>
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<td>The development of a new teaching approach for the School of Health Science at the University of Venda.</td>
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<td>Prof XG Mbhenyane</td>
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<tr>
<td>11h15 – 11h30</td>
<td>Online OSCE marking</td>
<td>Dr MH Allen</td>
<td>Using simulation in a Critical Care Nursing programme</td>
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<td>Clinical education constraints experienced by third year physiotherapy students.</td>
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<td>11h30 – 11h45</td>
<td>Mentoring consultation skills through a structured assessment.</td>
<td>Prof JFM Hugo</td>
<td>A framework for leadership and management of a medical school in S.A.</td>
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<td>The value of undergraduate research projects in HSE – a case of physiotherapy.</td>
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<td>Assessment of the contents of a haematology module by haematologist and medical interns – preliminary results of Delphi analysis.</td>
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<td>11h45 – 12h00</td>
<td>Assessment impacts on learning you say. Please explain how.</td>
<td>Dr FJ Cilliers</td>
<td>Expanding the eLearning curriculum in Forensic Pathology: the final frontier?</td>
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<td>Towards best practice in work integrated learning (WIL) facilitation and assessment in radiography.</td>
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<td>12h00 – 12h15</td>
<td>COMFORT BREAK</td>
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<td>Development and validation of a model of the competent SA intern: the “nine legged louse”.</td>
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| 12h15 – 13h00 | **Keynote Address 4**  
Curriculum and quality in Health Sciences Education  
*Chair:* Dr FJ Cilliers |
| 13h00-14h00 | **LUNCH**  
**MEET THE EXPERTS SESSION** |
| 14h00 – 16h30 | **AFTERNOON SESSION: WORKSHOPS**  
*Workshop 7*  
Prof P Morahan  
Dr FJ Cilliers  
*Venue:* Main Hall CSC  
*Chair:* Dr FJ Cilliers  
*Developing scholarship from everyday activities* |
|  | *Workshop 8*  
Prof A Tekian  
*Venue:* 4053 B  
*Chair:* Prof PPC Nel  
*How to improve the reliability and validity of oral examinations* |
|  | *Workshop 9*  
Ms L Olckers  
*Venue:* Seminar room CSC  
*Chair:* Mr GC Filies  
*Interprofessional and multi-professional education: why bother?* |
|  | *Workshop 10*  
Prof D Prozesky  
*Venue:* K0004  
*Chair:* Dr M v Rooyen  
*Writing computer based assessments of clinical skills (ACS)* |
|  | *Workshop 11*  
Prof R Delport  
*Venue:* F 330  
*Chair:* Prof JJ Blitz  
*Promoting critical thinking skills with written items assessment* |
|  | *Workshop 12*  
Mrs D Marais  
*Venue:* CHSE seminar room  
*Chair:* Ms S Statham  
*The impact of projects on student learning* |
| 16h30 – 18h30 | **SAAHE GENERAL MEETING**  
*Transport will be available directly from the conference venue to the dinner***  
*Auditorium 3*** |
| 19h30 | **CONGRESS DINNER at Bloemendal Restaurant.**  
*Guest speaker & Ex Dean, Faculty of Health Sciences, UCT: Prof JP van Niekerk*** |
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<td>07h30 – 08h00</td>
<td>Registration</td>
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| 08h00 – 08h45 | Keynote Address 5  
*Is anything recognizable as Problem Based Learning these days?*  
*Chair WJ McMillan*  
*Dr D Taylor*  
*Venue: Main Auditorium* |
|             | **Paper presentation**                                                   |
| **Parallel session 1** | **Theme: The student experience**  
*Venue: Auditorium 1*  
*Chair: Ms J van Wyk* |
| **Parallel session 2** | **Theme: Postgraduate education**  
*Venue: Auditorium 3*  
*Chair: Dr DM Manning* |
| **Parallel session 3** | **Theme: With and for communities**  
*Venue: Auditorium 4*  
*Chair: Ms VS Singaram* |
| 08h45 – 09H00 | The role of tutorials in student learning.  
*Dr C Strydom* |
| 09h00 – 09h15 | Medical students’ views of transition into primary health care driven medical curriculum.  
*Dr CE Draper*  
*Good clinical practice training course: an evaluation of the UCT course.*  
*Ms GM Philotheou*  
*A phenomenological investigation of the experiences of a community involved in the university of Kwa-zulu Natal community based education programme.*  
*Ms MS Linda*  
*Higher education institutions to take the lead in CPD for Health care professionals.*  
*Dr EM Castleman*  
*Perceived educational value of a rural clinical rotation for medical students.*  
*Mr NW Wilson van Aarde* |
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<thead>
<tr>
<th>Time</th>
<th>Session</th>
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<tr>
<td>09h15</td>
<td>Senior undergraduate nursing student’ experiences and perceptions of communicating with isiZulu speaking clients in clinical settings. Ms C Engelbrecht</td>
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<tr>
<td>09h30</td>
<td>The odyssey of the critical professional. Prof J Bezuidenhout</td>
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<tr>
<td>09h45</td>
<td>The factors in the public sector that negatively influence the Pharmacist internship year. Ms DE Frieslaar</td>
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<tr>
<td>09h45</td>
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<td>Challenges for research ethics education. Prof SJC van der Walt</td>
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<td>10h30</td>
<td>Integrating the primary health care approach into a medical curriculum: a preliminary evaluation. Mr JH Irlam</td>
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## 21 June 2008, SATURDAY

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<td>Predicting student success in the first year of a medical curriculum using neural network analysis.</td>
<td>A synopsis of examiners’ reports on dissertations and theses within the Health professions education programme.</td>
<td>Towards interdisciplinary practice: A shared community based project.</td>
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<td>Post-graduate training preferences of Walter Sisulu University Medical graduates.</td>
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<td>Teaching, learning and diversity-helping students to learn</td>
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INVITED SPEAKER KEYNOTE ADDRESSES

Prof J Grant:  (Director - Centre for Education in Medicine, Open University, UK)

Keynote: 4 - Curriculum and quality in Health Sciences Education

This presentation will address the relationship between quality and curriculum in medical education and will suggest that proper curriculum design and implementation should be the basis of assured quality of educational provision.

The presentation will also address the current 'quality industry', the role of inspection, and the role of the medical profession in assuring that quality of medical education.

Prof D Murdoch-Eaton:  (Professor in Medical Education, University of Leeds, UK)

Keynote: 1 - “Feedback - misunderstood or just not recognised”

Feedback is essential to a students' learning experience, and has become a pressing topic for universities. Feedback not only plays an important role in student satisfaction with their programme, but also contributes to a perceived general dissatisfaction with feedback from assessed work.

Qualities of effective feedback in higher education are well documented in the literature. Not only should feedback be given in a timely fashion, but as importantly in a manner intended to promote further learning. However, a Leeds’ study demonstrated misunderstandings amongst medical students of when and how they received feedback, its’ role their learning and missed developmental opportunities. A diversity of feedback needs was also a key outcome, reflecting individuality of personal development and the key underplayed role of students actively engaging with received feedback. We need to find ways to improve the staff – student gap in perceptions on the quantity and quality of feedback.
The assessment of clinical competence is one of the most important tasks facing medical teachers. This is something that is usually taken by them at the end of their students’ clinical course to certify a level of achievement. It is also something that should be regularly incorporated within the course to provide ongoing feedback to students and to their teachers. Assessment and evaluation often drive the curricula in medical schools and are used as means to measure the progress of students by the examinations they have passed. This assessment is also of importance because it is central to public accountability, as medical schools have a responsibility to ensure and demonstrate that a certain level of competency has been achieved in their graduating doctors.

To promote learning, assessment should be educational and formative – students should learn from tests and receive feedback on which to build their knowledge and skills. Tests that have both formative and summative function are hard to design, and in designing and implementing a programme of student assessment, examiners must be knowledgeable about the expected learning outcomes and the methods available that might be applied to the measurement of these. They must also have an understanding of the assessment process in order to allow them to make and implement an appropriate choice of methods and implement them in practice.

Assessment instruments can be described according to certain criteria that are evidence based and recognised by professionals in the field. These criteria include validity, reliability, impact on the learner and educational programme, and practicality including cost, and these all need to be taken into account when instruments are chosen to assess the different learning outcomes.

Miller proposed a pyramid of assessing clinical competence with increasing professional authenticity. This pyramid of competence is a simple conceptual model of the essential facets of clinical competence. The base represents the knowledge components of competence: “knows” (basic facts) followed by “knows how” (applied knowledge). These can be more easily assessed with basic written tests of clinical knowledge such as multiple-choice questions, essays, and problem solving questions. However, this test format cannot assess the more important component of competency required by a qualifying doctor, that is, the “shows how”, which is a behavioural rather than cognitive function and involves hands-on, not in-head, demonstration. Clinical assessment and the Objective Structured Clinical Examination (OSCE) are the predominant instruments at the “shows how” level, and observation, portfolios and logbooks are used at the “does” level.
With a shortage of doctors especially in the government health sector in Malaysia, there has always been an increasing demand for places in medical schools. Medical institutions have mushroomed rapidly in the last decade, to help increase the number of medical practitioners, placing stress on existing resources. These developments have lead to various concerns and raised issues on the quality of medical education, thereby making accreditation a necessity.

The Malaysian Qualifications Agency (MQA) was established in November 2007. Its main role is to implement the Malaysian Qualifications Framework (MQF) as a basis of quality assurance in higher education and as the reference point for the criteria and standards for national qualifications. The MQA is responsible for monitoring and overseeing the quality assurance practices and accreditation of national higher education.

In principle, the MQA is the equivalent of the South African Qualifications Authority (SAQA), and the MQF the equivalent of the National Quality Framework (NQF) providing common parameters and criteria for qualifications design. Although it may not be possible to make a direct comparison of criteria used in the MQF and NQF, there are similarities in having a structure in place on which to base criteria and standards for national qualifications in their respective countries.

Critical to the future success of the NQF is the effective training of workplace assessors. The role of the assessor within an organisation requires a high degree of knowledge, skill, understanding and integrity. Assessor Training Programmes have been put in place to provide practical and comprehensive training and to enable them to conduct workplace assessments in an effective and fair manner, in line with SAQA requirements. There is currently no equivalent training programme in Malaysia.

Much has been described about the tools for assessment, and who requires assessment, but focus should also be applied to the assessors, and how they are trained to assess. SAQA requirements on the eligibility criteria for assessors include expertise, especially with regard to interpersonal skills and subject matter. However, does this take into account the variability in style of examiners and issues of subjectivity?

Observations made during actual OSCEs in the final-year exit examinations in the Faculty of Medicine, University of Malaya in Kuala Lumpur, Malaysia, noted examiners engaging in inappropriate behaviours, such as prompting, indicating to the candidate how they had performed in the station, and also teaching/correcting the candidate. There were also apparent differences in the way examiners used the mark sheets their departments had developed. Training workshops were initiated in 2006 to address these issues by focussing on examiner training to ensure...
consistency in marking the checklists and examiner behaviour. Examiners who had undergone training were followed up in subsequent OSCE examinations to observe if there was any improvement. This paper describes some of the findings made by observers.

One of the goals of medical education is to ensure competent graduates. By using valid and reliable measurements of student performance, as well as mechanisms to train assessors in assessment methods, medical schools can fulfil this social responsibility and at the same time, ensure fairness in assessment.

Rev Dr DCM Taylor: (Senior Lecturer in Medical Education and Deputy Director of Medical Studies (Quality Management), University of Liverpool, UK)

Keynote: 5 - Is anything recognisable as Problem Based Learning (PBL) these days?

Over the last three years David has been working on the AMEE Guide to problem-based learning.

Some of the original conceptions of PBL, espoused by Barrows, have lasted into this millennium, others have not.

We will explore the reasons, and develop a concept of what constitutes the best of PBL.
Keynote 2: Medical Errors and Patient Safety: How could we Teach and Assess them at the Undergraduate Medical Education Level?

The Association of the American Medical Colleges has called for a “collaborative effort to ensure that the next generation of physicians is adequately prepared to recognize the sources of error in medical practice, to acknowledge their own vulnerability to error, and to engage in fully in the process of continuous quality improvement” (Cohen, 1999). Efforts to increase the awareness concerning patient safety are on-going in at the graduate level, as it is indicated in the six ACGME competencies.

However, should patient safety education be incorporated into the undergraduate medical education? Discussions on the design of patient safety curricula at the undergraduate medical education level have been sparse. This presentation will provide a brief overview of medical errors and patient safety education and explore various methods for its integration and assessment into medical education, clinical practice and training.
WORKSHOP ADDRESSES

Dr FJ Cilliers: (Stellenbosch University, SU) & Dr W McMillan: (University of the Western Cape, UWC)

Workshop 5: - Qualitative research in HSE

At this workshop, you will receive a basic grounding in the qualitative approach to research. Whilst not an in-depth look at individual methods, strategies and issues, you should nonetheless leave the workshop with an basic understanding of the strengths and limitations of a qualitative approach, some basic methods and analytical tools, and some sense of how write up and publish qualitative studies.

Topics to be covered will include the following:

- The qualitative paradigm
- Choosing appropriate strategies
- Data collection methods
- Analysing qualitative data
- Writing up and getting published.
Prof R Delport: (University of Pretoria, UP)

Workshop 11: - Promoting Critical thinking skills with written items assessment

INFORMATION ON THE WORKSHOP:

To face future challenges we need to foster novel thinking and learning skills. As assessment shapes learning the appropriate formatting of written items becomes of vital importance. A brief exposition is provided different applications of written items. An assessment plan will be constructed for a course, which takes into account the proficiencies to be developed, as well as the relevant knowledge domain and the appropriate level of cognition which apply to the discipline and foster critical thinking. Blooms Taxonomy is used as basis for cognitive stratification within the framework of the broadened definitions, as proposed by Passig.

The objective of the workshop is to provide hands-on experience on how use written items assessment to promote critical thinking.

The workshop consists of a mixture of lecturing, discussion and active participation in individual and also group-work activities.

It is advisable that participants bring with them a recent exam paper to work on.

Similar workshops were presented at international conferences with positive feedback.

Critical thinking skills can be developed through appropriate assessment in Medicine.
Ms G Faris: (University of Cape Town, Lung Institute)

Workshop 6: An innovative training session for primary Health Care Nurses. The PALSA PLUS programme

SETTING: The PALSA PLUS nurse-training programme in the Western Cape, provides outreach based in-service training for nurses responsible for diagnosing and treating patients in primary care. The PALSA PLUS guideline is the evidence based South African adaptation of WHO’s Practical Approach to Lung Health (PAL) that also includes and integrates the management of HIV/AIDS and STIs. Two randomized trials have shown it substantially improves quality of care.

OBJECTIVE: To provide training and continued support to nurses who have minimal prior training experience to conduct educational outreach trainings that are short, in-service, interactive, face-to-face, small groups that encourage learner participation.

METHODS: The 83 nurses who attended the five-day intensive train-the-trainer-to-train course (in groups of 12 – 13) were mostly nurse middle managers. The course balanced the clinical aspects of the guideline with training and facilitation skills. Through experiential, interactive learning and story telling, the adult learning principles of prior knowledge to enhance the learning process, active participation to encourage independent thinking and knowledge application were modelled. The trainers were also taught small group facilitation skills, an invaluable method of developing strong learning relationships. The relationships between master trainers and PALSA PLUS trainers continue to be nurtured through a structured ongoing support programme.

RESULTS: The trainers have taken full ownership of this modern training approach, breaking the mould of didactic training which characterizes health worker training, by learning to skillfully assess and respond to their groups so that they are able to designed tailor-made training tools that highlight how clinic and individual clinician practices must change to comply with guidelines. An example of a tool is a practical game called PALSA PLUS Moments. The game encourages quick thinking and eloquent self-expression that summarises the guideline whereby learning is made easy by a fun-orientated activity.

Through ongoing support at quarterly meetings, through peer support and through monthly newsletters, the trainers share ideas, motivate and support each other.

CONCLUSION: Through balancing guideline content with training techniques and ongoing support, the nurse trainers were able to respond to the needs of the nurses they train by designing specific training tools based on adult education principles.

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**Prof J Grant:** (Director - Centre for Education in Medicine, Open University, UK)

**Workshop 2: - Clinical problem solving:**

This workshop will help participants to:

- Understand the process of clinical problem solving
- Experience a number of teaching and learning techniques and exercises to analyse and improve students' and trainees’ clinical problem solving skills
- Understand the use of the Diagnostic Thinking Inventory
- Plan strategies for helping students and trainees improve their clinical problem solving abilities.
Ms D Marais: (Stellenbosch University, SU)

Workshop 12: - The impact of projects on student learning

Students today have different challenges and live in a more complex world – we need to help them become more adaptive, including generic skills like team work, time management, communication skills and problem-solving into their curriculum. The teaching-research nexus at tertiary institutions provides us with the opportunity of exposing them to these experiences through undergraduate research. It provides them with a basis for evidence-based thinking which can stand them in good stead for lifelong learning.

FORMAT OF WORKSHOP: Lecturers from various programmes within the Health Sciences and from different Universities in the Western Cape, will provide insight into the learning outcomes and purpose of the research activities of their students. Students will reflect on their experiences and perceptions of undergraduate research as a learning experience and their research project outcomes will be available for viewing. A discussion of the impact of undergraduate research on the student’s learning will follow with active participation of workshop attendees sharing and learning from each other’s experiences.

FACILITATOR BRIEF CV: Debbi Marais started her career as a Community Dietitian with the Department of Health and joined SU at the Division of Human Nutrition in 1998. She is currently a senior lecturer, teaching Research Methodology at undergraduate level, organiser of the annual 2-day Continuing Nutrition Education symposium for dietitians and the co-ordinator of the postgraduate programme within the Division. Debbi provides study leadership to at least one undergraduate research group each year, 6 of which have led to publications or submissions to peer-reviewed journals. She has 9 M Nutrition graduates for which she was study or co-study leader, of which 6 have already led to publications or submissions to peer-reviewed journals. She is the study or co-study leader for a further 15 postgraduate students and is has been the internal/external examiner for 10 postgraduate research thesis. Debbi is a member of the Faculty of Health Sciences Committee for Human Research and on the HPCSA CPD committee. She is currently writing up her thesis for a PhD and is continuously active with her own research in collaboration with colleagues within her own division as well as other departments within the university and internationally. She has presented at various national and international congresses and has been a member of 4 national congress organising/scientific committees. She is a guest reviewer for the S Afr J of Clinical Nutrition, Public Health Nutrition and Nutrition. Debbi was awarded the Rector’s award for Teaching Excellence in 2007.
Prof Page S Morahan & Dr FJ Cilliers: (Co-Director of the FAIMER Institute, Co-Director of the Hedwig van Ameringen Executive Leadership in Academic Medicine (ELAM) Program for Women and tenured professor in microbiology and immunology at Drexel University College of Medicine, USA) & (SU)

Workshop 7: - Developing scholarship from everyday activities

This highly interactive session is designed to broaden faculty understanding regarding scholarship and explore how to design, implement and publicize educational scholarship.

At the completion of the session, participants will be able to:

- Differentiate between educational activity and scholarship, compare and contrast practitioner- and research-oriented scholarship; define the criteria for scholarship, and describe a relative value scale of scholarship.
- Identify and describe various venues for diffusion of peer-reviewed scholarship
- Discuss initiatives in the U.S. whereby individuals and institutions measure and value this scholarship, and discuss applicability in Africa

As time permits, and depending upon the desires of the group, we may:

- Point out important features in the design, implementation, and publication of various kinds of scholarship
- Apply this information to develop educational activities into concrete scholarship
Prof Deborah Murdoch-Eaton: (Professor in Medical Education, University of Leeds, UK)

Workshop 1: - Detecting Students with Difficulty

Higher Education can be a testing experience for students. Many enter the different health care professions not entirely sure of their chosen future profession, and as student numbers increase and staff become increasingly stretched, the essential role of the tutors and all teachers in early detection of students in difficulty and instituting appropriate management becomes more crucial. Evidence suggests that fitness to practice issues often present during the undergraduate years, and early effective management of these student is crucial. Whilst many healthcare schools now have fitness to practice committees, they are dependent on detection and documentation of evidence from the field ie the students' teachers to detect and implement appropriate procedures as early as possible.

The workshop will explore the areas of difficulties presenting in students, particularly in relation to potential fitness to practice concerns, and use the material to illustrate and develop training workshops for local application.
Ms L Olckers: (University of Cape Town)

Workshop 9: - Inter-professional and multi-professional education: Why bother?

AIM : This interactive, participatory and task focussed workshop aims to bring together Health Science educators who are interested in and/or involved in inter-professional or multi-professional education. Participants will share their excitements and concerns and learn from one another's experiences.

TAKE HOME MESSAGE: Multi-professional and inter-professional education is exciting, rewarding, challenging and worthwhile bothering about if we want to better equip our students for their roles in the improved healthcare of individuals and communities.
Prof D Prozesky: (University of Pretoria, UP)

Workshop 10: - Promoting Critical thinking skills with written items assessment

Writing computer based assessments of clinical skills (ACS)

(3 hours)

OBJECTIVES: The workshop will begin with a demonstration of a good ACS. At the end of the workshop participants should be able to:

- Discuss/ decide when it is appropriate to use ACSes
- Construct an ACS based on an important clinical case:
- Selecting a clinical case - a high priority condition – for the ACS (we would expect participants to bring a relevant patient folder with them to work from)
- Identifying key decisions in the consultation process that need to be assessed
- Identifying key pieces of clinical and preclinical information that support these decisions, and need to be assessed
- Deciding which type of MCQ is best suited to assess each decision and piece of knowledge (A type, X type, R type, n of N type).
- Arranging the MCQs in logical order, and deciding where to introduce ‘no return’ intervals.

The workshop would be a practical one with ACSes being produced. There will also be a demonstration of the QuestionMark software which is suitable for delivering the ACSes.
Prof Christina Tan: (Director of the Medical Education & Research Development Unit (MERDU), University of Malaya, Malaysia)

Workshop 4: - Improving OSCE examiner skills

Formative and summative student assessment has always been of concern to medical teachers, and this is especially important at the level of graduating doctors. The effectiveness and comprehensiveness of the clinical training provided is tested with the use of clinical cases, either with real patients who have genuine medical conditions, or with the use of standardised patients who are trained to simulate accurately actual patients.

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) and 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 have been made during actual OSCEs of examiners engaging in inappropriate behaviours, such as prompting and 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. Training workshops were initiated in 2006 at the Faculty of Medicine, University of Malaya in Kuala Lumpur, Malaysia, to address these issues.

This conference workshop is adapted from these on-going training workshops conducted for future OSCE examiners, in which attempts are made to make examiners more aware of and be more consistent in their behaviour during OSCEs, as well as to improve examiner reliability in scoring OSCE stations and to develop appropriate assessment rating skills.

Workshop participants will have an opportunity to watch OSCE stations being conducted and using OSCE station checklists to come to an understanding of why their scores may differ from others in the audience, as well as discuss other issues that arise from this exercise.
Rev Dr David CM Taylor: (Senior Lecturer in Medical Education and Deputy Director of Medical Studies (Quality Management), University of Liverpool, UK)

Workshop 3: - Professionalism – moving beyond “motherhood and apple pie”

The workshop will have two elements. We will build on last year’s workshop on professionalism, look at a draft of a proposed paper; and see how the concepts have developed over the last 12 months.

Interspersed with the discussion we will toy with two different types of instrument for assessing professionalism.
Prof Ara Tekian:  (Associate Professor of Medical Education, Director - International Affairs and Director - Certificate Programs, Department of Medical Education, University of Illinois at Chicago, USA)

Workshop 8: - How to Improve the Validity and Reliability of Oral Examinations?

Oral examinations (viva voce) are used to assess the critical reasoning, problem solving, judgment process and/or communication skills of candidates. Controversy over the advantages and limitations of oral examinations has dominated the discussion of this assessment technique for decades. Despite serious reservations about reliability, validity, practicality, and usefulness, orals are frequently used in undergraduate and graduate medical education worldwide and by 15 out of 24 U.S. American Board of Medical Specialties (ABMS) Boards. This workshop will prepare participants to plan and implement effective oral examinations. A brief synthesis of the literature published during the past four decades will be presented and issues related to reliability/ reproducibility and validity will be discussed. Participants will have the opportunity to critique a videotape of an examiner in action, design a blueprint and a case scenario for a standardized oral examination, and role play.
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ABSTRACT STRUCTURE

Please note that the abstract are structured as follows:

- BACKGROUND TO THE STUDY
- STUDY OBJECTIVES
- SUMMARY OF METHODS
- SUMMARY OF RESULTS
- TAKE HOME MESSAGE

Due to technical issues beyond our control, these headings were not included with abstracts unless inserted by the author.
Online OSCE marking

DR MH ALLEN * (Wits)

The marking of OSCEs has a number of inherent problems. Typically a large number of examiners are involved in order to speed student throughput. The exams are then marked by station and then need to be reconstituted by student number to collate marks. If further assessment of examiner and station quality is to be done the results need to be re-examined once again. This causes a tremendous amount of burden on staff resources when the exam is paper-based. There is also the ever present danger of transposition or transfer errors when collating results.

We are planning an online computer-based marking system which will allow us to get instantaneous results, along with additional information, to allow evaluation of the exam itself as well as the assessment of individual students.

This trial project will be run with the assistance of Intel Corporation using a new portable device called a clinical assistant. The trial will start on a very small basis evaluating two stations in an OSCE against the rest of the stations. A cost benefit analysis will have to be done along with assessment by examiners ease-of-use of the computer hardware.

With the current spectre of load shedding, a strict evaluation will have to be done to make sure that exams can be run even during power outages. Although there are existing systems for computer assistance during OSCEs, these are essentially off-line systems with the risks associated with damage or theft of the portable equipment. The reliability of an online system along with the security of a wireless system forms part of the assessment process.

We will hopefully create a system which, while giving accurate and rapid results, requires little training of examiners resulting in few concomitant errors of marking.
The power of synergy in developing a horizontally and vertically integrated, outcomes based Clinical Associate program

DR PAR ARANGIE * (UP, Department of Family Medicine), PROF JFM HUGO (UP, Department of Family Medicine), DR G PICKWORTH (UP, Department for Education Innovation)

The healthcare needs of South African citizens motivated the decision to introduce mid-level workers for each of the categories of healthcare. For medicine this resulted in the creation of a three-year degree in Clinical Medical Practice.

- Identify curriculum areas of expertise
- Identify curriculum areas of practical procedures
- Develop a spiral, outcomes based curriculum.
- Create outcomes based modules that emphasize the relationship of theory to the practice setting.

In addition to international consultation on the scope of practice and outcomes for a Clinical Associate program a descriptive survey was conducted to identify needs specific to District Hospitals. Representatives from all academic Family Medicine departments, through FaMEC, reviewed and revised the document to develop a workable set of areas of expertise to be mastered by the student including clinical skills and procedures.

Consultation with the university’s departments supporting medical education, further defined essential elements to under-gird a problem oriented case based integration of basic sciences with clinical practice. Outcomes based modules with accompanying learning and assessment criteria and learning opportunities were then developed for Anatomy, Clinical Medical Practice and Physiology to eliminate redundancy and facilitate a smooth transition between courses. Specific lesson plans were designed that assist in directing the purpose of the theory course, to the mastery of skills within the clinical practice courses.

A spiral curriculum that is horizontally and vertically integrated across all didactic and clinical practice courses was developed. Interdisciplinary cooperation among stakeholders and within a medical school staff can produce a novel educational program that has the support of basic sciences, clinical medicine, nursing and hospital administrators.
Using simulation in a Critical Care Nursing Programme.

MS E ARCHER * (US)

The Critical Care (General) Nursing Programme in the Faculty of Health Sciences (SU, South Africa) is a one-year course that can be done either as a postgraduate diploma or an Honours degree. The practical component of the course consists of a number of practical procedures and case presentations.

Individual clinical guidance is provided at the bedside in the hospital by a critical care tutor during a weekly clinical contact. The purpose of these sessions is to discuss critically sick patients in order to practice the students’ integration, reasoning and case presentation skills. However, very often students want to use all this available teaching time to complete their practical procedures.

By practicing and completing the majority of the practical procedures in simulation in the Clinical Skills Centre (CSC) more time would be available in the clinical setting for the students to utilize the time with the clinical tutor doing patient discussions.

The objective was to identify and to describe how both tutors and students experienced the use of the CSC and simulation in attaining competency in the identified practical procedures as well as how it impacted on the use of time in the clinical settings during clinical contacts sessions.

This study is still in progress. A case study design was used. After a relevant literature study, the target group of Critical care nursing students (2007 intake) as well as the group of critical care tutors involved in teaching in the Critical Care (General) Nursing Programme since 2006 was invited to take part in the study. The data collection consisted of focus group discussions with the critical care tutors and questionnaire surveys with the students. The data is currently been analyzed and interpreted using descriptive statistics for the quantitative data and the qualitative data will be analyzed thematically.

This is only preliminary, but it seems that the use of simulation will be used to even a bigger extent in this programme in future. There are areas that one can improve for example having more time available for students to practice in simulation under the supervision of a clinical tutor. Students valued the use of simulation to teach the practical procedures as part of a Critical Care Nursing Programme.
The role of mediation in addressing underachievement

MS ES BADENHORST * (UCT), MS J HARDMAN (UCT)

Since 1994 transformation has occurred at most tertiary institutions, offering previously educationally disadvantaged students opportunities to engage successfully with academia by implementing support structures. Compounding this, the demand for universities to produce competent doctors, who can meet the health needs of South Africa, has also increased. Faculties of Health Sciences are thus facing the challenge of offering a diverse student population opportunities to pursue a MBChB qualification.

This study consists of two parts. Part one explores academic and cognitive difficulties experienced by educationally disadvantaged first year medical students prior to entering the Intervention Programme at the Faculty of Health Sciences, UCT. Part two explores the role of mediation in addressing academic and cognitive difficulties in order for students to return to mainstream.

The study draws on Vygotsky and Feuerstein’s theories to investigate how mediation can be studied in an academic development programme, using qualitative and quantitative research methods. To understand the role of mediation in improving learner outcomes in the Intervention Programme, the study uses an error analysis to investigate underlying cognitive difficulties experienced by participants in a mainstream exam preceding their entrance into the programme. Pre- and post-SRT and PTEEP test are used to explore whether cognitive shifts occurred during the course of the programme. This is followed by an analysis of the practice of Intervention Programme staff members, in order to understand how mediation functions to impact on students’ performance. To this end a methodology, capable of tracking mediation in observation data, is elaborated and discussed.

Findings from the error analysis indicate that students experienced difficulties with exam questions. An analysis of the errors indicate that these errors evidence features of Feuerstein’s categories of cognitive functioning. Results from pre- and post-tests provide quantitative data to suggest that shifts occurred over the period of the Intervention Programme to strengthen students’ ability to engage with academia. The notion of mediation as guided assistance is taken as a foundational concept for student development. Evidence of mediation in observed learning activities in the the programme provide the basis for the conclusion that mediation, as a developmental strategy, provides a strong explanation for why students’ academic engagement improved over the course of the IP.

To constructively address the legacy of apartheid, higher institutions need to gain insight into the academic challenges facing educationally disadvantaged students. This study provides a framework for exploring how mediation in an academic development programme can address academic challenges.

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Are some disciplines compromised when assessed in an integrated format?

DR AJ BENTLEY * (Wits)

In the first two years of the Graduate Entry Medical Program (GEMP), students are taught and assessed on all disciplines in an integrated fashion. Thus in one week of teaching they may receive lectures from Physiology, Anatomy, Pharmacology, Anatomical Pathology and Family Medicine on one particular disease, such as malabsorption in the gut. At the end of one or two systems blocks they write one exam with discipline specific MCQs and another with integrated Modified-Essay Questions (MEQs). Urban legends abound as to which subjects the students ignore on the understanding that their marks in another subject will pull them through.

Some of the disciplines have asked for sub-minima to be introduced in order to force students to pass all the disciplines. Our aim was to check if this was really necessary.

We analysed the marks obtained during one year of these integrated MEQs in order to determine whether students were specifically ignoring some topics

A total of 207 students wrote all exams in GEMP 2 in 2006. The mean marks for the student group in Anatomical Pathology, Pharmacology and Personal and Professional development was a failing mark. The means for the Anatomical Pathology, Pharmacology and Personal and Professional development were also significantly lower than all other disciplines but not necessarily different from each other. A Spearmans correlation showed the highest correlations between Pharmacology and Anatomy and Physiology and Medicine. While the correlation between Physiology and Medicine may be logical, the correlation between Pharmacology and Anatomy is not and may have more to do with the style of learning rather than the intrinsic crossover of one topic for the other. Community-doctor (CD) theme tended to have the lowest correlations with all other disciplines except for Patient-doctor theme.

Although some subjects had lower marks than others it is not clear whether this is due to not studying the particular subject or the level or mismatch between teaching and examining of the three subjects.
The odyssey of the critical professional

PROF J BEZUIDENHOUT * (SU), MR G YOUNG (SU)

In order to respond to the particular needs of students in South African Higher Education, critical professionals are required. These professionals should apart from being critical, also be reflective and compassionate. Although many University lecturers spend vast amounts of time and energy on reflecting on their teaching and exhibit real and personal compassion to their students, they often struggle to find a supportive environment for their critical endeavors. The NRF sponsored “Critical Professionalism” project at SU is one attempt to meet this need.

For the purpose of this project a number of lecturers and educational experts joined forces in a collaborative and interdisciplinary effort to model support for lecturers seeking to respond to the need for critical professionals in Higher Education. One theoretical approach adopted in this modeling is Wenger’s (1998) “Community of Practice”. This paper attempts to map lecturers’ journey (development) into a particular community of practice, namely one of critical professionals.

To investigate this journey, participants were requested to respond to following 3 questions:

1. In the light of our concern with social justice, what kinds of graduates should SU produce, and what would the challenges be to producing such graduates? (You can refer to both your own discipline and the university context in general)
2. What are you doing to contribute towards producing these kinds of graduates (and what challenges are you experiencing)?
3. What, in terms of your own biography, brought you to the understanding you sketched in Question One? (And what challenges have you faced?)

In order to map this journey the paper considers both the concepts “community of practice” and “critical professionalism”. Once the theoretical establishment of such a community has been described, the paper turns to the participants’ narratives regarding their own journeys. Using their responses to a questionnaire, the authors attempt to highlight emerging themes and to plot the progress of these lecturers on their odyssey.

The paper concludes with some suggestions regarding the establishment of such communities at Higher Education institutions.
Analysis of seven years of the progress test

PROF JJ BLITZ * (Department of Family Medicine, UP), DR AP BERGH (Faculty of Health Sciences; UP), DR RJ GRIMBEEK (Department of Statistics, UP), DR GP PICKWORTH (Department for Educaiton Innovation, UP), DR MJ VAN DER LINDE (Department of Statistics, UP)

The progress test is a test that is run every semester for the entire medical student body, from the second semester of first year to the first semester of fifth year.

The original purpose of the progress test was to benchmark the students of the “new” UP curriculum with those of the “old” curriculum and the students of Maastricht University.

The progress test is designed to test across all the disciplines represented in the curriculum. It is thought to test deeper learning and retention of knowledge over time.

The progress tests written by the UP medical students over the period 2001 – 2007 were analysed.

Each student is given a test result which is categorized into one of three groups:

- Satisfactory = to the right of one standard deviation below the mean
- Low pass = between one and two standard deviations below the mean
- Unsatisfactory = to the left of two standard deviations below the mean

This test result is then combined with the trend of the student’s test result from all preceding progress tests. This gives a current status after each progress test. Medical students are required to reach a status of “satisfactory” before graduation. The progress data is in the process of being analysed using descriptive statistics in an attempt to identify a method of recognising students that may be exhibiting signs of academic problems.

If analysed regularly, the student’s performance in the progress test may add valuable information to the attempt to identify students that need academic support.
Clinical practice intentions of African-trained medical students – a case study of 10 medical schools.

PROF VC BURCH * (UCT), & FAIMER (Foundation for Advancement of International Medical Education and Research)

BACKGROUND: Sub-Saharan Africa is the world region worst affected by physician emigration. This highlights the need to identify major factors that impact upon the geographical location of practice of African-trained physicians.

Determine the practice intentions of African medical school students and identify factors contributing to these intentions.

A survey was conducted of all final year medical students attending 10 medical schools in sub-Saharan Africa – South Africa (4), Nigeria (3), Uganda (1), Kenya (1) and the Democratic Republic of the Congo (1).

A total of 1047 students completed the survey. Ninety nine percent were African by birth and only 6.7% had dual citizenship. Ninety two percent intended to undertake postgraduate training; only a small number expressed interest in family medicine (4.2%) and public health (2.6%). Fifty four percent planned to train further in Africa and the remainder were interested in training abroad. Most students (75.7%) intended to live and practice in Africa, predominantly in urban /near urban locations.

Factors favouring practice in Africa – career /training opportunities, desire to improve medicine in Africa, social conditions and personal safety.

Factors favouring practice abroad – remuneration, work environment, access to equipment /technology, career /training opportunities, social conditions, personal safety and politics of health care in home country.

The findings of this survey are disturbing. It appears that African medical schools are largely graduating practitioners who intend to undertake specialist level work in urban centres. Furthermore, at least one quarter of students intend to train, live and work abroad in the long term. The “push” and “pull” factors that contribute to these intended practice decisions need to be reviewed and addressed if Africa aims to alleviate its current health care workforce deficit.
Breaking bad news - can the film, Wit, help students to reflect on the complexities of dying?

PROF DA CAMERON * (UP)

As part of a brief introduction to Clinical Medicine, a class of 2nd year medical students was shown the film, Wit, which deals with the experience of a professor of English literature who agrees to have aggressive chemotherapy for ovarian cancer. Students were asked to submit a brief reflective essay on breaking bad news.

The study set out to answer the following questions:

1. What is the impact of showing this film to a class of 2nd year medical students?
2. Does getting them to write a brief essay encourage reflection and an exploration of the complexities of facing death?
3. Does it assist in preparing them to cope with the task of breaking bad news?
4. What is the value of such an activity from an educational perspective?

A review and reflection by the presenter on reading the students’ essays

Still being analysed.

(Extracts of the film will be shown. This will be followed by discussion of the value of this film in medical education.)

This film is a powerful tool in assisting students to reflect on the complexities of being a doctor and of dealing with dying patients.
Higher education institutions to take the lead in CPD for health professionals

DR EM CASTLEMAN * (Academic Executive), PROF MM NEL (UFS, Faculty of Health Science)

The content health professionals learned at higher education institutions (HEIs) in undergraduate studies needs to be updated throughout their careers to reflect changes in best evidence medicine, changes in the needs of the patients and the health care delivery systems. HEIs primary functions are undergraduate and formal post-graduate education and CPD is seen as a secondary function.

The aim of the research was to develop a model to be utilised by the HEIs to manage CPD for its alumni in support of the purpose of CPD.

An empirical, non-experimental research design was followed in this quantitative study. A literature study preceded a cross-sectional survey. Information on the most preferred components for alumni to be included in such a model was collected through custom designed self-administered questionnaires. The sample size was 1177.

From the literature review it was concluded that HEIs have five functions in CPD, namely to:

- identify deviations of practice from accepted norms;
- to identify reasons for these deviations,
  - to implement corrective actions to remediate performance,
  - to implement development interventions to develop professionals to reflect latest best evidence practice; and
  - to continuously update and support professionals to maintain best evidence practice.

The results from the survey was: 23% of the respondents were at the time of the research alumni members of an HEI. The majority were interested in becoming a member to a CPD alumni network. Most of them indicated willingness to pay a monthly subscription fee. They represented every province in South Africa. Opportunities to discuss practical, clinical and or work related issues, mentoring, and to know who in their immediate geographic area, are members of the network are the preferred interactions in the alumni network. Most indicated a need for training workshops, alumni newsletter, and a summary of the latest development in their areas of interest.
PHEI may fulfil their role in CPD towards their alumni through utilising a network of mentors, peers and small groups managed by the PHEIs.

To achieve the purpose of CPD, HEIs should implement a process in which health professionals can participate continuously to maintain and improve standards of professional practice through the development of knowledge, skills, attitudes and behaviour.

Networks utilizing existing infrastructure and expertise in a decentralized manner to make CPD convenient and relevant to learners could make it feasible.
Assessment impacts on learning, you say? Please explain how.

DR FJ CILLIERS * (SU, Maastricht University, SAFRI), DR HJ ADENDORFF (SU), PROF EM BITZER (SU), MS N HERMAN (SU), PROF LWT SCHUWIRTH (Maastricht University), PROF CPM VAN DER VLEUTEN (Maastricht University)

It has become axiomatic that assessment impacts powerfully on student learning, but try asking anybody saying this to quote actual research supporting their assertions. There is a dearth of research on the nature and mechanisms of impact. Such literature as there is pays little attention to the mechanisms mediating the impact. Lack of understanding of this impact probably contributes to the continued use of assessment practices that promote learning that results in poor quality learning outcomes and hampers further research in the field due to a lack of a framework to guide thinking.

The aim of this study was to determine the impact of assessment on the learning of theory of senior medical students. Three questions were addressed: What dimensions of assessment impact on student learning? What is the impact of assessment on student learning? How do various dimensions of assessment bring about such influence as they exert on various dimensions of learning?

Individual 4th and 5th year medical students in a six year medical programme were the unit of analysis. Convenience sampling recruited 18 students. Individual, depth interviews were conducted and audio taped. Interviews were transcribed in full and analysed qualitatively using the principles of grounded theory. Ethical approval and informed consent were obtained.

Six major sources of impact of assessment on learning were identified i.e., assessment strategy, assessment task, workload, sampling, cues and the individual assessor. Various targets for this impact were identified. The impact of assessment on learning was largely mediated through motivation and emotion. A model has been formulated relating the sources and consequences of impact.

This work proposes for the first time, to the best of our knowledge, a model explaining the impact of assessment on student learning. This exploratory study has elucidated some of the mechanisms by which assessment exerts its impact on learning and adds to the scant evidence about the nature of impact of assessment on student learning. The framework relating various constructs does not propose any new constructs. Instead, it brings known constructs together in a new way to guide further research into the powerful impact of assessment on student learning. If assessment is to be used as a tool to enhance the power of the learning environment and contribute to, rather than mitigate, the generation of meaningful learning outcomes in higher education, we need to understand not only what impact assessment has but how that impact is brought about.
Development of an interactive simulation for the teaching of electrolyte and acid-base disorders

PROF MR DAVIDS * and PROF ML HALPERIN, (Division of Nephrology, SU & Tygerberg Hospital and Division of Nephrology, St Michael’s Hospital and University of Toronto, Canada).

BACKGROUND:: The diagnosis and management of electrolyte and acid-base disorders are considered among the most difficult areas for clinicians and students alike. Medical emergencies in this area are often complex, and a sound grasp of the subject is therefore essential. An interactive web-based simulation has been developed as part of an effort to present a physiology-based approach as the preferred way to address these disorders.

METHODS: We endeavoured to implement best practices as regards educational principles, and also as regards user interface design. Flash® from Adobe Systems® was used for the development of an interactive case-based simulation illustrating relevant pathophysiological processes and the responses to various therapies selected by the user. A PowerPoint® “wireframe” or “storyboard” was constructed and served as a starting point for the communication between the author and the team of developers, who had no background in biomedical sciences. The ActionScript™ programming language was used to control the simulation by calculating the effects of user-selected therapies on parameters like plasma Na concentration and brain volume, then displaying appropriate messages based on the results of the treatment.

DISCUSSION: Flash® applications allow for maximum user interaction to provide a rich user experience, and avoid the problems of cross-browser and cross-platform incompatibility. It runs on almost all PCs, as well as an increasing number of mobile phones and other devices. We have created a reusable learning object which is sharable from one developer or educator to another, and which can easily be incorporated into WebCT or other e-learning platforms.

The simulation will be demonstrated, followed by a discussion of lessons learnt and future plans for evaluation and further development of the application.
Evaluation of the Clinical Progress Intervention for medical students not demonstrating academic progress

PROF MR DE VILLIERS * (SU), MS M VAN HEUSDEN (SU), PROF B VAN HEERDEN (SU)

Student success in tertiary education is a world-wide challenge in that a significant percentage of students never complete their first degrees. Various studies indicate that academic progress is not only influenced by academic factors, but also social, financial, health and other related problems. Hirsch (2001) strongly advocates for timely interventions that are holistic in approach, not only focusing on study skills, but also taking the affective dimension into consideration.

The Faculty of Health Sciences at SU has a number of support programmes especially for students in their first year; but there is a need for more structured support for students during their clinical years. A Clinical Progress Facilitator (CPF) was appointed in 2007 for a trial period of two years in order to assist these students. The task of the CPF is to identify, evaluate and assist those who do not progress academically because of a variety of problems.

The aim of the evaluation of the CPF process is to determine to what extent the current early warning system has been effective and whether it needs modification. Objectives include whether students with potential problems had been identified early enough to successfully remedy problem areas, the nature and degree of success of the intervention, and which problems, other than of an academic nature, influence the progress of students at this faculty.

This retrospective qualitative study is work in progress. Semi-structured interviews with a sample of students from those who have seen the CPF have been conducted. Interviews were also held with the CPF, lecturers from the relevant clinical fields as well as personnel from academic support services and from one of the residences. A questionnaire was electronically completed by the students involved.

The presentation will highlight the main results of the study, which at the stage of abstract submission were not available yet.

The presentation will identify pointers and further action to assist medical students in their clinical years to successfully complete their studies.
Expanding the eLearning curriculum in Forensic Pathology: the final frontier?

DR J DEMPERS * (Division of Forensic Medicine, SU)

There has never been a more exciting time for the development of distance education techniques in the field of “practical medicine” than the present. Due to the nature of the material to be taught in fields like forensic pathology, surgery, orthopaedic surgery and anatomy, much development of video based e-teaching has taken place over the last five years. This is of particular importance as it has been proven that students who regularly watch available video tuition material were more active in using collaborative e-learning tools and achieved better course grades than non-video watchers.

Through the development of our divisional Webstudies program, it has become quite obvious that further audiovisual expansion of the curriculum is necessary to not only improve the teaching experience offered to local students, but also to put the division in the position to market its product beyond South African borders.

Although abundant resources exist for studies conducted in video based e-learning in fields like anatomy and surgery, very little is written about e-learning in the field of forensic pathology. This is significant, as forensic pathology poses unique problems in terms of statutory principles, ethics and maintenance of chain of custody in the process of compiling a top-notch and competitive e-learning program.

This presentation represents a critical appraisal of the needs of an eLearning program in Forensic Pathology at the Tygerberg Academic Complex, the resources available to fulfill these needs, and the shortcomings in these resources.

Despite the huge amount of teaching material available, the potential for eTeaching in the division is not fully realised due to multiple factors, including lack of available resources, lack of technical knowledge and lecturer time constraints.

It is imperative that a visual eTeaching environment is maintained in forensic medicine. Universal, cost effective methods therefore have to be devised to broadcast study material to local and international students.
Medical students’ views of the transition into a primary health care driven medical curriculum

DR CE DRAPER * (UCT), PROF G LOUW (UCT)

BACKGROUND: The University of Cape Town (UCT) introduced a new MBChB (Bachelor of Medicine and Bachelor of Surgery) curriculum in 2002. This curriculum is largely problem-based and underpinned by the principles of the primary health care (PHC) approach. The aim of this research was to investigate students’ views of the new medical curriculum UCT, and of the teaching of the PHC approach in this curriculum. The findings to be presented form part of a broader PhD study.

METHODS: Mixed-methods were used in the PhD study, but this presentation will focus on the data gathered from qualitative methods, that is focus groups and interviews. A total of one hundred and seventeen students (first-, second-, third- and fourth-years) were purposively selected to be involved in the focus groups and interviews conducted in 2004 and 2005.

RESULTS: Students’ feelings around the new curriculum were initially rather negative, but became more positive as students progressed through the years and began to see the relevance of what they are learning. With regards to the teaching methods used in the new curriculum, a range of views were expressed about the dominance of group work in the curriculum. Students’ views of how the PHC approach was taught were varied, and these generally also progressed from initially negative to more positive views.

CONCLUSIONS: Findings presented here emphasise that in order to continually improve and develop medical curricula, future research in medical education should include ongoing investigations into students’ views on their learning environment, the content of what they are learning and the manner in which they learn. The importance of these investigations relates to the effective management of students’ expectations about their medical degree, the developmental transition students are generally coping with, and the provision of links between the theory and reality of what they are learning.
Towards best practice in work integrated learning (WIL) facilitation and assessment in radiography

MS JGE DU PLESSIS * (Lecturer CUT), DR EJ SMIT (Programme Head, CUT)

In a current ongoing study at the Central University of Technology, Free State (CUT), we attempt to identify the main guidelines and benefits for role players in assessment of Work Integrated Learning (WIL). This has become essential due to changes in the Educational Philosophy in our country. Certainly the curriculum and qualifications framework of the future will require a profound shift toward applied learning, theory in practice and well developed skills.

The aim is to set attainable guidelines for standardizing facilitation and assessment of WIL, specific for Radiography.

Questionnaires and interviews are conducted annually with learners and employers to assess WIL in the Radiography programme at CUT. The information thus obtained is used to set attainable guidelines of assessment in WIL. Questionnaires and interviews are compiled according to international guidelines for Work-Site visits and interviews. At CUT, Radiography learners are being placed for WIL at three academic- as well as three private employers in Bloemfontein and Kimberley. Interviews have been conducted with all learners in the different year groups (2004-2007) by the lecturer/coordinator of co-operative education at CUT, with assistance by additional appointed coordinators in clinical practice. Twenty four questionnaires have been distributed to employers, on a six monthly basis and collected within a week of distribution.

Results show that many challenges exist towards best practice in facilitation and assessment of WIL in Radiography, and that the implementation of an action research project, identifying problems and implementing solutions, might benefit all role players for WIL in Radiography.

The study, thus far, is an attempt to investigate the format of a workable, standardized model for quality assessment in WIL for Radiography. Subsequent attempts to improve assessment of WIL can now be implemented at the accredited institutions relevant to training of Radiography students at the CUT as an ongoing action research project.
Senior undergraduate nursing students’ experiences and perceptions of communicating with isiZulu speaking clients in clinical settings

MS C ENGELBRECHT * (UKZN-SANTED), PROF P McINERNEY (UKZN), MS ZZ NKOSI (UKZN), MS D WENTZEL (UKZN), MS S GOVENDER (UKZN)

Language provides an important means by which humans communicate with one another and communication plays a pivotal role in the health professions in developing trust and co-operation between the carer and the one cared for. Transcultural nursing in South Africa is often taken for granted and the power of language as a social construct and political tool is underestimated. In a patient –centred care paradigm, the language of the community and the way health is languaged in the community is very important especially in a community where such a large percentage of the community speaks one specific language. ...one is faced with one of two situations; either struggling to communicate through an interpreter or communicating effectively without an interpreter.

The purpose of the study is to explore and describe the senior undergraduate nursing students’ perceptions and experiences of their ability to communicate with their isiZulu speaking clients in their clinical practice settings.

A qualitative research methodology (Creswell, 1994:1) will be implemented where we will work inductively (Mouton & Marais, 1992: 105) to explore (Mouton & Marais, 1992: 45) and describe (Mouton & Marais, 1992: 46) the experiences and perceptions of senior undergraduate nursing students of their ability to communicate with their isiZulu speaking clients in their clinical practice settings, by doing focussed groups with voluntary participants.

Work in progress. Results will be available by time of presentation.

Multilingusim is a important and integral part of community and nation building, especially in the field of health care.
Clinical education is a fundamental part of a physiotherapist’s professional education. Clinical placements offer a rich opportunity for students to learn whilst providing care to the patient. However, the clinical learning environment differs vastly from the classroom environment. In the classroom, learning activities may be planned and structured, yet in the clinical environment, unplanned activities often occur with patients and other health care providers. This element of uncertainty may provoke anxiety and feelings of vulnerability amongst health care learners. These factors may influence the learning process.

The aim of the study was to explore and analyze the clinical exposures of third year Physiotherapy students at SU, in order to inform the planning and implementation of a revised educational framework for clinical training. The aim of this framework is to maintain quality in clinical education by providing consistency and some form of standardisation for clinical teaching and learning.

A descriptive case study was performed. In 2006, all 40 third year students were invited to participate in the study during their last two clinical rotations. Students had to complete a self developed questionnaire on teaching and learning and they also had to complete a daily logbook on their workload and activities during clinical training. Students were also invited to participated in semi-structured focus group interviews.

This paper will only report on data generated with the interviews. Four focus groups were held and were attended by 9, 9, 6 and 7 students respectively. Thus, in total, 31 students attended. Themes that emerged during the interviews were identified as follows: the value/or not of certain learning opportunities, the influence of clinical teachers on learning, learning vs service delivery, the lack of interdisciplinary learning opportunities, the assessment of clinical competence and lacking facilities.

Students are thus aware of the common constraints during clinical education. However, they accept these constraints as necessary aspects of their personal and professional development. At the beginning of their clinical training, students require an organised clinical education program as it clarifies expectations between the teacher and the student.
Towards interdisciplinary practice: a shared community-based practice experience

MR GC FIELIES *(UWC), MS N MLENZANA (UWC), MR O KHONDOWE (UWC)

Shared Community–Based Practice (SCBP) is a pioneering service-learning initiative for all health and welfare disciplines located within a community setting. Service-learning is an educational approach that allows for a structured learning experience that combines community service with preparation and reflection. It is community-based model of service delivery described as a collaborative model with the intention to shift cultures of general practice from simple referral models to stronger models of collaboration (Keleher, 2006). The programme will involve the collaboration between the Physiotherapy (PT) students of the Faculty of Community Health Sciences, the service providers, disadvantaged communities and other related agencies in Mitchells Plain and Nyanga.

The students had to achieve four aims for the module by the end of the programme, namely: (i) demonstrating in depth knowledge and skills when working with communities in a community setting, (ii) demonstrating a comprehensive depth of knowledge about the role and responsibilities of other role-players that contribute to multidisciplinary practice, (iii) demonstrating in depth knowledge of basic concepts such as pathophysiology, epidemiology, legislation relevant to service provision through independent literature research using the internet, and library for the relevant information and (iv) demonstrating the skills needed to practise in a community setting through development and implementation of a comprehensive intervention strategy in an independent discipline-specific and collaborative manner.

In 2007, forty-nine, third year PT students were placed at the UWC CRP in Mitchells Plain and Nyanga. Although only one discipline was involved, the vision for this module was that students from two or more disciplines practicing in the various projects at a specific community come together once a week from 14h00-16h00 for the duration seven weeks of their community block. The students were divided into 8 groups. Each group had an average of six students and learning was facilitated by academic and site facilitators. Following the needs assessment, various projects were carried out at three special educare centres under the following themes: (1) training, (2) awareness and (3) resources.

All the projects that were conducted in the identified areas were successful. Most of the aims and objectives of this module were met successfully. Students managed presented projects at the end of their placement. The communities of Mitchells Plain and Nyanga benefited from this programme, through resources acquired, training of CRWs and home-based carers and awareness raising of PT. The programme gave direction to the need for interprofessional practice to be incorporated in student training across the faculty.
Improving the public sector Pharmacist Internship Programme

MS D E FRIEGLAR * (Pharmacy Services - Western Cape)

Historically, the teaching hospitals, Groote Schuur, Tygerberg and Red Cross Children’s Hospital have always had posts for pharmacist interns. Recent changes in the legislation, that mainly financially affected the private sector pharmacies, have however, led to a decrease in the number of intern posts available in that sector so that the burden fell on the public sector to create more posts for pharmacist interns. These pharmacist intern posts were created in rural hospitals and community health centres which, unlike the teaching hospitals, did not have a well established training program in place to support the pharmacist interns, which, in turn, presented new challenges for the Western Cape Pharmacy Services, Pharmacy Practice Division.

The primary objective of this study was to establish the factors which negatively impacted on the internship year.

To realise the above objective an exit interview was arranged to discuss the internship year with the 2006 pharmacist interns. An exit interview questionnaire was designed and this together with informal interviews was used to obtain the necessary information. The data from the exit interviews were collated and divided into positive and negative feedback. In response to the results of the exit interview a tutor workshop was arranged in 2007. The tutors were questioned using a questionnaire which addressed their role of tutor and the challenges that they encountered while tutoring the interns.

A number of factors were identified which negatively impacted on the internship year. Although, the major factors which were identified were; the lack of a structured training program and lack of support from the tutor. The challenges which the tutors identified in training the interns were lack of support from management and time constraints.

The exit interview can be a valuable tool to identify problems in the pharmacist internship year.
Empowering nurse trainers to adopt innovative training methods: ownership of programme for lung health and HIV/AIDS; PALSA PLUS

MS BM GREEN * (City of Cape Town), MS A JANSE VAN RENSBERG (Provincial Administration of Western Cape), MS D WILLIAMS (City of Cape Town), MS S FOURIE (City of Cape Town), MS G FARIS (Knowledge Translation Unit, UCT Lung Institute), DR L FAIRALL (Knowledge Translation Unit, UCT Lung Institute)

The PALSA PLUS nurse-training programme in the Western Cape, provides outreach based in-service training for nurses responsible for diagnosing and treating patients in primary care. The PALSA PLUS guideline is the evidence based South African adaptation of WHO’s Practical Approach to Lung Health (PAL) that also includes and integrates the management of HIV/AIDS and STIs. Two randomized trials have shown it substantially improves quality of care.

To provide training and continued support to nurses who have minimal prior training experience to conduct educational outreach trainings that are short, in-service, interactive, face-to-face, small groups that encourage learner participation.

The 83 nurses who attended the five-day intensive train-the-trainer-to-train course (in groups of 12 – 13) were mostly nurse middle managers. The course balanced the clinical aspects of the guideline with training and facilitation skills. Through experiential, interactive learning and story telling, the adult learning principles of prior knowledge to enhance the learning process, active participation to encourage independent thinking and knowledge application were modelled. The trainers were also taught small group facilitation skills, an invaluable method of developing strong learning relationships.

The relationships between master trainers and PALSA PLUS trainers continue to be nurtured through a structured ongoing support programme.

The trainers have taken full ownership of this modern training approach, breaking the mould of didactic training which characterizes health worker training, by learning to skillfully assess and respond to their groups so that they are able to designed tailor-made training tools that highlight how clinic and individual clinician practices must change to comply with guidelines. An example of a tool is a practical game called PALSA PLUS...
Moments. The game encourages quick thinking and eloquent self-expression that summarises the guideline whereby learning is made easy by a fun-orientated activity.

Through ongoing support at quarterly meetings, through peer support and through monthly newsletters, the trainers share ideas, motivate and support each other.

Through balancing guideline content with training techniques and ongoing support, the nurse trainers were able to respond to the needs of the nurses they train by designing specific training tools based on adult education principles.
Establishment of a short course in teaching and learning for staff at the Wits Medical School

DR LP GREEN-THOMPSON * (Wits Faculty of Health Sciences), PROF D PROZESKY (CHSE,Wits), DR D MANNING (CHSE,Wits), MS KB SMUTS (CHSE,Wits)

The medical curriculum at the Wits went through a major transformation and an entirely new curriculum was launched for the last four years of study in 2003. In keeping with international trends, many new techniques of learning and teaching were espoused. The third and fourth years of study were converted to a problem based learning process. Staff were encouraged to think about their teaching and adapt it to styles of teaching that were more in keeping with student centred approaches. The Centre for Health Science Education functions as the education unit for the Faculty and has always sought opportunities for the development of the staff. We embarked on a short course of education and learning targeted at clinical, basic science and therapeutic science staff. The course was based on the structure used for a similar course developed by Detlef Prozesky. It has been modified substantially in the course of the year. The course runs over three days. The objective of the course is to:

- Introduce clinical teachers to the basic pedagogical concepts
- Demonstrate the techniques of developing a curriculum
- Allow participants to participate in the creation of learning objectives
- Teach participants how to choose the correct technique of assessment for the particular outcome being measured
- Assist participants in the development of assessment items in particular for multiple choice format assessments
- Allow participants to deliver a mini lecture in a field of their expertise.

The structure of the course includes a basic introduction to learning and teaching, Bloom’s taxonomy, creating a curriculum, techniques of delivering the curriculum, methods of evaluating and assessing the content of a curriculum. Participants then write multiple choice questions and receive feedback. They then participate in lesson planning and give a micro lecture based on that lesson plan.

The objective of this paper is to report on the response of faculty to an education course.
An evaluation form is issued at the end of each course. Data to be presented

To date six courses have been run successfully, with in excess of 80 participants. These came from a variety of disciplines namely internal medicine, psychiatry, surgery, physiology, public health, medical physics, physiotherapy and occupational therapy. The evaluations received have been favourable with many participants requesting additional exposure to the educational ideas expressed.

Short education courses are a valuable tool to assist teachers in many disciplines to enrich their teaching process.
Final Year Medical Students: Perceptions of the Practice of Medicine

Across the globe, the number of female medical students and graduates is increasing, with some schools reporting in excess of 60% females. Several authors have discussed the possible implications of this “feminisation” on the medical profession, particularly in traditionally male-dominated disciplines such as Surgery and Internal Medicine. The choices students make in terms of their medical careers will depend on many factors, including the obstacles they face during their studies and the opportunities and choices that are available. Social and cultural contexts may also influence the career paths ultimately chosen by male and female students. In South Africa, the equity debate is amongst the driving factors.

This study is part of an international venture in which we are endeavouring to gather information about where and how male and female graduates from different cultural contexts perceive the practice of medicine and to identify factors that may influence their decisions regarding their medical careers.

Guided by structured questionnaires, final year medical students from the United Arab Emirates University and the UKZN are being interviewed regarding the obstacles and opportunities they have encountered during their studies. Students are also being canvassed regarding their postgraduate studies and their intentions in terms of their practice of medicine once they have qualified. We are particularly interested to compare the experiences and perceptions of male and female students. It is envisaged that we will track these students over the next few years.

This study began at the 2008 academic year, with interviews currently in progress. Data analysis will begin in July. Preliminary results nevertheless suggest that while gender plays a major role in determining the career options of female students in the UAE, it appears to have less influence on the career progression of female South African students. Gender may also impact on residency choice for male UAE students (e.g. cultural difficulties experienced during O&G rotations).

With a shortage of clinicians in many parts of the world, including South Africa, it is important for medical faculties to understand the factors which may impact on the career choices of both male and female graduates. In the light of the reported feminisation of medicine, obstacles to career choices should be identified and opportunities need to be created to provide students, irrespective of gender, access to different fields of medicine.
Mentoring consultation skills through a structured assessment

PROF JFM HUGO * (UP), DR M VAN ROOYEN (UP), PROF JJ BLITZ (UP), PROF D CAMERON (UP)

Consultation skills are critical in primary care where students are exposed to unselected patients in rural and urban communities.

Training in consultation skills is enhanced by feedback from mentors, student peers and simulated patients in observed consultations.

The Leicester Assessment Package was adapted with the juggling metaphor for the consultation process in order to design assessment/feedback tools. The same feedback forms are used for formative and summative assessment and provide for reflection on both process and content of the consultation. Intensive orientation of students and mentors is done at the beginning of a six-week rural district health programme during which consultation skills are an important learning outcome.

During the orientation, students and mentors identify strengths and weaknesses of consultation skills through a process of 360° feedback. An individualised educational prescription is then generated. This guides the learning during the block and assessment after the block.

Structured assessment of observed consultations as part of orientation and assessment prepares mentors facilitation skills and enhances students self-mastery of consultation skills in a variety of rural locations.

Take-home message: Shift your emphasis and energy from examination to orientation.
Integrating the primary health care approach into a medical curriculum: a preliminary evaluation

MR JH IRLAM * (UCT Primary Health Care Directorate), MS J KEIKELAME (UCT Primary Health Care Directorate), MS L VIVIAN (UCT Primary Health Care Directorate)

The Primary Health Care (PHC) Approach, defined by the 1978 Alma Ata Declaration, and formally adopted in 1994 by the UCT Faculty of Health Sciences, comprises a set of equity-based principles governing teaching, research and service within the Faculty. The PHC Approach was adopted in 2002 as the lead theme of the reformed medical (MBChB) curriculum, in order to equip graduate doctors with the understanding and skills necessary to function effectively within the South African health care system. The first cohort of students under this curriculum graduated in 2007.

To evaluate students’ understanding of the PHC Approach and their ability to apply these principles in practice during the final three clinical years of their MBChB in the UCT Faculty of Health Sciences.

Evaluation methods include the use of course evaluation forms, student focus group discussions, document reviews (assignments, reflective journals, logbooks, project reports, patient portfolios), and interviews with Faculty staff.

Preliminary results indicate that students are generally competent in identifying and reflecting on the relevant PHC principles within clinical and community contexts. Challenges remain in communicating the relevance and usefulness of the PHC Approach to students and Faculty, in integrating the PHC principles into the teaching and assessment of all clinical disciplines in the curriculum, and in supporting students’ application of these principles in the context of an over-burdened health care system.

This is innovative work in progress that may help UCT medical graduates to become skilled and compassionate practitioners of the Primary Health Care approach. Further long-term evaluation is required to establish whether this is the case.
Written questions as an effective means of enhancing an unfacilitated PBL process.

DR PAC KEENE * (Wits Medical School; NHLS), PROF D PROZESKY (Wits Medical School)

PBL in the GEMP at Wits Medical School is divided into 3 sessions for each case. The second, PBL 2, is not facilitated but is followed by a plenary session led by an expert. The students are expected to discuss the history, examination and special investigations pertaining to the case with the plenary session allowing for questions and clarification. However, there has been poor attendance at the plenary and an awareness that the students have not been engaging in the PBL 2 process. In addition, there is a perception that students entering the clinical years have not grasped the principles of approaching a case.

1. To improve the engagement of students in PBL 2 by providing a series of questions to guide them in reading through the case notes and exploring the issues, both pathophysiological and psychosocial.
2. To model the hypothetico-deductive approach to a case.
3. To provide a structure for discussion of the case in the plenary session.

The questions are designed to stimulate careful reading of the case as well as discussion and understanding of the issues. They are also used to raise and revise pertinent issues, which have been covered in other cases. After each of the history, examination and special investigations the students are prompted to evaluate the diagnostic hypotheses and decide what further information would be necessary to confirm or refute their positions.

The plenary sessions use the questions as a guide, the important issues and the hypothetico-deductive approach being highlighted.

The response was evaluated:

1. informally by assessing the attendance at the voluntary plenary session;
2. by a questionnaire containing graded and open-ended questions.

The plenary session was attended by at least 75% of the class.
The open-ended responses were overwhelmingly positive with themes to emerge including the benefits of structure, way of thinking about a case, thoroughness of case evaluation and an enhanced approach to pathophysiology.

The graded responses were positive for all statements, including “I have benefited more from PBL in this than in other blocks because of this approach.”

Providing structure to the unfacilitated PBL 2 session by means of written questions resulted in enhanced engagement by the students with the process and good attendance at the plenary sessions.
Learning strategies amongst undergraduate dental students

DR S. KHAN * (UWC)

In 2007, the prosthetic module, usually done in 3rd year at UWC, was moved to the 2nd year to decrease the studying load. With this, came an increase in pressure (written as part of final exams, not as a stand alone; no previous tests covering this module) and new challenges (first exposure to practical dentistry; translating theory into practice).

I wanted to make their learning and retention of new information easier as they had to do this work throughout 3rd year and part of 4th year. They also had to prescribe and communicate with dental technicians with regards to this work for the rest of their careers.

- To ascertain if drawing up a question paper and memo for this module assisted students to better understand the concepts in preparation of the final exams.
- To determine whether this exercise motivated learning and assisted with a deep learning approach.
- To determine whether the mock test assisted with preparation for their final exams.

Different interactive teaching methodologies were used to address the objectives of this study. The cohort used is the BChD II class of 2007.

DATA COLLECTION: An exercise of drawing up a question paper and memorandum for this module was given. They were asked to write a mock test, as set up by their peers; to evaluate the question paper and to mark the test afterwards. I then drew up a questionnaire to assess their attitudes and strategies used when doing these exercises.

Inclusion criteria: Students had to be in 2nd year for the 1st time; no previous exposure to the work and they had to be present for the mock test. Triangulation used in data analysis: quantitative (Paired Comparisons test) and qualitative (strategies used for studying; compare opinions of different students for the completed exercises) methods. Incorporated active learning techniques assists with deep learning and preparation for exams.
Post-graduate training preferences of Walter Sisulu University medical graduates

PROF EN KWIZERA * (WSU)

One of the goals of the 23-year old Walter Sisulu University (WSU) Faculty of Health Sciences is “to produce health professionals who are self-directed and life-long learners who will be able to adapt to changing local and global circumstances, keep up with developments in their profession, and have the necessary motivation and background to acquire relevant specialised qualifications to fulfil the needs of the community and to advance their own careers.”

To determine the numbers of WSU MB ChB graduates who have completed or are currently undertaking post-graduate programmes, and to analyse these numbers in terms of, inter alia: curriculum under which they trained, gender, preferred specialities, whether completed or ongoing, and where those who have specialised are practising.

This was a descriptive study of WSU medical graduates’ post-graduate training patterns from 1992 to 2008, and looked at doctors who graduated between 1990 and 2004. Graduate follow-up involved visits to the country’s major cities where interviews and focus group discussions were conducted. There was also telephonic and e-mail communication. Graduate demographics were extracted from a database of all WSU medical undergraduates since 1985.

Although this is still work in progress, preliminary data suggests that at least 20% of WSU medical graduates have completed or are engaged in post-graduate programmes (31.5% of ‘traditional’ graduates and 17.0% of PBL graduates, though the latter is underestimated because the data is still incomplete) Nearly all the specialities pursued by the graduates are clinical, the most popular being: Paediatrics (n=21), O & G (n=16), Surgery (n=15), Internal Medicine (n=10), and Family Medicine (n=8). The majority of those who have completed specialist training are practising in the country’s major cities, and only two are in the Mthatha Hospital Complex.

WSU is succeeding in motivating her medical graduates to help achieve one of the major goals of the Faculty of Health Sciences, namely, Continuing Medical Education and specialisation. However, the paucity of WSU medical graduates choosing careers in Basic Medical Sciences, as well as the failure of those who specialise to return to their Alma Mater are causes for concern.
A phenomenological investigation of the experiences of a community involved in the UKZN community-based education programme

MS NS LINDA * (UWC), MS C ENGELBRETCHT (UKZN), PROF NG MTSHALI (UKZN)

Community-based education (CBE) is increasingly viewed as the best way to address the issue of relevance for graduates in health care sector to be responsive to the needs of the South African people. Many authors agree that the adoption of CBE programmes are aimed at responding to the changing definition of health from a bio-medical to bio-social definition (Mtshali in Uys & Gwele: 2005; Murray & Bevis: 2001). The CBE strategy promotes learning of future health professionals while addressing real life issues of the community. This is in line with the recommendations made by the WHO (1978) “Health for All” strategy; as such it is more relevant to the South African context where extreme poverty and communicable infections are prevalent. Community involvement is one of the crucial principles in the implementation of a successful CBE programme if it is to achieve what it is set to achieve.

Developing and sustaining true partnership is crucial for CBE programme to be successful. Regarding true partnership, authors like Bell-Elkins suggest Principles of Good Practice and maintains that successful and true partnership needs to be community-based. In principle communities that are participating in such partnership are expected to benefit from such engagements.

The issue of partnership accordingly becomes crucial and sensitive, as academic institutions are obliged to ensure that learning experiences and learning opportunities available in the community settings are more in favour of developing competencies required by the students. It is therefore important to ensure that the community is made to understand clearly and early what is required of them in the relationship.

Objective of the study was to identify, uncover and describe experiences of a community regarding its involvement in the UKZN CBE nursing programme.

The study used a qualitative approach and phenomenological design. This methodology was selected for its qualitative nature to collect rich data by taking into account the context from which data was extracted (Darlington & Scott: 2002). Methods used to collect data were focus group discussions and one to one interviews.
Findings revealed a variety of experiences which include the following: (i) Expectation of certain behaviours by the community, (ii) community awareness on certain issues (iii) benefits to the community, (iv) formalized relationship with students from the university as well as how the community was involved in the CBL activities.

There is a great need to acquaint the community at-large (including all stakeholders) regarding the benefit CBE strategy can yield for those areas in South Africa undergoing development process.
In 2002 the MB,ChB programme committee of the Faculty of Health Sciences at SU embarked on a process of curriculum revision. In addition to being part of a regular curriculum review process, various external and internal challenges accentuated the need for revision. Pressure from the government on medical schools to seriously consider shortening of their medical curricula was one of the main drivers. Widening of access to academically under prepared students was another important consideration.

During the preliminary phase of curricular review, it became clear that substantial changes to the first year of the programme needed to be instituted. Traditionally the first semester was devoted to the learning of the natural sciences, often in a non-contextualised fashion. During the further development of the new first semester (called the “Foundation Phase”) we found that it should be possible to follow an interdisciplinary teaching and learning approach.

A starting point was to contextualise the natural science content as far as possible within the health science disciplines. Challenges were to include the relevant components of the original first semester into either the new Foundation Phase or the rest of the curriculum, as well as to give more support to first year students by teaching crucial generic skills. It was further necessary to ensure that the goals and outcomes of these modules were in line with the exit outcomes of the programmes.

The new Foundation Phase, implemented in 2008, consists of four modules. Students from two programmes (MB,ChB and BSc Physiotherapy) participate fully, and those of the other two (B Occupational Therapy and BSc Dietetics) participate partially in the Foundation Phase. Early feedback on the four new modules by staff and students highlighted the positive aspects as well as some that need to be revisited. Some of these could possibly be addressed by changes in management of the Foundation Phase or the pedagogical approach.

A new interdisciplinary first semester was successfully implemented in 2008 for students of our undergraduate health sciences programmes. Curricular change is, however, an ongoing process and it was therefore necessary to carefully monitor the implementation in a scientific manner, obtaining planned feedback which enabled us to intervene timeously to change and further improve when and where appropriate.
Medical students’ approaches to learning at the Wits

DR T MAITIN * (Wits)

BACKGROUND: The Wits is involved in efforts to evaluate the new and innovative medical curriculum, namely the Graduate Entry Medical Program (GEMP) which was started in 2003. The GEMP uses a Problem Based Approach which resonates with what Biggs terms a “deep approach” to learning.

OBJECTIVES: To assess and describe learning approaches used by students enrolled in the GEMP. Questions posed attempt to provide answers that: describe the predominant learning approach used by students as they enter the GEMP; highlight the statistical significance of observed differences in the group means between the surface and deep approaches and; suggest if any changes occur in the learning approach used by students over time.

METHODS: This study is a longitudinal cohort survey, using Biggs’ Revised two-factor Study Process Questionnaire: R-SPQ-2F as the instrument to collect data from medical students enrolled for GEMP from 2003 to 2007.

RESULTS: Predominantly, medical students start the GEMP using a deep approach to learning and seem to sustain this over time. However, there are significant decreases of the mean scores of the deep approach over time. Changes in the surface approach mean scores are not significant. Qualitative comments suggest that students struggle with time management, and finding an appropriate strategy to study effectively in the GEMP.

CONCLUSION: It is suggested that intervention strategies be developed whose aim would be to assist students maintain a deep approach to learning, manage time effectively and utilize effective study methods for the GEMP curriculum.
Mentoring: A tool to provide Academic and Social Support in Medical Education

DR M MAMMEN *(WSU)*

The study reports on mentoring as part of the support programme in the Faculty of Health Sciences at Walter Sisulu University (WSU). The faculty makes profitable use of mentoring of novice (first year) medical students (mentees) by pre-trained seniors (mentors). Mentoring as a concept is defined as a process tailored to suit each mentee's needs in order to provide academic and social support when mentees enter the programme. It continues throughout their first year in the faculty. 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 was recognized that 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 was introduced in 1994 to facilitate such skills. There has been no significant difference in the background of new entrants into medical education over the years. Consequently, the need for mentoring continued. Lessons learned over the past 14 years have assisted to improve both the quantity and quality of mentoring. The quantity of mentoring increased due to increased enrolment per year over the years. 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 objective of the study was to assess the beneficial effects of mentoring on mentees and mentors.

Data were gathered from independent self-evaluation reports through returned survey questionnaires by mentees and mentors at WSU in 2006. The sample consisted of a total of more than 200 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 fulfil more of its pre-planned objectives. 80% of the mentors reported that through the support they give to the mentees, they themselves developed problem-solving skills.

Mentoring is an empowering and enabling process to novice medical students from disadvantaged academic and economic backgrounds.


Student responses to theme-based content in an integrated curriculum

DR DM MANNING * (Wits), DR A BENTLEY (Wits)

The first two years of the four-year graduate Entry Medical Programme (GEMP) of the Wits’s MBBCh degree has an integrated, problem-based curriculum organised horizontally in 11 organ-system based blocks and vertically in four themes i.e. Basic and Clinical Sciences (BCS), Community-Doctor (CD), Patient-Doctor (PD) and Personal and Professional Development (PPD). The curricular structure intends to develop a holistic approach to patient care through a biopsychosocial model. To promote the intended learning the assessments are aligned with the curricular content through the use of integrated case-based written assessments which draw on material from all four of the themes.

The study aimed to investigate the attitudes and approaches of students to studying the four Themes in the GEMP and to relate these to scores achieved for the different themes in the integrated assessments.

Several different sources of information were triangulated:

- Likert scale questionnaires on attendance and perceived value of theme-related course content
- Focus group interviews
- Statistical analysis of mean cohort scores for the different components in the integrated assessment.

The questionnaire and interview data showed that the students reported having a more positive attitude towards, and spent relatively more time on studying the BCS theme than the CD, PD and PPD themes. This learning behaviour is reflected in the generally higher scores achieved for the BCS theme than for the CD, PD, and PPD themes as a group. The focus group interviews indicated that while some students did not perceive the latter themes as important, others were unsure of what was required of them in assessments, at times experienced the marking as subjective and the assessment format to be inadequately aligned with the intentions of the themes.

The integrated, problem-based, student-centred curriculum is founded on a constructivist, knower-based conception of learning in which the integrated written examination should represent a valid and authentic form of assessment. The results suggest that in general the presentation and assessment of the basic and clinical science disciplines are able to communicate the value and assessment criteria more effectively than the psychosocial themes.

A medical curriculum integrating different knowledge domains creates a challenge for providing learning experiences and structuring assessments which effectively convey the criteria for what counts as knowledge through access to the implicit as well as the explicit values of all the constituent disciplines.
Defining the core curriculum in a self-directed learning medical curriculum: aligning learning outcomes, learning process and assessment.

DR DM MANNING * (Wits), PROF DR PROZESKY (Wits)

The design principles of the curriculum in the first two years of the Graduate Entry Medical Programme (GEMP) at the Wits include development of responsible, self-directed and life-long learning, whilst encouraging deep understanding of those essential concepts, core principles and underlying mechanisms of the basic and human sciences which underpin subsequent clinical learning, development of a holistic approach to patient care, and professional practice. There is, however, the possibility for creating a tension and contradiction between encouraging self-directed learning on the one hand, and defining the core curriculum on the other. In the GEMP the former is encouraged through the use of problem-based learning (PBL) and the development of skills in information retrieval, analysis and evaluation, and the latter by a framework of faculty-prescribed learning objectives and criterion-referenced assessment.

This paper describes the approach adopted in the GEMP for defining the appropriate learning objectives and aligning them with self-directed learning activity and relevant assessment criteria.

In defining the core curriculum in terms of a set of learning outcomes two processes are required: identification of content areas to be covered, and specification of the academic depth at which that content is required. The second of these presents a greater challenge than the first. Two sources were particularly useful in this endeavour. The first was a document developed at the University of Edinburgh classifying lower and higher level learning objectives with explanations and examples of each. The second was the SOLO (Structure of Learning Outcomes) taxonomy described by Biggs and Collis (1982) and further elaborated in the context of constructive alignment between learning outcomes, learning opportunities and assessment practice (Biggs, 1987). The taxonomy describes four levels of learning outcomes with level descriptors similar those used in the Edinburgh document.

The intended learning outcomes for GEMP 1 and 2 are defined by the level at which the content is required and are aligned with the assessments through the use of the same descriptors. Self-directed learning is promoted by ensuring that in each weekly PBL case certain content is designated for student-driven research, framed by the appropriate learning objectives.

Although the approach has yet to be evaluated formally, faculty staff have responded positively to having a clear structure on which to base learning outcomes, feedback from students suggests that they understand the requirements of the self-directed learning tasks, and both content and construct validity of the assessments has been enhanced.
Self-directed learning behaviour in a dual entry, problem-based medical curriculum

DR DM MANNING * (Wits)

The Wits admits two thirds of its medical students into the six-year MBBCh programme from matric and one third as graduates into MBBCh III. The two groups are thus merged in the last four years of the degree, known as the graduate entry medical programme (GEMP). One of the key objectives of the GEMP is to promote self-directed learning. While acknowledging that some graduate entrants might have content deficits compared with the school entrants, it was assumed that graduates would enter the programme as mature, responsible, and competent learners and would readily display self-motivated approaches to learning.

This study investigated the approaches which matric- and graduate entrant students have adopted to studying in the GEMP.

The research was conducted as a retrospective cohort study of the GEMP 2 class of 2006. Quantitative data was collected using a Likert scale questionnaire and qualitative data from semi-structured focus group interviews. Although the questionnaire was anonymous, biographical data identified entry point, age, race and home language.

The questionnaire return rate was 60%, with over-representation of White and graduate entrants, and under-representation of Indian, Black and matric entry students. The graduates reported a greater tendency than matric entrants for:

- using the scheduled free time effectively
- reading outside of the course objectives and course materials
- making use of recommended websites
- finding additional interesting websites to supplement and enhance learning.

The older graduates in particular showed the greatest inclination to read articles in medical journals and were the most focused on a long term goal of medical practice rather than on passing the exams. The Indian students were the most focused on exams and the least likely to seek additional sources of information. Use of text books was reported fairly evenly across the different groups, with Black students making most use of the library books. When examined from the perspective of home language, the Afrikaans-speaking students showed the greatest tendency towards adopting a self-directed approach.
The results indicate that after a year in the GEMP the graduate entry students generally displayed a more mature and robust approach to self-directed learning than the matric entrants. The study also tentatively suggests that established models of learning may be socially derived and resistant to change. Current longitudinal studies of GEMP students seek to evaluate the extent to which they are responding to the challenges of problem-based learning by adopting different learning styles.
The development of a new teaching approach for the School of Health Sciences at the University of Venda.

PROF XG MBHENYANE * (University of Venda), PROF LB KHOZA (UNIVEN), PROF LO AMUSA (UNIVEN), PROF TX MALULEKE (UNIVEN), PROF T SODI (UNIVEN)

The School of Health Sciences at the University of Venda aims to be innovative in order to enhance its current teaching approach. The current curriculum is delivered through a problem-oriented, project-driven and community-based learning approach that is still teacher-centred. The new model will incorporate the principles of problem-based learning in structured programs and will be more student-centred, disciplines-integrated and competency-driven. Working groups of between 10-15 will be used to drive the learning of theory by providing problems to learners to solve. These will create a synergistic flow of ideas whilst at the same time enhancing the development of a sense of tolerance by students working with others. Furthermore, the new approach will encourage social learning, motivate student engagement in the learning process and ultimately lead to life-long learning. This paper traces the historical development of the current teaching approach and is concluded by looking at the challenges and opportunities created by the new problem-based learning approach.

To review the health sciences curriculum to include principles of problem based learning.

Systematic step-wise approach integrating training and development. Three groups of planners were used: Dean & heads of departments (5); core group of 9 (MPHE) and one other group (all staff). There were four steps: self-assessment; development of masterplans, development of teaching materials and piloting of materials which were implemented over a 2 year period (2006 - 2007).

The school of health sciences curriculum for univen has been reviewed and piloted. Training materials were developed.

Problem based learning approach can enhance the community based education in the training of health professionals to strengthen lifelong learning.
Teaching, learning and diversity – helping all students to learn

DR W J MCMILLAN * (UWC)

Literature suggests that without an understanding of patients’ backgrounds, beliefs and needs, it may be impossible to provide appropriate healthcare. Evidence suggests that graduate health professionals practice in communities like the ones they grew up in. Thus black physicians are more likely than white physicians to work in black communities; graduates from rural communities are more likely than city dwellers to practice in rural communities; and working class graduates are more likely than middle class graduates to practice in working class communities. It is therefore arguable that the inclusion in health science education programmes of students from diverse backgrounds has the potential to contribute to effective health services delivery in the wider community.

However, throughput in higher education of historically disadvantaged and working class students is documented as problematic. The literature indicates a number of reasons for this poor success. Firstly, the legacy of apartheid means, in actual terms, that the majority of African students continue to be schooled in print-impoverished environments, often characterised by teacher-centred, predominately oral classroom cultures. Rote-learning is prevalent, with little facilitation of active critical reading and writing skills, and the associated development of the nuanced vocabulary valued and rewarded in higher education.

Secondly, competence in the language of instruction is cited as a contributory factor. Most working class, African students have English only as an additional language and their competence in the language is frequently poor. Empirical studies indicate that conversational fluency in English is inadequate for mastering the abstract nature and implicit rules of the cognitive tasks required for academic discourse.

Finally, a growing body of literacy studies and educational sociology literature attributes poor throughput to the way that university environments alienate some students.

The paper addresses insights from this last body of literature. A way forward for educators is suggested.

This position paper surveys the current literature regarding diversity, identity, inclusion and alienation in order to generate an understanding how working class and African students might experience the higher education learning environment. Insights from critical pedagogy theory are
synthesized with this understanding in order to suggest ways in which educators might create learning environments that facilitate the effective learning of all health science students.

There are no results in a position paper:

Understanding how students experience the higher education learning context has the potential to help educators create learning environments that facilitate the effective learning of all health science students.
The value of undergraduate research projects in health science education - a case of physiotherapy

MS DJ MOITHABENG * (UP)

Research projects form a major component of the final year of undergraduate study and occupy about a quarter of student time. Students frequently spend large amounts of time on their projects, often producing work of publishable quality. Undergraduate research projects (UGRP) allow students to study part of their degree subject in greater depth than is otherwise possible. These projects are recognized as a defining element of the course. In South Africa, project work is a common feature of undergraduate programmes in all eight universities training physiotherapists. Individual universities and departments, however, set their own agendas, and cover different aspects of the assessment criteria for research as specified by the professional board.

Although the educational value of the research project is recognized, there is little if any discussion of its contribution to professional development. This paper highlights the value of undergraduate research projects (UGRP) to professional development.

The paper reflects on the research teaching philosophy and approach, and the experiences and achievements in the physiotherapy department at the UP as a case study. A content analysis of the UGRP conducted between 2004 and 2008 is presented and discussed in relation to a review of the literature on the benefits of undergraduate research projects.

The UP experience suggests that UGRP’s are valuable to the students, academics and the profession as a whole. The literature suggests other non-academic benefits of UGRP training, including process, presentation, management and personal development skills. These are currently being pilot tested at the UP and preliminary results will be presented.

UGRP are of mutual benefit as they contribute to the holistic professional development of the student, and to the scholarly development of the academics who supervise these students.
Striving towards excellence as a clinical educator in a school of medicine

Medical education has seen major changes over the past number of years. Integrated teaching, problem-based learning, community-based learning, core curricula with electives or options, and more systematic curriculum planning have been advocated. The increased attention paid to the learner may be seen by lecturers as a loss of control and power. This can lead to feelings of uncertainty, inadequacy and anxiety. It is now recognised, however, that teaching and learning are closely related and that the purpose of teaching is to enhance learning. It is important to ensure that the changing role of the clinical educator is not neglected in discussions about new educational strategies and approaches to curriculum development.

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. Some of the objectives which were pursued were the following:

- A literature study to conceptualise and contextualise the problem.
- Identifying the roles - and the competencies that are necessary to fulfil those roles - of the clinical educators, as well as to determine the criteria to develop clinical educators of excellence.

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 and which form the basis of the study, comprise a literature review, and – as the empirical study – a questionnaire survey and a Delphi process.

The findings were reported by means of a description, a discussion and recommendations.

With this study a contribution is made not only to staff development in the School of Medicine, University of the Free State, but also to other medical schools in South Africa. The beneficiaries of this research are the clinical educators, the students and, ultimately, the patients.
A framework for leadership and management of a medical school in South Africa

PROF PPC NEL * (Programme Director; Programme Management, School of Medicine, UFS), DR N VAN ZYL (Head: Clinical Services, Universitas Hospital, Bloemfontein), PROF GJ VAN ZYL (Head: School of Medicine, UFS, Bloemfontein)

Managers need to reassess their role and create an environment within which education and training can be conducted successfully. The complexity of medical and education institutions; the changes that have occurred and are still occurring; as well as the expectations of higher education and health institutions and bodies, demand that urgent and informed action be taken in leadership and on the management front.

The problem that was addressed, was that of a lack of a framework within which to fit the concept of leadership and management in a medical school. The aim of this study was to address the problem by designing such a framework for leadership and management in medical schools on which the leadership and management of a school could be modeled if a school should wish to do so. The objectives were to gain a deeper insight into approaches to leadership and management per se, particularly in institutions for higher education, including medical education and training; to gain an understanding of the changes impacting on higher education and the role that it plays in leadership and management; to determine criteria for a framework for academic leadership and management in a medical school; to test the criteria (by means of formulated statements) for leadership and management in a medical school; and to design a framework for leadership and management that can be implemented in any medical school in South Africa.

The methods which were used and which formed the basis of the study, comprised a literature review, and - as the empirical study - structured interviews and Delphi questionnaires.

The findings of the empirical study were reported on by means of a description and discussion of the structured interviews, followed by those of the Delphi study. These findings were used to compile a framework for leadership and management in a medical school. The premises for the academic leadership and management framework; the departure points for successful implementation; the different role-players who influence leadership and management in medical schools; as well as detailed formulations of the recommendations on each aspect included in the framework, were given. The researcher proposed two ways of how the recommendations made in the framework could be used, namely a sliding and a layering approach and/or by using them together with a planning indicator. With this study an attempt was made to contribute to effective and efficient academic leadership and management in Medical Schools in South Africa.
A synopsis of examiners’ reports on dissertations and theses within the health professions education programme

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PROF PPC NEL (Programme Director, Programme Management, School of Medicine, UFS)

The requirements that theses and dissertations should meet, are that they should demonstrate the candidate’s familiarity with the relevant literature, their research skills, as well as their ability to write a proper report on their research. A thesis should, in addition, make an original and significant contribution to the subject field. As far as research is concerned, the candidate should prove that they are fully conversant with the research methods and techniques of their specific subject field and that they have mastered and are able to use the research methods and techniques of the particular subject field. As far as the report is concerned, they should be able to document the research problem and objective, the research setup or design, method, results and conclusions in a proper scientific (systematic, logical) manner. On the whole the work should bear evidence of the candidate’s analytical skills, critical stance and substantive insight.

The study objective was to analyse the feedback in 70 reports of examiners.

Quantitative and qualitative approaches were used. An empirical, non-experimental research design was followed in this descriptive study.

The findings of the study were reported on by means of a description and a discussion. The findings were used to make recommendations on postgraduate education as far as the selection of a research theme, problem statement, literature review, research methodology, analysis and interpretation of results and documentation of the report, etc.

With this study an attempt was made to emphasise feedback of examiners as learning opportunities for supervisors and postgraduate students.
The development of a post-graduate diploma programme in mental health

DR R J NICHOL * (Dept of Psychiatry), PROF MM NEL (Head: Health Sciences Education and Supervisor; Faculty of Health Sciences, UFS), PROF GJ VAN ZYL (Head: School of Medicine and Co-Supervisor; UFS), PROF JF HAY (Head: Programme Development and Co-Supervisor; UFS)

This research was undertaken to develop a framework for a Post-graduate Diploma Programme in Mental Health. The paucity of psychiatrists in South (and Southern Africa) and the absence of tuition for doctors planning to obtain a Diploma in Mental Health from the College of Medicine of South Africa necessitated the study.

The goal of the study was to provide a framework whereby members of the medical profession could embark on formal post-graduate training, on a part-time basis, utilising blended learning mode (including face to face contact sessions, directed learning and e-learning), that would support the requirements of the National Qualifications Framework (NQF), the College of Medicine, and the Professional Boards. The objectives of the study were to conceptualise and contextualise the problem of the absence of training for a Post-graduate Diploma in Mental Health. Criteria were identified, using a survey of the literature, the researcher’s own experience in psychiatry and a Delphi process, in order to compile an appropriate framework for the diploma programme.

The research design was based on a quantitative approach, enhanced by qualitative elements, used to ensure that sound and well-founded recommendations would be proposed in the final framework. The methods which were used and which formed the basis of the study comprised an in-depth survey of the appropriate literature available and the use of the Delphi process. The Delphi questionnaire was developed using information gained in the literature study and the researcher’s own experience in primary health care and Psychiatry.

The findings of the Delphi study were reported and used in order to develop the framework for the Post-graduate Diploma in Mental Health Programme in six phases. These phases are summarised as follows: the identification of the individual needs of the doctor as learner and the mental health care user (patient), content of the Programme, the description of the mode of delivery in which the Programme will be presented, the use of blended learning to consolidate different parts of the Programme in Mental Health, implementation of the Programme, and the final accreditation and acceptance of the Programme. This research makes a significant contribution towards the improvement of mental health care in South Africa, especially at primary health care level.

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Good Clinical Practice Training course: an evaluation of the UCT course

MS G M PHILOTHEOU *, MS B WYRLEY-BIRCH (CPUT), PROF R ABRATT (UCT)

The Medicine Control Council of South Africa requires health care professionals and all others involved in conducting clinical trials and studies to attend a training course in Good Clinical Practice (GCP) every 3 years.

The International Conference on Harmonization (ICH) published guidelines on Good Clinical Practice for use when generating clinical trial data for submission to regulatory authorities. This guidance is the industry standard and its observance has been legislated with some modifications in South Africa.

The ICH defines GCP as "a standard for the design, conduct, performance, monitoring, auditing, recording, analyses, and reporting of clinical trials that provides assurance that the data and reported results are credible and accurate, and that the rights, integrity, and confidentiality of trial subjects are protected."

Regular ‘Clinical Trials; Scientific basis and Good Clinical Practice’ courses have been offered at the University of Cape Town (UCT) from 2005-2008. As a Quality Improvement measure independent evaluations were conducted by Health Care professional educators.

Participants at each course were a multi-disciplinary group of +/- 100. Feedback forms were used to obtain broad perceptions from the participants regarding the course. Participants were asked to rate statements around the presenters, the panel discussion and the course as a whole on a 5-point Likert scale from strongly agree to strongly disagree. In addition, free form responses required a response in the participant’s own words to open-ended questions. These were analysed qualitatively and provide more detailed feedback. The return rate for questionnaires averaged at >80% for all five courses held.

Rated responses to statements indicated that participants considered the presentations, panel discussion and course as a whole as valuable and worthwhile. Furthermore the fact that presenters were also members of the UCT Research Ethics Committee was of added value to the participants. It was apparent from analysis of the free-form responses that the course satisfied a real need by providing a forum within which practical and ethical problems encountered in research could be discussed. A difficulty was the diverse target group; although all attendees were
involved in research they came from different educational backgrounds.

The course has improved since 2005 due to modifications based on the evaluations. Participants have called for a follow up or refresher course over and above the basic course which is now run annually. In accordance with Adult Learning theory the follow-up course should be more participatory and take place in an active learning setting.
Experiences with the Angoff method of standard setting for high stakes exams in the MBBCh course

PROF DR. PROZESKY * (Centre for Health Science Education, Wits University)

There are two exceptionally high stakes exams in the Wits MBBCh programme: an integrated exam at the end of MBBCh 4 (which covers all the material presented in MBBCh 3 and 4) and a similar one at the end of MBBCh 6 (which covers all the material from MBBCh 3 to 6). In 2004 and 2005 we experienced significant problems in setting the standard for the first one. Accordingly the decision was taken to subject the exam to a formal standard setting exercise, which was done at the end of 2006 for the first time. The Angoff method was selected and also used that same year for the MBBCh 6 integrated exam.

The aim of this paper is to describe our application of the Angoff method and to highlight its benefits.

The way in which we have been applying the Angoff method is described. In the literature the Angoff is normally used for one best answer (A type) MCQs. In our examinations we use four types of MCQs: the ‘A type’, the ‘R type’ (extended matching), the ‘X type’ (multiple true/false) and the ‘n of N type’ (more than one best answer). Since negative marking is used for the ‘X type’ and ‘n of N type’ MCQs we had to develop a way of calculating the standard scores for these questions and this is explained.

The standardised pass mark in each of the four exams closely approximated the 60% pass mark which is routinely used in the MBBCh programme, and possible reasons for this are discussed. Practical problems experienced in using the Angoff method are highlighted, as well as its expected and unexpected benefits.

The Angoff method of standard setting for assessments is practical (if somewhat labour intensive) and effective.

We have extended its use to cover different types of MCQs.
Development and validation of a model of the competent South African intern: the ‘Nine-legged louse’

PROF DR. PROZESKY * (Centre for Health Science Education, Wits University), MS B SMUTS (Centre for Health Science Education, Wits University)

The Wits changed its MBBCh curriculum in 2003. In early 2004 it was decided to evaluate the outcome of the new curriculum in comparison to that of the outgoing one, and also to relate the outcome to the learning processes used in the two programmes.

This presentation describes the rationale for, and process of, developing a ‘Model of the competent South African intern’ in order to compare the internship preparedness of graduates of the ‘old’ and the ‘new’ curricula against the model.

A review was undertaken of international and national literature, Health Professions Council of South Africa (HSCSA) documentation and Faculty outcomes for the MBBCh degree. In-depth semi-structured interviews were conducted with a stratified sample of eleven intern supervisors and seven past interns in their community service year. All possible aspects of internship were entered into a spreadsheet and these data were interrogated and refined using expert opinion and a coarse and fine sieve approach until nine main categories emerged. The model was validated by a panel of 27 medical educationists, HPCSA inspectors and intern supervisors not involved in the undergraduate training of Wits medical graduates.

Valuable insights were received from the validation panel but no additional categories or subcategories were added to or removed from the original model based upon the rules set up for validation. The model was then used to construct a set of questionnaires and interview schedules for interns, intern supervisors, colleagues and patients for use in a comparative study of intern performance.

Considerable time and effort was spent on the development and validation of the model. This was invaluable in establishing the validity of the survey instruments used in the subsequent comparative study.
Educating for Change: Physiotherapists in under-resourced communities reflect on Practice

DR SS RAMKLASS * (Department of Geriatrics, Nelson R Mandela School of Medicine, UKZN)

Increasing access to healthcare services and dismantling of a fragmented healthcare system are the cornerstones of transforming healthcare initiatives in South Africa. Sustainability of healthcare services in rural and remote areas is secured by legislation of a year long community service contract with graduating healthcare practitioners.

This study explored the experiences of the first cohort of community service physiotherapists (CSP) graduating from a historically disadvantaged university. The aim of the study was to elicit the perceptions of CSP on their academic preparedness for practice in rural and under-resourced communities. Further, it determined how CSP were influenced by the rural contexts in which they practiced, and how they responded to and influenced that context. It also explored how relationships were constructed between the CSP and members of the community and other healthcare providers.

A survey was conducted at the end of 2003 amongst all 23 CSP from one physiotherapy education and training department. The instrument was faxed to the participants together with consent for participation. 20 of the 23 questionnaires were completed and returned within a month of the data collection process. The questionnaires were coded. Data was analysed within broad themes related to roles and responsibilities within healthcare settings, the association between theory and practice experiences of the curriculum and practice in under-resourced settings, the design of the clinical education program, and the development of inter-personal relations.

CSP assessed their preparation for practice largely in relation to the technical skills that they acquired through the curriculum. Community-based physiotherapy was under-emphasised in the curriculum in relation to practice opportunities in hospital and institution-based settings. The curriculum did not advance the role of physiotherapists as socially responsive agents and paid little attention to knowledge underpinning socio-cultural issues and inter-personal relations. The adherence to a medical model perspective resonates in the curriculum design. The findings of this study suggest implications for curriculum development of healthcare programs. Academic knowledge for professional practice is insufficient to prepare CSP for their multiple roles as practising physiotherapist, physiotherapy manager, member of a multidisciplinary team, counsellor, health educator and advocate for social justice within a primary healthcare model.
The use of Information and Communication Technologies to provide support to physiotherapy students in South Africa.

MR M ROWE * (UWC)

There has been a global shift towards the use of Information and Communication Technologies (ICT) in healthcare, which has been shown to improve service delivery, patient care and student education and support.

This study aims to investigate the use of ICT by South African universities to provide support to physiotherapy students and the experiences and perceptions of those students on the use of ICT as a means of receiving support.

The study design was a cross-sectional, descriptive, postal survey and the instrument used was a self-administered questionnaire. The survey population included all the undergraduate physiotherapy students (n=1105) from the eight universities offering the physiotherapy degree in South Africa. The sample size consisted of the 496 students from the population who completed and returned questionnaires, indicating a response rate of 45%. Data were captured and encoded using MS Excel and statistical analysis performed using the Statistical Package for the Social Sciences (SPSS), version 15.

The results of the study showed that the use of ICT is affected by race, as well as the university attended and that there was a preference among students for face to face contact as the method by which support was accessed. The use of ICT for research and professional development was also low.

There is a concern that with the move towards community based services in South Africa where colleagues may be widely dispersed, some groups of physiotherapy students do not seem well placed to make use of ICT services to access support.
Academic history and psychometric potential as multiple indicators of potential student success in health technology

DR EJ SMIT * (Programme Head), MS JGE DU PLESSIS (Lecturer)

Widening access, even if equity driven, must not result in students not having a fair chance of academic success. Although no minimum admissions requirement is specified for higher education study in SA, most institutions like the Central University of Technology use a point rating system to select students. However there is concern about a continuing high drop-out rate of 50%, especially among black students. The DoE is funding foundation programmes to help improve throughput rate and the CUT has also introduced academic development and ‘bridging’ programmes that help students overcome poor schooling and to cope with learning in a second language. As access without success is simply no access, reducing drop out rates is crucial. One way of ensuring this is to admit the ‘right’ students. At the CUT, a UoT degree, diploma or certificate requires the possession of at least a SEC (gr 12) and a score of 27 or more points on the CUT scoring scale in which all 6 SEC subjects are taken into account.

A study on the correlation between the existing admission requirements, as a success indicator in the first year Chemistry module for health technology, an abbreviated psychometric test, as additional indicator, and student performance was done to determine the applicability of these indicators in the current higher education environment.

The score (on the CUT scoring scale) of the 3 main scientific subjects were used as the historical indicator of potential success, and this was correlated with the results of an abbreviated psychometric test, testing mainly mathematical and English language ability as a cognitive indicator of potential. The study was done in the Faculty of Health and Environmental Sciences of CUT and stretched over a 7 year period.

Results show that there is a definitive difference in strength when the two indicators are used for previously advantaged versus disadvantaged students; contrary to what was expected, the strength of the CUT score indicator has improved over the years; the psychometric test indicator remained constant over the period, and additionally initiatives such as the foundation programme did not have any significant impact on either access or student performance. As, on average, more than 50% of the correlation found between the historical indicator and student performance could be due to chance, it is thus concluded that the CUT should examine the validity and reliability of admissions requirements in order to assure meaningful correlations of multiple indicators with potential for student success.
An innovative primary care rotation for final year medical students

MS NO SONDZABA * (Division of Rural Health, Wits), PROF ID COUPER (Division of Rural Health, Wits)

The Wits, Johannesburg, launched a new 4-year Graduate Entry Medical Programme in 2003. This follows a problem-orientated, criterion-referenced and outcome-based curriculum, with the first 2 years being mainly taken up with problem-based learning sessions around weekly cases and the second 2 years being built around clinical rotations.

This paper describes the innovations in one 6-week rotation in the final year:

The Integrated Primary care (IPC) block was planned and implemented by 7 different medical school departments, under the coordination of the rural health unit. Students spend their 6 weeks in district hospitals and linked primary health care centres, in underserved periurban and rural areas. They are evaluated through a series of activities, recorded in a logbook, and an end of block examination, set by the participating departments together. The focus is around the consultation with the undifferentiated patient.

Innovative features of the rotation include the following:

1. The extended rural placement opportunity for the students
2. Cooperation between different departments to achieve common learning objectives
3. The student-directed nature of the block, where learning is focused around tasks completed by the students while working in primary care settings
4. Placement of students in traditionally "non-academic" settings
5. Service learning components, around health service development
6. The integrated examination at the end of the rotation.

The integrated nature of this rotation is an influence for change amongst all involved, including students, faculty and the health service.
Do students and lecturers agree on the barriers and benefits of Problem based learning?

MS SB STATHAM * (SU), MS SB STATHAM (SU), MS G INGLIS-JASSIE (SU), MS S HANEKOM (SU)

Curriculum changes advised by the HPCSA encouraged the development of a problem based module in the Physiotherapy III course. This module was introduced for the first time in 2007. A post implementation process evaluation was conducted.

The objectives of the study were:

- To assess the students’ perceptions of the barriers and benefits of the new problem based module.
- To assess the lecturers’ perceptions of the barriers and benefits of new problem based module

Self developed questionnaire for students

Self developed questionnaire for lecturers

Post implementation focus group for students

Post implementation focus group for lecturers

Module booklets

In both groups the benefits and barriers overlapped. The students felt group work, improved clinical reasoning, problem solving, information gathering, personal development and dealing with real life issues were benefits however others felt the same issues were barriers. The same trend was seen in the lecturer feedback where students attitudes and confidence, critical thinking skills and their ability to take responsibility were seen as both benefits and barriers. Suggestions for improvements will also be discussed.

The use of a monitoring and evaluation approach in responding to the needs of both students and staff is highlighted.
Assessment of the contents of a haematology module by haematologists and medical interns – preliminary results of delphi analysis

DR DC STEFAN * (SU)

The hematology curriculum is defined by specialist haematologists but has to serve the needs of generalist practitioners.

To compare the opinions of specialist haematologists on the content of a haematology curriculum with that of medical interns.

An open-ended questionnaire, followed by a survey requiring that haematology subjects are being scored for relevance to the generalist practice. These questionnaires are part of an ongoing Delphi process for sounding expert opinion on the hematology curriculum.

Haematologists and interns agreed on the importance of subjects such as anaemia, haematological malignancies and interpretation of blood results. Subjects considered important by haematologists, such as Fanconi anaemia, oncogenesis and cytostatics, and acquired platelet defects, were given low scores by the interns; on the contrary, pregnancy anaemia and anticoagulant therapy scored low in the specialists' survey but were found very relevant for practice by interns.

These results illustrate the need for broad consultation in the process of curriculum building.
An electronic pre-hospital emergency care registry for the management of student paramedic clinical learning

MR C STEIN * (Department of Emergency Medical Care, UJ)

Clinical learning is an important component of university-level paramedic education. It is also one of the most difficult educational activities to manage and quality assure because it occurs off-campus and relies on the input and assessment of mentors not employed by the university. Traditionally, clinical learning activities have been documented on paper, making analysis of this data time-consuming and difficult.

The objective of this study was to describe the background, structure, function and outputs of an electronic pre-hospital emergency care registry custom-developed to manage student paramedic clinical learning at the University of Johannesburg.

A historical background to the problem of clinical learning management was given, followed by a motivation for the creation of an electronic pre-hospital emergency care registry. Features of the registry and how it is used by students were described and examples were given of how it has facilitated the job of clinical learning management and assessment of students in an off-campus environment. The importance of the registry in both educational and clinical research was also described.

The main motivation for an electronic pre-hospital emergency care registry stems from the difficulty in quality assuring clinical learning with traditional documentation and verification methods. The registry is a web-based application and has been made accessible to students both over the internet and on a local intranet, each with its own advantages and disadvantages. The powerful features of aggregation and summation made possible by electronic data storage and retrieval have made management and quality assurance of clinical learning easier and more efficient. There are however, also some potential problems related to validity of data which do not have unqualified solutions. The registry is an invaluable source of data that has already been used for clinical research and that could be used in the future for educational research, particularly in the area of assessment and clinical competence.

Although complex to design and implement, an electronic registry for the management of clinical learning offers many advantages over traditional approaches used for this purpose.
Locating Palliative Care Education at the University of Cape Town Medical School – a Primary Palliative Care Approach

MS J STIDWORTHY * (UCT), DR A BARNARD (UCT)

The teaching of palliative care at the medical school of the University of Cape Town is located in the Family Medicine Department of the School of Public Health and Family Medicine. The Faculty of Health Sciences and its departments are committed to a primary care approach in all teaching, and the situation of the Palliative Medicine department within the Family Medicine ambit serves this commitment well. The vital role of the public health approach to the delivery of excellent community palliative care is assisted by the close association with the School of Public Health. To demonstrate that Palliative Care is an implicit part of Primary Care and Family Medicine.

Programme monitoring and review

Cumulative knowledge and skills allow for planned progression. Content and description of teaching methods. Assessment of students and teaching methods. Focus on the integration of Palliative Care into the undergraduate curriculum at UCT.

Identifying the placement of the teaching of palliative care within the UCT curriculum emphasises the development of palliative care skills, knowledge and values as integral to those of the Family Medicine Practitioner:

"Many health care professionals see palliative care as a soft option and equate this with withdrawal of care. However, palliative care is active therapy..." (Mash B. Handbok of Family Medicine. 2007. 243)
The role of tutorials in students’ learning

DR C STRYDOM * (UWC)

BACKGROUND: In 2006 the BChD II class attended tutorials during which they were required to solve clinically-applied questions in groups. At the end of 2006 feedback on the tutorials was obtained. In 2007, with the same students now in their 3rd year, a larger variety of tutorial tasks were added to the tutorials. These consisted of a selection of stimulus material, e.g., self-study questions referring to learning materials, table templates for summarizing of information, open- or closed-book true/false or multiple choice tests. The motivation was to guide learners specifically on how to engage with the Dental Materials information, e.g., that it would help students to (1) learn the more detailed “must-know” facts of the subject; (2) engage in difficult concepts; and (3) study more efficiently. They worked in pairs, small groups, or on their own. At the end of the 2007 academic year feedback on the usefulness of the tutorials and tasks was obtained.

STUDY OBJECTIVES: The aim of this study was to use student feedback to explore the usefulness of the tutorials and tasks.

SUMMARY OF METHODS: In 2006, 73 students out of 85 who attended a randomly-chosen lecture provided feedback, in a self-administered questionnaire, to an open-ended question concerning tutorials. These students formed 79% of a class of 92 students. In 2007, a self-administered questionnaire containing several close-ended responses and open-ended questions was completed by 41 students. These students formed 43% of a class of 98 students. Open-ended feedback concerning the tutorial tasks still needs to be obtained.

SUMMARY OF RESULTS: In the 2007-feedback, most agreed that the tutorials helped them to study more effectively and reported that the data base improved their factual and conceptual knowledge. When rating the various tasks, summarizing work into tables was rated as the most beneficial, followed by open-book spot tests, closed-book spot tests, and self-study questions.

Content analysis of the students’ 2006 and 2007 comments on tutorials identifies additional benefits.

TAKE HOME MESSAGE: The tutorials and tutorial tasks were helpful to learning, especially understanding.
Best practices for postgraduate supervision: a systematic review

PROF SJC VAN DER WALT * (North-West University)

Research supervision is a crucial factor in the quality of postgraduate education and the efficiency of the higher education system to deliver postgraduate students. The quality of postgraduate supervision, the length of time to complete and the high percentage of learners who terminate their studies are of concern to health sciences educators and managers. Changes in the profile of postgraduate students and supervisors, as well as a variety of delivery modes, are challenges postgraduate education system has to address. Supervision of postgraduate students is a complex task surrounded by many myths and facts, contributing to new supervisors often unsure of their task. Unfortunately there is a lack of systematically developed best practices to show the way for new and inexperienced supervisors. A systematic review was done as a starting point in developing best practices that are appropriate in the current scenario in postgraduate education in South Africa in general and specifically within the health sciences. In this paper I will present the methodology and findings of the systematic review.

The aim of the study was to conduct a systematic review of all good quality research, guidelines and policies on postgraduate supervision.

The review question was “what are best practices in postgraduate research supervision”. Various data bases were searched in a multi-staged search procedure to identify all scientific studies published in Afrikaans and English, guidelines and policies. Both quantitative and qualitative research studies were included. All appropriate studies and documents that complied with the selection criteria were then critically appraised using appropriate instruments from Critical Appraisal Skills Programme’s (CASP) instruments. The transfereability of the findings of selected studies, guidelines and policies occurred continuously and simultaneously with the other steps of the systematic review.

The findings of the selected studies, guidelines and policies were summarised and synthesised as conclusion statements. The strength of the evidence were classified using the framework developed by Minnie (2007).

A lack of intervention studies in postgraduate supervision is a major limitation in the formulation of best practice guidelines. The methodological lessons learned, findings of the systematic review, and implications for practice and further research are the focus of the take home message.
Challenges for research ethics education

PROF SJC VAN DER WALT * (NWU)

Research methods are built into most of the health sciences’ curricula. Student research poses potential ethical problems but it is not clear to what extent we prepare our students for ethical research. The same applies to supervisors of student research projects and members of ethics review boards (IRBs). Despite the large time and financial commitments involved with current research ethics education programmes, little is known about the effectiveness of these efforts in improving the protection of research participants, the effectiveness of educational strategies and methods in establishing responsible conduct of ethical research and to what extent it contributes to the quality of ethical research.

The aim of this paper is to present a critical review of research ethics education in health sciences faculties.

Structure of argument: In this paper I will first argue that research ethics is a priority within research training and education and should be included in all health sciences’ curricula. This notion is supported by various educators and researchers such as Murray (2002) who states that an important way to prevent misconduct in research is to educate students about research ethics. Unfortunately, little consensus exists on how to actually provide this training. As leaders in the field of health sciences research we should work together to develop core competencies for research ethics programmes. Secondly I will draw the attention to the lack of empirically informed ‘best practices’ for research ethics education. Thirdly, I will address the structure for research ethics education and finally I will argue that in spite of our intentions with research ethics education, health sciences researchers, supervisors and members of ethics committees need to critically appraise our research ethics education programmes.

My main argument addresses a core question: what should research ethics education entail? To answer this question, I played Socrates and challenge reseach ethics in terms of (a) What is research ethics education; (b) the goal and outcomes of research ethics education; (c) core competencies; (d) content and learning activities; (e) educational strategies; and (f) assessment of competencies.

Health sciences educators, researchers and members of institutional review boards need to cooperate in establishing good ethical research education programmes.
Predicting student success in the first year of a medical curriculum using neural network analysis

PROF BB VAN HEERDEN * (Centre for Health Sciences Education, Faculty of Health Sciences, SU), PROF CA ALDRICH (Faculty of Engineering, SU), DR SA DU PLESSIS (Academic Support Services, SU), DR GT JEMWA (Faculty of Engineering, SU), MS R DE JAGER (Information Technology, SU), DR AJN LOUW (Faculty of Health Sciences, SU)

BACKGROUND: Selecting medical students at our institution is mainly based on high school academic performance. Due to changes in the school curriculum and assessment procedures, traditional selection criteria are no longer available. We are also aligning the demographic profile of our students with that of the country. School performance is, however, not always a reliable indicator of success at tertiary level, especially when selecting students from previously disadvantaged schooling systems. Alternative predictors for successful medical study need to be identified.

STUDY OBJECTIVES: To identify alternative predictors for successful study during the first year of the medical programme, over and above academic performance at high school level.

METHODS: Artificial neural network analysis (ANNA), specifically a Support Vector Machine, was used to identify predictors of success in students admitted into medicine since 1999. Three categories (demographic, quantitative and qualitative) of 99 input variables were used. First-year performance was classified as passed or failed.

RESULTS: Of 171 students with complete datasets, 10 failed. Using all input variables, ANNA predicted failures with almost 100% accuracy. The most powerful predictors were the national Health Sciences Placement Tests results (90% accuracy). Performance was significantly related to home language and ethnicity.

TAKE HOME MESSAGE: ANNA seems highly accurate to predict student performance in the first year of our medical curriculum. The use of ANNA will aid our selection process, especially in identifying students at risk for failing.
Reflection: looking within to know better.

DR M VAN ROOYEN * (UP), PROF JFM HUGO (UP), PROF JJ BLITZ (UP)

Senior medical students of the UP visit a community based site for five weeks during the last eighteen months of their training.

As part of the requirements of the rotations students have to reflect during their work and learning, and produce evidence of this reflection in their learning portfolio.

Areas of reflection expected from students cover: patient encounters (including patients under five, antenatal, delivery and post natal cases), daily learning journal, and their most significant change story.

A rubric has been designed to assess the reflections in a series of one on one discussions with the student.

Students find reflecting difficult, and a waste of time at first, but improve with help and practice. Overall students' self knowledge and insight improved. The reflection discussions helped faculty to understand the learning sites and learning opportunities / difficulties these students face in the community.

Reflection is an essential tool for medical students to link the experience with the academic content in order to learn about self and civic responsibilities.
An Innovative Doctor of Pharmacy Degree

PROF RB WALKER * (Rhodes University), PROF BJ WILSON (Rhodes University), PROF BD PATTERSON (Rhodes University)

Improvement in pharmaceutical services in developing countries is essential as part of overall improvement in health care. As part of the need to upgrade health care services in this sector, a role was envisioned for advanced practice pharmacists who would be competent to make significant contributions to achievement of the objectives of the National Drug Policy within the country. In order to meet this need, a unique Doctor of Pharmacy programme, a joint undertaking between the Rhodes University Faculty of Pharmacy and the Eastern Cape Department of Health, has been established.

The objective was to develop and implement a three year post-baccalaurate programme for registered pharmacists leading to the Doctor of Pharmacy degree.

Based on identified needs within the province, a series of competencies was established. Based on these general competencies, a work group was convened to develop the specific outcomes and structure for the programme. The resulting programme consists of 12 rotations, consisting of both experiential and didactic activities, of 3 months each. Following an Introduction to Pharmaceutical Care, the rotations include experiences in pharmacy management, paediatrics, infectious disease, cardiology, endocrinology, psychiatry and several other specialities. A research project is required as part of the third year of the programme. Funding for the programme is awarded from the Health Professionals Training and Development Grant (HPTD).

The first student was enrolled in 2004 and under the supervision of clinical supervisors and preceptors as well as academics has successfully completed the programme and graduated in March 2008. Six other students are currently enrolled and an additional four students will begin the programme in May 2008. The success of the programme in the public sector will be dependent on establishment of advanced pharmacy practice posts.

Collaboration between universities and the public sector is fraught with challenges and requires ongoing communication. Despite these challenges, the programme is viable and is meeting the objectives in improving pharmaceutical care within the provincial health care system.
Perceived educational value of a rural clinical rotation for medical students

MR NW WILSON VAN AARDE * (Ukwanda Centre for Rural Health, Faculty of Health Sciences (FHS), SU (SU)), PROF P BOUHUIJS (Centre for Health Sciences Education (FHS, SU)), PROF HH CONRADIE (Department of Family Medicine and Primary Care (FHS, SU)), PROF H REUTER (Ukwanda Centre for Rural Health (FHS, SU)), PROF BB VAN HEERDEN (Centre for Health Sciences Education (FHS, SU)), PROF BJ MARAIS (Ukwanda Centre for Rural Health (FHS, SU))

It is well-recognized that medical students, whose training exposure is limited to tertiary-level training hospitals, may be inappropriately equipped to deal with the most relevant health issues affecting rural communities. Rural community-based medical education programs have been introduced in many settings, but the educational value of these programs is often poorly documented.

Our aim was to evaluate the perceived educational value of a 2-week clinical rotation undertaken by senior undergraduate medical students at rural health care centers in the Western Cape Province.

Students completed a daily log diary to provide an overview of time spent on specific academic activities, ranking the educational and enjoyment value of each activity. At the end of the 2-week rotation students completed an open-ended, qualitative questionnaire capturing the main positive and negative aspects of their experience, followed by focus group discussions with a randomly selected subgroup.

Thirty-seven students consented to study participation and 25 (68%) adequately completed the log diaries and questionnaires, rating the following activities as most educational: ‘mobile clinic excursions’, ‘performing medical procedures’, ‘on-site teaching by doctors or other medical staff’. The rural experience allowed practical application of their theoretical knowledge, dramatically improving their levels of confidence and enjoyment. On the negative side students indicated the following:

(i) compulsory written reports and additional projects prevented them from maximizing the rural experience;

(ii) a time period of two weeks is too short to benefit optimally from the rotation.

This is the first African study to evaluate the educational experience of medical students during a rural clinical rotation. The feedback demonstrates that well-functioning rural health care centers provide excellent opportunities for students to develop the most relevant practical skills, required from generalist doctors working in resource-limited settings.
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POSTER ABSTRACT LIST

Statistical evaluation of X-type MCQs – adapting existing software

DR MH ALLEN * (Wits)

It has generally been quite easy to perform automatic analysis of A-type questions (the typical, pick the one correct answer out of five possibilities) or even R-type / extended matching questions (choose the correct answer to a question from a list of answers). There has however been difficulty where X-type questions are concerned (multiple true / false questions). Although X-type questions are sometimes not very well regarded, we have a large existing bank of these questions and need to be able to ascertain which are the best questions to use in rigorous student assessment. In rigorous assessment, the difficulty and discriminating power of each statement in a question should be statistically assessed.

We needed to develop a method of rapidly evaluating X-type questions so that we could get accurate statistics relating to both correct answers and distractors and to see what impact the differently biased questions had on the exam.

We use a number of electronic, online exams. The product used when the X-type questions are needed is a commercial offering from Perception, called Questiormark. The software presents these questions in a format known as matrix questions but does not analyse them very well. A Microsoft Excel add-on has been designed to facilitate this analysis. Questions are assessed for “unfairness” and discrimination. Unfair questions include those which are badly written, misleading or are just incorrect (by mistake). Questions which do not discriminate between competent and others are not particularly helpful.

Once examiners had been trained in the use of this add-on, the lag-time for the production of completed exam results has been decreased by 50 to 80%. Further analysis and result trends by discipline is now also being done.

With the use of an Excel add-on we are able to build up a bank of relevant, well investigated X-type questions so that we can set statistically valid exams.
UCT Medical School development of undergraduate Palliative Care teaching - laying foundations for best practice and ongoing learning

DR A BARNARD * (UCT), MS J STIDWORTHY (UCT)

Palliative care at the medical school of the University of Cape Town is taught as an integral part of family medicine within the national primary health care framework. Given the current disease profile in South Africa, this teaching provides learners with appropriate knowledge, attitudes and skills to provide palliative care to any patient with a life-limiting disease from the time of diagnosis until death, and then bereavement support for family members. The role of the interdisciplinary team within an effective palliative care unit, the extended resources available in the team, and community and health care system are integrated into the teaching. The palliative care teaching staff reflects the interdisciplinary team - palliative care physicians, a palliative care specialist registered nurse and a palliative care specialist social worker.

Case study of a new group teaching method.

Case Study.

Evaluation of Resource Enabled Active Learning programme (R.E.A.L.) within the small group setting using student's reflective appraisals for assessment of the learning experience.

Multiple teaching methods and optimal use of resources are combined to model case solving strategies, ethical practice, bedside learning and communication skills in an integrated morning tutorial, a formative assignment and a summative assignment. The students are supported and encouraged to adopt the learning methods and practice as a lifelong strategy.

"The university imparts information, but it imparts it imaginatively... A university which fails in this respect has no reason for existence." A Whitehead 1929 (Ramsden 2003)
Setting an integrated Modified Essay Question.

DR AJ BENTLEY * (School of Physiology, Wits), DR D MANNING (Centre for Health Science Education, Wits)

During the process of assessing and managing a clinical patient information needs to be drawn from multiple disciplines. This integration can be difficult particularly when disciplines are taught by discipline specific teachers using specific lectures or other teaching means which are topic specific. These teaching deliveries are usually also designated within specific themes or systems. Patient assessment and management demands that doctors use information without such boundaries. The assumption is that during their training doctors will automatically learn how to do this process.

As part of their block exams we set two or three integrated modified-essay (MEQ) questions along with another exam containing MCQ’s of the X-, A- and R-type.

To set the integrated MEQ we start with two or three general scenarios which set the scene as far as patient demographics is concerned as well as general theme/disease focus for each question. The scenarios are set by the block coordinators or an independent assessment coordinator. The scenarios are usually only one paragraph long and are sent out to all the disciplines which have been involved in the teaching of the exam material. The disciplines involved include anatomy, anatomical pathology, chemical pathology, physiology, pharmacology, clinical medicine/surgery, patient-doctor, community–doctor and professional development themes. The topics of microbiology, genetics and molecular medicine are included less frequently. The number of marks that each discipline should set is calculated based on number of teaching hours for that particular section. They are asked to look at the scenarios and to bring to an exam setting meeting questions they would like to have included in the MEQ as well as possible additional information to be added to the scenario. At the meeting the committee places each question at the correct point within the MEQ and links all the material to make a coherent question. The MEQ is presented to the students as one question and they are not alerted to the disciplines involved in the question setting.

The final question thus contains up to four different disciplines that would normally be encountered in the particular disease entity. Forcing the students to handle many disciplines in one question, we hope, prepares them for the process when handling patients in the clinical years.
Using different types of questions extends the range of basic science assessment

DR AJ BENTLEY * (Wits)

The importance of a good grounding in the basic sciences to the competent practice of medicine is obvious and has been the subject of debate. Part of the problem is that basic scientists often complain that their topic has limited scope for assessment in a multi-layered assessment particularly when aimed at medical students in the clinical years.

We have tried to use physiology at all levels of assessment available to us.

We have set physiology questions as X-, A- and R-type MCQs, part of the integrated Modified-Essay Question and in the OSCE exam.

The X-type MCQs assess detailed knowledge of factual information whilst the A and R-type questions provide information about the application of basic physiology in a clinical setting. Physiology questions in an OSCE exam are usually paper based or as add-ons to stations which examine clinical symptoms and signs. In an MEQ the physiology questions either occur early on when asking students to explain the mechanism of signs and symptoms or further within the question in relation to the pharmacology or after new data sets are introduced to the scenario. The use of physiology questions at different levels is essential both in order to expose students to the usefulness of the physiology to explain at many different levels both the presentation features of the patient as well as for management strategies. An added usefulness is for the lecturers of the topic to evaluate at which point on the spectrum the knowledge of the basic science is lost. If the students only know the detail but are unable to transfer that information to the patient then the teaching approach may need to be changed.

Assessment of basic sciences can thus be achieved at many different levels of expertise. The presence of the basic science question in clinical exams alerts the students to the importance of the subject.
How prepared are the students for Interdisciplinary Teaching and Learning in a Primary Health Care Setting program?

MS J BESTER * (SU), MS SB STATHAM (SU), DR M PATHER (SU), MS MM BESTER (SU)

Interdisciplinary teaching and learning (IDTL) was introduced by the Stellenbosch Faculty of Health Sciences during the period 2002-2003 and was formally adopted as part of the strategic plan for the faculty in 2005 together with the aim of training more students in a primary healthcare setting.

Hermanus was one of the primary healthcare clinical sites used for IDTL but had the most shortcomings regarding functioning fully at primary care level and the nature of the IDTL activities. This led to the current project for which FINLO financing was sought.

The objectives for the students were:

- To improve the students’ knowledge and skills in the application of services based on primary healthcare principles;
- To promote the students’ ability to work within an interdisciplinary team;
- To broaden the students’ personal and professional frame of reference so that they can become goal orientated professionals within a primary healthcare approach.

A health promotion program aimed at empowering a group of Home-based Health Carers was developed. The students take full responsibility (under guidance of the IDTL facilitator) for developing the learning material and facilitating the learning of the target group.

The project is continually being monitored and adapted within an action research framework.

The following data collection methods are being used:

- The readiness for inter-professional learning scale
- The interdisciplinary education perception scale
– Self developed questionnaire
– Focus group with the program facilitators
– Records sheets from the IDLT facilitator

Preliminary results from the students in this primary health care block (final year physiotherapy and occupational therapy as well as MBChB students) enrolled for 2008 will be presented in view of the fact that the study reaches completion at the end of 2008.

1. The complexities of aligning discipline specific outcomes in a community setting.

2. Lessons learned in community entry and how to sustain the intervention to benefit all stakeholders
Action learning for curriculum development

PROF JJ BLITZ * (Dept Family Medicine; UP), PROF DA CAMERON (Dept Family Medicine; UP), PROF MVAN ROOYEN (Dept Family Medicine; UP), PROF JFM HUGO (Dept Family Medicine; UP)

In 2006, the Department of Family Medicine decided to respond to persistently poor student evaluation of the Health and Healthcare module that they presented to senior undergraduate students. The subsequent 2007 revision of the module (reciprocal peer teaching methodology) was met with an even worse evaluation.

Stakeholder groups (academic staff, current and future students) met at regular intervals over four months to reflect on student evaluation, student assessment marks, staff evaluation and ideas for revision of the 2008 module. This process enabled the stakeholders to design a learning opportunity which built in awareness of learning style flexibility, reflection on action and community engagement. The goal was to provide the students with insight into their own learning and their ability to impact on service delivery. As a result, a form of community engagement (academic service-learning) was chosen as the teaching methodology. Each student was allocated to one clinic for a three week period. This allowed them to get to know the staff and develop team relationships with regard to improving care.

Action learning

Preliminary results demonstrate a better than ever student evaluation, an improvement in the class average marks for the module, a renewed vigour for learning and practice of medicine expressed by the students, happier academic staff and satisfied service providers.

A community engagement opportunity for senior medical students seems to contribute to their sense of responsibility which in turn drives more effective learning.

Action learning by academic staff enriches curriculum development, providing a better learning opportunity for students, leading to more meaningful learning.
Medical student electives: how do they compare with other learning opportunities?

DR NA CAMERON * (Health Science Faculty, SU), PROF BB VAN HEERDEN (Health Science Faculty, SU), DR FJ CILLIERS (Centre for Teaching and Learning, SU), MS ME VAN ZYL (Health Science Faculty, SU)

Most medical students are encouraged to undertake an elective period during their studies. At the Stellenbosch Health Science Faculty the MBChB course lasts 6 academic years with the last 18 months as student interns. The students are required to complete two 4 week electives in November of their 4th year and July in their 5th year. These electives are assessed by means of a written portfolio.

To elicit opinions of 5th year medical students on the value of the elective periods directly after their second elective in July 2007.

Voluntary anonymous written questionnaire.

Thirty four percent (59/175) of students returned the completed questionnaire. The majority of these students (40/59) found the elective periods somewhat or much more valuable than the average 4 week practical clinical block as there was more one on one teaching and more opportunity to acquire skills. Six students said it was difficult to compare the more formal practical block with an elective period as they were different kinds of experiences. 28/59 thought that two 2 week periods or one 3-4 week period would be better; 25/59 that the current two 4 week periods were best and 6/59 that a single longer elective period would be better. Several students commented on the planning and the cost of electives, and on the assessment of the portfolios.

It seems from this limited sample that the current arrangements for elective periods for medical students at our Faculty provide valuable learning experiences and that current arrangements reasonably well.

Student comments provide clues for possible improvement.

Further research into this and other less formal learning opportunities for medical students is recommended.
Results of a Delphi study on the clinical skill requirements of the diagnostic radiographer in South Africa

MRS FE DAVIDSON * (Radiography Education, Cape Peninsula University of Technology)

CONTEXT: The education of radiography students for the National Diploma involves both theoretical instruction and clinical experiential learning. When new graduates enter the workplace, they are expected to have reached a certain level of clinical competence in order to perform independently in the clinical setting. This can only be achieved if academic staff, clinical staff and professional bodies work closely together.

AIMS: The aim of the study, which was conducted in 2005-2006, was to get consensus on the clinical skills required by newly qualified diagnostic radiographers in South Africa.

METHOD: The “Delphi Technique” was employed to develop consensus from experts in the field of radiography on the clinical workplace skills required by new graduates. A panel of 50 experts comprising of academics and clinical staff was recruited nationally to participate in three rounds of questionnaires.

RESULTS:
- There were statistically significant differences in the expectations of clinical staff and academics
- Those clinical skills which ranked highly were related specifically to the radiographer
- Generic competencies such as ethical practice, patient care also ranked high
- Specialized imaging e.g. CT, MRI, Mammography ranked low
- Competencies traditionally performed by radiologists e.g. contrast studies ranked low
- Some of the CCFO’s were accepted as necessary clinical competencies
- There was some degree of acceptance of role extension competencies
The results compared favourably with United Kingdom standards of practice and the American Registry of Radiologic Technologists.

**CONCLUSION:** There is a need for further collaboration between all stakeholders on clinical competency requirements for new graduates (academic and clinical staff). All aspects of role extension need to be explored with respect to:

- The needs of the country; and
- Regulations governing the scope of practice of the radiographer.

An application has been made to SAQA for a new 4-year Professional Degree of radiography. The re-curriculation process is presently underway and the results of the study will have implications for process.
The MEDUNSA MBChB Curriculum
PROF FPR DE VILLIERS * (MEDUNSA)

In 1993, the Education Committee of the General Medical Council in the UK produced a document entitled “Tomorrow’s Doctors” in which it described changes that needed to take place in Medical Education. In 1999, the Interim South African Medical and Dental Council published a document that provided guidance on Undergraduate Medical Education in South Africa. These formed the background against which the new curriculum at MEDUNSA was designed.

The objective was to design a new curriculum for the new millennium, which is at once practical, but with due regard to current concepts in Medical Education.

Outcomes-Based Education has attracted international interest in recent years. It is an approach to education in which decisions about the curriculum are driven by the outcomes the students should display at the end of the programme. The exit learning outcomes provide the framework for thinking about the type of doctor that is to be produced.

After exploring a variety of models, the Faculty Committee on Curriculum Development opted for an eclectic hybrid model that encompasses the best of the examined models, as follows:

THE ETHICS MODEL
- Early introduction to Clinical Work
- Task Based Learning based on Case Reports
- Health (rather than disease) focus
- Integration, Contextualization and Reticulation
- Community based and -focused Learning
- Standardized Assessments related to an Outcomes-based Approach
The introduction of the new integrated module on the Practice of Medicine, as part of the curriculum renewal, has allowed for integration both vertically and horizontally. Themes incorporated in each year, in this subject, are the following:

1. Clinical skills
2. Ethics
3. Public health, and environmental health.
4. Measurement skills (e.g. Epidemiology, Evidence-based Practice)

Integrated Case-Based Learning

Learning in this manner blurs the interface between disciplines and allows the student to be better prepared for those patient problems that occur commonly in a Primary Health Care setting. The seminars are presented from the first year around common problems like Hypertension. The approach is multidisciplinary with each seminar conducted by a trained facilitator. Teachers from the basic medical, pathological and clinical sciences play active roles in the presentation of the learning material.

We consider our current curriculum to be an excellent balance between clinical and theoretical, person-centered and community-based while always keeping the required outcomes in mind.
Preceptor training to ensure Primary Health Care Nurse Competence

MS A DUNN (CPUT), Ms J Fortuin

INTRODUCTION: Primary Health Care is an essential component of the National Health System. Due to the shortage of medical doctors and the Provincial Government’s aim to provide nurse-driven services, nurses are being trained to provide health assessment, treatment and care to patients. The Primary Health Care course is offered to Professional Nurses as an elective (Clinical Nursing Science, Health Assessment, Treatment and Care) of the BTech Nursing course. Preceptorship is offered as a supportive learning strategy to gain clinical competence. The aim of the study is to equip Primary Health Care learner preceptors towards standardising learner assessment. The problem is that Preceptors (mentors) are trained at different institutions with no standardisation of assessment among preceptors.

Various workshops held with preceptors to:
- Discuss preceptorship and mentoring
- Improve the clinical assessment tool
- Demonstrate clinical procedures
- Test the assessment tool for reliability and validity

RESULTS: Preceptors provided input in improving the clinical assessment tool and reported that they valued the opportunity to standardise procedures and the clinical assessment tool towards assuring competence of clinical nurse practitioners.

RECOMMENDATIONS: Continuous interaction is needed with lecturers and preceptors to ensure clinical competence of learners and assessment standardisation. The learners’ clinical competence needs to be assessed. Learner satisfaction of fair assessment will be evaluated.

CONCLUSION: Providing a preceptor training programme enhances standardisation and the process towards improving the quality of clinical competence amongst nurses training in Clinical Nursing Science, Health Assessment, Treatment and Care.
Student and academics’ experiences in doing Conversational isiZulu training in the School of Nursing, UKZN

MS C ENGELBRECHT * (SANTED- UKZN)

Due to the language policy in the higher education institutions, the School of Nursing is participating in a project sponsored by SANTED to provide support structures for both staff and students to develop multilingualism. This support is given by giving language instruction for both staff and students in conversational isiZulu, as well as developing study materials in both English and isiZulu.

Explore and describe the experiences of both staff and students in learning isiZulu as method of communication and conversation.

A qualitative research methodology (Creswell, 1994:1) will be implemented where we will work inductively (Mouton & Marais, 1992: 105) to explore (Mouton & Marais, 1992: 45) and describe (Mouton & Marais, 1992: 46) the experiences of staff and students in doing a conversational isiZulu course.

Work in progress. Results will be ready by the time of the presentation.

The acquiring of an extra language is a method of reaching out to others and to understand each other in our different contexts in a multicultural setting.
Correlation between continuous assessment, final exam and final mark for MB ChB III at Walter Sisulu University

PROF ME GARCIA-JARDON * (Walter Sisulu University (WSU)), PROF EV BLANCO-BLANCO (WSU), PROF EN KWIZERA (WSU), PROF A STEPIEN (WSU), PROF S VASAIKAR (WSU)

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 different components: 1) continuous assessment (CA), which contributes 60% of the final mark for the block; and 2) end of block exam (EOB) contributes 40% of the final mark. 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.

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.

The study is retrospective, descriptive and analytical based on the integrated marks of all the MB ChB III students at WSU in 2007. 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 dependence between each of the assessment components and the final mark.

96 students were in the MB ChB III programme at WSU in 2007. A total of 384 block assessment marks with their respective 4 assessment types were compared. Regression analysis only showed some correlation when analysing the overall block marks versus the final mark for the MEQ, followed by OSPE and IPA and no correlation was observed with TUT. The stratified analysis per block showed increasing positive correlation with the progress of the blocks with the highest coefficient being that of the MEQ for block 4. MEQ correlation with final marks was followed by OSPE for blocks 1, 2, 3 and 4 respectively.

TUT and IPA block marks did not show significant difference as blocks progressed showing a negligible or no correlation with the final marks. Tutorial activities should be standardized to ensure the reliability of the continuous assessment.
An initial report on an appraisal process implemented for third year medical students at Wits Medical School

DR LP GREEN-THOMPSON * (Wits Faculty of Health Sciences)

Murdoch-Eaton and Levene (Medical Teacher, 2004) reported that they conducted formal appraisals of students in the first year of study in their medical curriculum at the University of Leeds, United Kingdom. One of the key findings they made was that the students felt they were being treated as individuals. The appraiser response was overwhelmingly positive and may be a result of their selection process. The Wits runs a graduate entry medical programme which admits students directly from other degrees into a joint phase with third year medical students. As an attempt to improve the level of student support, this process was initiated at the university. A group of 10 appraisers was assigned for the third year MBBCh class. This meant an average of 22 students per appraiser. Students were invited to attend the appraisal interview at their discretion. All students were briefed about what the intentions of the process were and handed a personalized appraisal document with the marks of the previous two blocks on them with an average mark for the class. The document asked a variety of questions relating to whether the student was showing results in keeping with the level of work they had put in. The form was a modification of the original form used in Leeds.

The objective of this report is to establish the views of those who were appraisers in the process and to report on the student opinion of these appraisal interviews.

The appraisers were asked to give feedback on their experiences during the appraisal process.

The views of the appraisers were that the process was useful. The total number of students who responded to the invitation was 60% of the class. The most commonly requested advice in the session was for study technique and for examination answering technique. Most of the students took the opportunity of one visit to the appraiser; but fewer students who had failed the two blocks in question returned to the appraiser for more than one visit.

A formal appraisal process may be a useful tool in the student support process.
Research projects for undergraduate medical students: is it worth the trouble

DR LP GREEN-THOMSPON * (CHSE, Wits Faculty of Health Sciences), PROF D PROZESKY (CHSE, Wits Faculty of Health Sciences)

The Wits2010 vision has as its bedrock the development and growth of the university’s research profile. With this in mind the planners of the revised curriculum for the undergraduate degree in medicine included the conduct of a basic research project in the fifth year of study. The project forms the year mark for an integrated practice block which runs throughout the year. The project is preceded by a series of days on which the basic processes and techniques of research are described and taught to students. This teaching comes on the back of a very strong evidence based medicine focus in the preceding two years of the curriculum. The research topics are generated form the departments in the medical school as well as from an important partnership with the City of Johannesburg. Some topics come from student suggestion and one has arisen from a student community project from the prior year of study. The studies range of record reviews to community health studies. Students conduct the projects as part of their clinical group of 10 students. Each year this translates into 21 group projects. The students are expected to navigate the ethics committee process. An innovation this year to facilitate this was the protocol presentation day where faculty listened to what students were proposing. A significant challenge is the dearth of enthusiastic and suitably qualified supervisors. The project mark forms 35% of the Integrated Practice Block. This mark is made up of protocol (20%), research report (40%), research presentation (20%) and a peer evaluation (20%). The research presentation is in a conference style format and is evaluated by a panel of researchers from the faculty.

The aims of this study are to report on the marks which students achieve in the research project and to evaluate the contribution of the peer evaluation to this score.

Study of the results of students in the research component of the course

Most groups perform very well in the research assignment. The peer evaluation serves to moderate the outcomes of the group activity. To date one project has been published (SAMJ, January 2008) and two have won poster awards at a public health conference.

The inclusion of a research task at undergraduate level may be an important vehicle in the teaching of ongoing research.
Learning continuity of care in district clinics: Longitudinal Clinic Attachment Programme for Medical Students

PROF JFM HUGO *(UP), PROF T MARCUS (UP), DR L WOLFAART (UP)

Community engagement highlights the need for academic service learning that encompasses continuity of care and community oriented primary care.

A Longitudinal Clinic Attachment Programme (L-CAP) will see medical students attached to a particular primary care clinic for a period of four years. Each group of four medical students, one from each academic year group, will visit the clinic for one full day every two weeks.

Forty primary care clinics in and around Pretoria will be used with clinic staff and mentors supervising and training.

Reflections from pilot projects as well as the structure and process of the program and challenges will be presented.

As a community based experiential learning program that addresses continuity of care, primary care education and service provision, this initiative is expected to meet needs of medical students, educators, service providers and patients. The program will also provide a platform for research collaboration beyond the faculty. The initiative has been embraced by all role players and its success rests on meeting all role players' needs.

Take Home Message

The L-CAP provides an opportunity for meaningful community engagement throughout the undergraduate curriculum.
Charting the journey: How did physiotherapy students experience the introduction of a problem-based learning module at SU?

MS G INGLIS-JASSIEIM * (SU), MS SB STATHAM (SU), MS S HANEKOM (SU)

The physiotherapy division at SU embarked on process of curriculum revision in 2004. The process was initiated as a result of recommendations made following an accreditation assessment by the HPCSA. One of these changes involved the introduction of a problem based learning (PBL) approach for the Applied Physiotherapy module in the third year of the course. The module aims to develop the student’s ability to integrate the knowledge, techniques and concepts of physiotherapy science that students are introduced to in their first 2 years; and the context of the specific pathology, personal and psychosocial circumstances of a patient. This integration or link forms the basis of the clinical reasoning process which ultimately equips the student to plan appropriate management strategies.

One of the major aims of PBL is to improve the problem-solving skills of students which can be applied to a wide variety of clinical situations. Other benefits include improvements in team work skills and student’s ability to find and use resources to support their problem solving ability. The difficulties experienced in implementing PBL into a curriculum has been documented in the literature and include student anxiety, student’s lack of confidence in adapting to PBL and group learning, misunderstanding the role of faculty and time management issues.

The study objectives were to assess what the impact of the introduction of a PBL module was on:

1. The students’ abilities with regard to
   a) Team work
   b) Problem solving skills
   c) Accessing and using resources

2. The students’ experiences of
a) Anxiety and confidence in adapting to PBL and group learning
b) Time management issues.

SUMMARY OF METHODS: Reflective journal
Focus groups with students

SUMMARY OF RESULTS: The changes in presentation, learning style required and adaptation to more self management were difficult for the students who were initially resistant to the change. However as the year progressed and the students realized that they were partners in the changes they became more amenable. These developments were noted in the focus groups as they progressed through the year.

TAKE HOME MESSAGE: The conscientious observation and regular feedback from the students allowed the staff to catch the problems and issues as they arose before they became destructive to student learning.
A Student-created Text Book

DR A P KENT * (UCT)

Medical students at the University of Cape Town are comfortable with using electronic learning methods and the Department of Obstetrics and Gynaecology has used their skills to develop an electronic text book created by the students themselves.

The staff of the Department have embarked on an exercise whereby students are asked to add to a Wiki site to build a 3-tiered text book for their own use.

Students during their third year of training are requested to create a set of core definitions, vocabulary and terms that have assisted them in grasping the fundamental concepts in Obstetrics & Gynaecology during their first exposure to the discipline. Fourth year students are asked to add topics that they have learnt about and senior students add references and additional material to clarify the topics or offer further reading.

Students have responded enthusiastically to the creation of their own text book which is quality-controlled by a member of staff. They add their contributions to their portfolios which are marked as part of their formative “in block” assessment. Data on the technical details and the work achieved thus far will be presented.

Students enjoy the concept of Wikis and enthusiastically can create their own learning material in electronic format.
Addressing the gaps in Paediatrics Clinical Clerkship through south to south Collaboration

DR S.K KIGULI * (Makerere University)

INTRODUCTION: Paediatric clerkship at the Faculty of Medicine (FoM, Makerere University) has traditionally occurred during the third and fifth years of the five year medical program. Learning methods included lectures, clinical teachings, clerking patients and performing procedures, grand rounds among others. A PBL curriculum was introduced at the FoM in the Academic Year 2003/4. There was therefore a need to address the existing gaps in the clerkship.

To describe the process of implementing student centred learning during the paediatric clerkship of medical students. The Department held a workshop that reviewed the existing learning methods, and identified the gaps in the competences in the students at the end of the clerkship. This workshop was facilitated by clinicians from Moi (Kenya) and Walter Sisulu (Republic of South Africa) Universities.

Gaps were identified in the training and assessment of students in the areas of interpersonal communication, professionalism, training students in the community context, self directed learning as well as problem solving. In order to address the gaps, the department adopted the following learning methods: Case Based Tutorials using real patients, Structured bedside teachings, Patient Clerking and Home visits at the COBES sites, student presentations in large group tutorials facilitated by experts, Patient clerking and Case write-ups, Selected clinical procedures and grand rounds, and the adoption of OSCE during clinical assessment.

The students on the new curriculum have undergone junior clerkship and senior; and have received formative as well as summative assessment. However long and short cases were used, summative assessment of students’ clinical skills in the first year; and OSCE was introduced a year later. These students have been found to be highly motivated and self driven, with good communication and critical thinks skills, and acceptable clinical examination skills.

The Paediatrics Clerkship at the FoM, Makerere has been made more student centred through South to South collaboration and adoption of case based tutorials, structured bedside teachings and assessment. Collaboration between individuals and institutions in the region provides a great opportunity for improving the education and training of health professionals.
Learning Radiology in the Problem-Based Learning (PBL) Curriculum at the Faculty of Medicine, Makerere University.

DR EK KIGULI-MALWADDE * (Makerere University)

Faculty of Medicine (FoM) has been training health professions in Uganda since 1924. Four years ago, it decided to change the entire 5 undergraduate curriculums from traditional to Problem Based. It adopted the SPICES model (Student centered, problem based, integrated, community based, electives, Systematic.

At the FoM, the medical program is 5 years. Radiology is a necessary and important part of medical curriculum. When FoM reviewed her curriculums in 2003, radiology was integrated into the different courses throughout the 5 year program.

At the FOM several issues that need to be addressed so as to improve the radiology training were identified as follows:
- Shortage of radiologists
- Hidden curriculum does not work out that well for radiology
- Teachers lack teaching skills for new curriculum
- Organization and Implementation

To improve the implementation for the integration of Radiology in the PBL curriculum and ensure quality and to involve radiologists in the vertical and horizontal integration of radiology topics in the medical curriculum

An inventory of needs was executed by interviewing the radiologists and giving the students questionnaires.

Learning outcomes for Radiology were defined and learning activities were chosen. Learning materials were identified and strategies to improve the implementation were formulated. The integration and improvement of radiology in the medical undergraduate program is an on going process. It requires the commitment and involvement of radiologists and students so as to improve the training of students.
Correlation of non-verbal communication skills with academic performance in the late rotation psychiatry module

DR L KOEN * (Department of Psychiatry, SU), PROF DJH NIEHAUS (Department of Psychiatry, SU), DR R GUNTHER (Department of Psychiatry, SU), DR E JORDAAN (Biostatics Units of the Medical Research Council, Bellville)

Research has demonstrated clear links between physician’s communication skills (verbal and non-verbal) and variables like clinical competence, medical outcomes and patient satisfaction.

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

Video interviews conducted by late rotation psychiatry students as part of their portfolio were rated according to a rating scale comprising 8 dimensions of non-verbal communication. This included: body lean, posture, attitude, hand movements/gestures, facial expression, smile, head nod and eye contact. Inter- and intra-rater reliability was assessed.

Twenty six students partook in the study and a total of 63 patient exposures were rated. In terms of inter-rater reliability the highest correlations were attained for the dimensions of attitude, hand movement, smile and eye contact. The poorest correlations were attained when assessing posture, facial expression and head nodding. In our study kappa scores for intra-rater reliability falling below 0.40 were obtained in the dimensions of facial expression (0.29) and head nod (0.32), however in the analysis of inter-reliability none of the kappa values for the various dimensions fell below 0.40.

The purpose of this phase of the study was to develop a non-verbal behaviour rating scale to be used in the assessment of medical students. As such it is merely the first step in a process which aims to improve the overall non-verbal and verbal proficiency in medical students.
In the interest of Interns. Exploring the experiences of medical interns in a rural secondary hospital.

MS G LOURENS (Paarl Hospital, Department of Health, Provincial Government of the Western Cape)

BACKGROUND: Medical interns are placed in health care settings where the perception might be that the Batho Pele principles of ‘putting people first’ are rarely applied to them. As a quality care to our carers initiative in a rural secondary hospital in the Western Cape, the role of conducting in-depth interviews with interns, exploring their experiences, was considered in planning interventions in bridging the transition between higher education institution exit and clinical workplace entry and thereby assisting in strategies for supporting Interns.

OBJECTIVE: To explore the experiences of medical interns and explore the transitional period between the higher educational institution setting exit and a secondary rural health care hospital setting intern placement programme.

METHODS: Structured, adapted Batho Pele Questionnaires were used to conduct interviews. Formal reports submitted by interns, the intern curator, and the medical superintendent were also studied. A qualitative approach was used with thematic coding of these documents, triangulation and comparison.

RESULTS: Work still in progress, but provisional results indicate that interns were confronted with having to assume high levels of responsibility, often making decisions they did not feel safe doing, and were confronted with ethical dilemmas. The nursing crisis, increasingly felt in rural health care settings, reduced the number of senior nursing staff able to guide medical interns in their clinical practice development.
Assessment of medical student's attitude to the introduction of communication and counseling skills training.

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Communication skills in medical practice are critical for information gathering, diagnosis, treatment, patient education and health team interactions. Good communication skills are the most important determinants of patients' satisfaction with care, adherence to treatment and decrease the risk of malpractice law suits. Effective counseling and patient education for behaviour change require health care providers to have good communication skills. Surveys suggest that most people want to get health information from a professional and that counseling from health professionals can be effective both in reducing lifestyle risks and supporting self management of chronic diseases. Most doctors either do not realise the importance of patient medical education and counseling, lack the basic communication skills which includes counseling skills or are too busy to do so. Formal training in communication and counseling skills is not included in my school's present curriculum.

We evaluated the knowledge of medical students at the College of Medicine, University of Lagos of communication and counseling skills and their attitude towards inclusion of training in these skills in their curriculum.

An anonymous questionnaire was distributed to two cohorts of students, preclinical and clinical. The questionnaire consisted of a demographic section, an open ended question on the meaning of communication skills and counseling skills and a section in which they self rated their skills, importance of these skill in the management of patient and inclusion into the curriculum.

A total of 238 students completed the questionnaire and 59.24% (139) were males and 40.76% (96) were females. There were 52 (21.85%) final year clinical students and 186 (78.15%) preclinical students. Majority of the students (92.8%) and (81.3%) respectively felt good communication and counseling skills were very important in patient management. About 70% of the students felt their communication skills were above average while about 60% rated their counseling skills above average. However majority 96% felt it was important to teach communication skills and 92%
wanted counseling skills instruction as part of their curriculum despite the above average rating they gave themselves. Majority of the students felt communication skills is just being able to deliver information and that counseling is advising your client on what course of action to take.

We conclude that our students both in the preclinical and clinical stages are aware of the importance of communication skills in patient management. They would like the inclusion of training in these skills into the school’s curriculum despite the good ratings they gave themselves.
The Medico-Legal Autopsy: A learning experience for undergraduate medical students at the UKZN, South Africa

MS LS MCNAMEE * (UKZN)

The poster describes a study exploring medical students’ experiences of autopsy demonstrations used as a teaching strategy in Forensic Medicine. The medical curriculum in most parts of the world has undergone dramatic changes over the past decade. It is well documented that, due to various reasons, less use is being made of autopsies for teaching. This decline has been a cause of concern for both medical educators and students.

A depiction of the Theoretical Framework takes centre stage in the poster as it is used as a ‘kaleidoscope’ through which to view the findings of the study. It is the “Interaction between the dimensions in the tension field of learning” as described by Illeris (2004) who proposes a ‘trio’ of factors is evident in the holistic learning process and that all learning includes these three simultaneous and integrated dimensions:

- Cognitive content dimension
- Emotional, psychodynamic, attitudinal and motivational dimension
- Social and societal dimensions

The study was undertaken to determine how medical students experience autopsy demonstrations that form part of the undergraduate curriculum, by addressing the following questions: Are the demonstrations of benefit to their learning and, if so, what is the nature of the benefit? What are their experiences of the demonstrations (how did they feel about the autopsy process)? What factors do they believe affected their experience? What concerns or objections do they have about the use of autopsy demonstrations for teaching? What recommendations do they make for future curriculum planning?

Qualitative data obtained by interviewing ten 4th year medical students from various socio-cultural backgrounds were interpretively examined. One-on-one, semi-structured interviews were tape-recorded and transcribed. The data were thematically organised and then analysed using a clear theoretical framework.

Students still perceive autopsies as essential even in the context of self-directed learning. They identified a better understanding of anatomy and
traumatology as the main cognitive benefits. At an emotional level they felt they had developed a degree of clinical detachment and would be better equipped to deal with issues surrounding death.

While socialisation influenced students’ feelings about the autopsy, it did not detract from their appreciation of the educational value of the experience.

From the student perspective, autopsy demonstrations do fulfill a valuable role in undergraduate medical education. Besides the obvious cognitive advantages, educators should be cognisant of the hidden curriculum emanating from autopsies; one that impacts on the development of the professionalism and ethical behaviour of future medical practitioners.
Teaching EBM: Comparison of training interventions for PubMed search skills amongst 3rd and 4th year medical students

DR G MYERS * (Wits), PROF DR PROZESKY (Wits)

The Wits Faculty of Health Sciences introduced a PBL (problem-based learning) medical curriculum in 2003, in line with reforms taking place in this area worldwide. As with other medical libraries, the Witwatersrand Health Sciences Library (WHSL) played an increasing role in the new curriculum with regard to the acquisition of online search skills. An assessment-driven learning approach was adopted to examine the acquisition of students' literature searching skills. It was decided that online search skills could most effectively be summatively assessed in the form of an OSCE (Objective Structured Clinical Examination). This new means of assessment afforded the opportunity to examine the outcomes of different PubMed training interventions.

To determine if the use of a MeSH (Medical Subject Headings) tutorial had a positive effect on online search skills in PubMed training programs for medical students.

As examination results would depend on the outcome of the interventions, it was deemed unethical to use a randomized control trial as the study design. The 3rd year (n=213) and 4th year (n=208) student populations were selected as cohorts. The first intervention for both cohorts demonstrated the use of MeSH, but allowed the student to decide if the MeSH term or a free text word should be selected. The second intervention for both cohorts demonstrated the use of the MeSH “Links” menu tutorial in a facilitated skills session. OSCE results in July 2006 for the 3rd year cohort showed a mean of 5.8 out of 10. In November 2006 after the MeSH “Links” program was initiated, the results for the same cohort improved to a mean of 9 out of 10. For the 4th year cohort, marks improved from a mean of 7.1 to 8.5 out of 10 after a similar intervention.

Both cohort groups showed an improvement in search skills after use of the MeSH “Links” menu tutorial. Use of this PubMed feature is thus recommended for the teaching of search skills to medical students. The assessment-driven learning approach to search skills taken by the CHSE, as part of the entire clinical skills program, no doubt also contributed in some measure to improved student performance, although this will need to be measured over the long term to assess sustained impact. This study also demonstrated that use of the OSCE to measure search skill performance is extremely suitable, and a far more reliable instrument than student perceptions of self efficacy.
Showcasing Psychology as a Science within the Domain of Health Sciences Education

PROF P NAIDOO * (UWC),

Historically, there has been a perception that there is a great divide between the natural sciences and the human sciences. The human sciences are viewed as a “soft science” because it is not driven by a cause-effect approach to explain the existence of certain phenomena. This stereo-typed understanding of the human sciences, including psychology, has been inherited by health science students and the stereo-type is perpetuated and re-inforced throughout their career.

This understanding is hugely disadvantageous to both the practitioner and the patient alike. This understanding presents as a disjuncture between the post modern approach to “client-centered” care, which emphasizes the humanness of a patient, and the traditional view that the human sciences cannot really meet the rigors of a truly scientific discipline and can therefore not be taken seriously. With the increasing awareness of the importance of behavioural and emotional factors as mediator variables between the diseased or ill state and health outcome, it is critically important to showcase psychology as a science in order to inculcate a culture of mind-body integration amongst health science students. The sub-discipline of Health Psychology plays a central role in this regard.
Appraisal of a Masters programme in Dental Public Health (1999-2004)  
PROF S NAIDOO * (Faculty of Dentistry, UWC)

A Masters programme in dental public course was initiated in 1999 to address the growing need for dental public health specialists in Africa. Prior to 1999, there were no courses of this nature offered in Africa and many travelled abroad, usually to the United Kingdom or United States, to obtain the degree. This training course, initially organized jointly by the Departments of Community Dentistry at the UWC and SU, was specifically designed for the oral health needs of countries in the African region. The aim was to give oral health professionals, particularly those working in the health directorates or public sector of their countries, a grounding in research methodology and public health so that they could make informed policy decisions and develop oral health strategies relevant to their country’s needs. The course is presently offered as a full or part-time programme and consists of summative course work and a research component that results in a thesis.

The objective of this paper is to provide an appraisal and describe our experiences of a Masters programme in dental public health over a six year period (1999-2006).

A retrospective record review.

Over the 6-year period, 37 students were enrolled into the programme, 41% were South African and the remainder from the rest of the African continent including countries like Lesotho, Botswana, Nigeria, Kenya. More than two thirds were male and 84% were dentists. Nearly all enrolled for the course work and thesis programme, except for two, who did the course via research only. A third of the students opted for the full time, one year programme. Of the 37 students who enrolled, 32 (87%) completed the programme and five dropped out. Those who completed the programme took an average 2.4 years to do so. Less than a third of the students published the findings of their research projects. Just over half of the students have remained in the public sector since completion of the course and a quarter in academic institutions.

The Masters programme in dental public health has now been running since 1999. It has gradually evolved from a full time programme to a mainly part-time one, due to the fact that students have great difficulty in sourcing funding and/or obtaining leave from work to attend a one year full time course. Continuous evaluation is required to fit into the changing and evolving field of public health.
Using portfolios to assess professional development

MS LL OLCKERS * (UCT)

Portfolios were introduced into two first year Health Science courses Becoming a Professional and Becoming a Health Professional at the University of Cape Town in 2007. The focus in these courses is on the development of students into “Integrated Health Professionals”.

The portfolios replaced and expanded on the role of reflective journals which were previously kept by students. The change to portfolios meant that facilitators were now reading and marking their students’ written work with specific focus on professional development. The portfolio tasks included exercises related to the domains of knowledge, empathy and reflection.

Formative feedback was given during the semester and summative assessment took place at the end of each semester. Facilitators assigned each student a mark based on a combination of their written work and a one on one interview.

A preliminary study was conducted with the 2007 cohort of first year Health Science students and their small group facilitators to evaluate:

1. the value of portfolios as a means of facilitating professional development
2. the effectiveness of portfolios as a means of assessing professional development

The methodology included mainly qualitative methods:

- a questionnaire completed by the small group facilitators
- interviews with small group facilitators
- reading and evaluation of a selected range of student portfolios
- a questionnaire completed by students

Approval for the study was given by the UCT Faculty of Health Sciences Ethics Committee.
Students and their facilitators were extremely positive about the value of keeping portfolios for on-going professional development. Students valued the reflective process and the goal directed feedback from their facilitators. Facilitators valued the opportunity to engage more openly in the professional development of their students. They did however report struggling with assigning marks to what they perceived to be the more personal reflective exercises and assessment activities. To this end, they reported on the importance of transparent and explicit marking criteria, and training for the assessment of portfolios.

Portfolios provide an opportunity for the development and assessment of “Integrated Health Professionals” who are knowledgeable, empathic and reflective. The challenge of marking portfolios can be overcome with commitment to clear assessment criteria and training of markers.
Clinical skills evaluation in a resource constrained nigerian environment

PROF E. OVIASU * (Dept. of Medicine, College of Medical Sciences, University of Benin, Benin City, Nigeria), DR C. E. OMUEMU (Dept. of Medicine, College of Medical Sciences, University of Benin, Benin City, Nigeria.)

Our medical school which is located in Benin City, Nigeria, runs a 6-year undergraduate medical programme with a disciplined-based curriculum. Assessment of the students’ clinical skills has been based on the traditional long case and short case format, which unfortunately has become too cumbersome in recent years because of significant increase in student population in relation to available faculty and patients.

The objective of the study therefore, was to evaluate Objective Structured Clinical Evaluation (OSCE), as an alternative tool for assessing students’ clinical skills, with regard to level of objectivity, reliability and time-efficiency.

Fifteen OSCE Stations were developed to evaluate skills in interpretation of laboratory results, history taking and physical examination of standardized patients (SPs), and counseling. Interns were recruited as SPs and taught to play a role in 10 stations during two 4-hour sessions. Three stations used real patients. Six stations required history taking only and six required physical examination. Prior to the OSCE, faculty staff were exposed to two mini-workshops on assessment that described the historical perspective, the limitations of the current methods, the process of conducting an OSCE and methods of item analysis.

Forty-five out of 120 year – 4 students rotating through Internal Medicine, were randomly selected for the OSCE. Students were asked to complete both Pre- and Post- OSCE survey questionnaires about their perception of the assessment process. Faculty and Senior Residents who had been trained on use of Checklist and Global Rating Scale served as raters. The standard for passing was set at 50%, according to university rules.

Only 38 of the 45 students initially enrolled participated in the study and 23 of them achieved a score >50%, resulting in a pass rate of 60.5%. Scores ranged from 34.8% to 70.5%. Overall, 80% of the students considered OSCE to be a more objective clinical assessment tool. Most appreciated the time-efficiency of the process and all respondents were in favour of adopting OSCE as a permanent assessment tool.

With adequate preparation, OSCE could be acceptable as a preferred tool of Medical Students’ Clinical skills assessment, even in a resource constrained environment.
Assessment of final examination

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BACKGROUND: Formative and summative assessment is two important types, which direct the design of an evaluation system. The decision to apply formative, summative or a combination of both forms of assessment will guide the instrument selection, the manner by which assessment is implemented, the amount of manpower needed, score interpretation and the use of assessment results.

METHODS: The study materials are the answer sheets on theoretical final exams of every graduate student of HSUM, by 10 specialists such as, medicine, biomedicine, health informatics etc, in 2007 and student’s marks. Kuder-Richardson reliability coefficient, difficulty and discrimination index, Hoffsten method to evaluate test items were used.

RESULTS: According to the study, reliability coefficient was over 0.80 in every specialist’s graduate. According to the study, reliability coefficient was over 0.80 in every specialist’s graduate exams. Regarding to difficulty index the 25.0-82.7% of total test items were belonged to easy category, the 0.7-2.6% - difficult and the 17.3-82.7% - moderate. But discrimination index of the 13-60% test items from total test items every specialist was negative or zero. Consequently, it is required to evaluate criteria and method of exams. Also, Hoffsten methods score of final theoretical exams each specialists were 72-87%. The Hoffsten score over 70% means the most test items were in easy category due to textbook of final tests published with answers and test items did not develop in application level.

CONCLUSION: Some test items of final theoretical exam could not evaluate properly student knowledge.
Integration of Cancer screening training into internship education

DR MS PATI * (SCB Medical College)

During the past decade, there has been increased prevalence and incidence of Cancer in India and is a significant health care problem facing the medical community. Adherence to screening practice guidelines by the primary care physicians could be a pivotal step towards cancer control and reduce the level of morbidity and mortality. This requires emphasis on training in preventive oncology during medical education. Internship plays a crucial role in preparing a medical student into the role of Physician.

The present work was conducted to assess the impact of focused cancer prevention education during internship on physicians’ cancer-screening practices.

The training was initiated in 2004 in one of the state medical college while the other one medical college interns served as controls. Every year all the interns received a specific module spanning 4 weeks on cancer prevention and screening methods. The evaluation study was conducted in 2007.

The interns who received cancer screening education offered more instruction on self-breast examination, recommended more mammography and performed more breast examinations, Pap smears, rectal examinations for colorectal cancer screening, fecal occult blood testing and rectal examinations for prostate cancer screening.

Emphasis on focused training during residency can significantly influence cancer screening practice of the physicians in primary care.
Medical students and the wider health team: student experiences of a final year exposure

PROF D.R. PROZESKY * (Centre for Health Science Education, Wits University)

One of the themes in the Wits MBBCh curriculum is ‘The multidisciplinary team’. The theme is introduced in the MBBCh 3 year and ‘spirals’ onward with planned student learning experiences in each subsequent year. The final event is a series of placements with five other members of the health team in MBBCh 6: clinical dietetics, occupational therapy, physiotherapy, social work and speech therapy and audiology. These exposures take place in three of the Faculty’s training hospitals. These placements have now been in process for two years and we needed to know whether they are achieving their objectives.

The study objectives are:

- To describe the nature of the exposures - specifically the patient management to which students are exposed.
- To describe the learning benefits that students derive from the placements.

During the 5 weeks of the placement students complete a logbook which contains details of patients seen and treated, and a section in which students detail what they have learnt about each profession. A stratified random sample of 80 logbooks was taken and analysed:

- Quantitatively: classifying and counting the types of patients seen and their management.
- Qualitatively: describing the learning benefits that students report to have gained from the placement.

The results show that the range of patients to which the students were exposed in these placements varied considerably from profession to profession (clinical dietetics: less variation; physiotherapy: great variation). The principal theme in reported student learning was the value of the other members of the health team in providing holistic patient care (described in detail).

Exposures to working with others members of the health team is effective but needs to be carefully structured.
Early patient based clinical teaching: student and tutor views and experiences

PROF D.R. PROZESKY * (Centre for Health Science Education, Wits University), DR A CASSIM (Centre for Health Science Education, Wits University)

Medical students in the Graduate Entry Medical Programme (GEMP) at Wits University start being exposed to patients in hospital settings from March of the GEMP 1 year. This is done in a structured way with one visit per week for two years, running parallel to a skills training programme in a skills laboratory. During the hospital visits students work with selected patients in groups of three and this interaction is supervised by a clinician tutor. At the end of 2006 it was decided to conduct a formal evaluation of the placements since we as organisers had become aware of problems which might result in decreasing their effectiveness. A detailed evaluation would also enable us to improve the placements.

This report focuses on the following objectives of the study:

– Comparing student and tutor understanding of the objectives of the placements.
– Comparing student and tutor evaluations of placement processes and their relationship to the objectives.
– Comparing student and tutor evaluations of the effectiveness of the placements.

A stratified random sample was taken of placements over a period of 6 months, for students in the GEMP 1 and 2 years of study and in four of the Faculty’s training hospitals. For the objectives listed above quantitative and qualitative data were collected by questionnaires. Data analysis was both quantitative and qualitative.

Student and tutor understanding of the objectives of the placements varied considerably and were often not fully in line with the Faculty’s objectives (especially when more junior staff members were used as tutors). Student and tutor evaluations of the placement processes were generally favourable but problem areas were clearly defined (timing, clinical load, practical arrangements, communication).
There was general agreement that the placements were effective as learning experiences, but tutors felt that their scope was too limited (not focusing on learning the whole consultation) and students felt that they were often too theoretical.

Early student clinical placements need to be very carefully planned.

Good communication is critical to the success of such placements; junior staff members in particular need careful orientation.

Such placements need to be placed in the context of learning the overall skill of conducting a consultation.
Admission score and students’ performance in preclinical examinations

DR Y. RAJI * (Department of Physiology, College of Medicine, University of Ibadan, Nigeria), DR R.S AJANI (Department of Anatomy, College of Medicine, University of Ibadan, Nigeria), DR O.I SHITTU (Department of Statistics, Faculty of Science, University of Ibadan, Nigeria)

The College of Medicine at the University of Ibadan, Nigeria has developed a new entry admission requirement for its prospective students. The admission requirement utilizes a combination of secondary school certificate examination (SSCE O’ Level) and universities matriculation examination (UME) results in a ratio of 60:40% respectively, which constitutes the admission score. This change was necessitated by the gross inconsistencies in students’ performance at the university in relation to their UME scores.

1. To investigate the relationship between new admission requirement and students’ performance in the first professional degree examinations.
2. To determine if admission score (60%SSCE + 40%UME) can be used to predict students’ performance in preclinical examinations.

Information on the UME scores and SSCE O’ Level grades of students were obtained from students’ records. The scores of these students in Anatomy, Biochemistry and Physiology in the preclinical examinations for 2005/2006 session were obtained from the examinations office. A total of 351 medical students, (286 MBBS, and 65 BDS) were considered in this study. These students were admitted into the University with the new admission requirement. Summary statistics on the performance of each group of students (i.e. MBBS and BDS) were determined from the data collected. Multiple regression models and discriminant analyses were also performed.

The mean score in Anatomy was highest followed by Biochemistry. Only the UME scores, scores in Anatomy, Physiology and average score in the three subjects (AVS) were normally distributed. Correlation between the average performance in admission score ($r = 0.452$), AVS and SSCE ($r = 0.427$) was higher than the AVS and UME ($r = 0.232$). The performance of MBBS students was significantly better than that of the BDS ($t$-test, $P = 0.05$). AVS could reasonably be predicted individually by admission score or SSCE and barely with UME score; the predictive power of AVS with UME score was weak ($p$-value $= 0.0268$). UME scores could predict only Physiology.
About 70.3% MBBS students were correctly admitted while about 63% of the students admitted into BDS program had the capability to do BDS. The percentages of misclassifications are 29.7% and 36.9% for MBBS and BDS respectively.

The performance of the MBBS and BDS students in the preclinical examination can best be predicted with SSCE scores or the admission score. Further studies in progress will compare students' performance under the new admission system with those under the old admission system in the University.
Teleconferencing IPC Block: Lessons Learnt

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The Integrated Primary Care (IPC) block is a six week preceptorship undertaken by final year medical students in the Graduate Entry Medical Programme (GEMP) of the Wits, Johannesburg. Its academic activities are coordinated by the Wits Rural Health Unit (RHU). As part of the IPC block about 30 students per rotation are placed in either a rural or urban primary healthcare centre in Gauteng or North West Province.

RHU and IPC planning team decided on teleconferencing as a pilot project to: 1) support medical students and provide a safety net for them; 2) educate faculty members regarding primary care and student exposure to it; and 3) bridge the distance between sites. This poster presents a review of the first 24 months' experience.

Four one hour telephone conference sessions, facilitated by a family physician, are held every Thursday of the six week block. Three other consultants are available each week to the students from the disciplines involved in the block. Students present problem patients about whom they have questions.

Students have presented a variety of interesting and challenging cases from each of the participating sites. Teleconferencing is a new medium to the students and most of the consultants. Technical and logistical challenges have added to the learning experience. These have necessitated the development of guidelines for participants. A formal evaluation at the end of rotation, and feedback from the consultants after each session, have reflected a positive outcome.

The teleconferences have had benefits not only for the students but also for patients, their communities and the consultants. The objectives of the pilot project have been fulfilled and teleconferencing has become a permanent feature of the rotation.
**WIRHE Scholarship; More Than Just Rands and Cents**

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The Wits Initiative for Rural Health (WIRHE) scheme is an initiative to alleviate some of the human resource challenges in rural district hospitals. Its focus is supporting students from rural areas to study for health professional degrees.

In the pilot project launched in January 2004, financial support was provided to nine disadvantaged students from the North West and Limpopo provinces. The project has since expanded to include an intake of 12 students per annum, three from each of the four districts in the North West province in collaboration with the provincial department of health. In the current academic year, WIRHE has 41 students studying in three of South Africa’s eight medical schools.

At the end of the first year, the pass rate was 56%. Four years later the programme has two major funding partners, the pass rate has improved to 82% and one graduate is already working back her contract in a district hospital in Limpopo. These results are achieved in the face of many financial and non-financial challenges faced by students from rural communities.

The scheme provides a model which has the potential to be developed in all provinces with the involvement of all medical schools.
**Student behaviour informs learning opportunities: HIV exposure incidents**

DR M VAN ROOYEN * (Dept Family Medicine; UP), PROF JJ BLITZ (Dept Family Medicine; UP), PROF DA CAMERON (Dept Family Medicine; UP), PROF JFM HUGO (Dept Family Medicine; UP)

Initial review of the data of students accessing the support system for HIV exposure incidents over the period 2004-8, suggested that although they had attended a mandatory “universal precautions” teaching session, students did not consistently practise these precautions.

Sixty six percent of the exposures were needlestick injuries which commonly occurred during the process of venepuncture or intravenous cannulation mostly to students in the two most senior years of study.

Second year students are taught these procedural skills in the Skills Lab – but are only required to use these skills in actual clinical practice three years later.

Examination of the results allowed us to reflect on the possible causes of the observed student behaviours and propose changes in training.

The following curriculum revisions were proposed:

1. **Skills Lab training**
   - Goggles must be worn (in addition to other items relevant for universal precautions) during training sessions to re-produce ideal practice
   - Cannulae and needles must not be re-used, but model appropriate disposal of sharps (otherwise students are indirectly taught to re-cap sharps)
   - Immediately prior to clinical rotations:
     - Skills lab practice should be repeated.
     - Universal precautions are to be reviewed
     - The competence of every student should be certified
2 Clinical practice
   – Adherence to “universal precautions” should be modeled by teaching clinicians and nursing staff
   – Sharps bins, or a container to transport sharps to the bin, must be available at each bedside
   – Cannulae and needles must not be re-capped
   – Students should be assisted to be aware that their own fatigue or decreased concentration increases the risk of exposure
   – Students should not be allowed to start a clinical rotation without an ART starter pack on their person.

Analysis of students’ actual behaviour in the clinical situation can be used to improve learning opportunities. Skills lab training needs to simulate clinical reality as closely as possible. This needs to be in terms of:
   – training in the entire procedure from preparation to clearing up,
   – training using the same equipment as will be available in the wards and
   – locating training chronologically close to the clinical experience.

Situating skills lab teaching as close as possible to the actual clinical experience will increase the student’s perceived need to learn and will ensure that the student will have the opportunity to use the skill before it has been forgotten.
Prof, I'm tired and stressed!!

DR M VAN ROOYEN * (UP)

The study was done at the Medical School of the UP, South Africa to determine (1) the prevalence of depression and burnout amongst medical students (2) to identify their perceived reasons for this.

PHASE 1: two focus group discussions were held to determine students’ perceived reasons for burnout and depression. A questionnaire was developed from these results.

PHASE 2: a voluntary anonymous questionnaire was administered to all medical students in the school containing:

- Demographic’s
- Maslach Burnout Inventory
- Beck's Depression Inventory
- Developed questionnaire

Response rate: 38.2% (480 / 1255). Symptoms of burnout were reported by 56% (240 / 428). Depression of varying severity was present in 48.6% (197/405).

Most significant stressors identified:

- Long term retention of knowledge
- Promotion of every block
- A expectation to perform well

Burnout and depression is a problem. Students’ perceived reasons for these can be addressed.

The undergraduate program committee will be asked to:

- implement teaching and assessment strategies that encourage deep learning
- review exam exemption policy.
- Improve support and counselling services

TAKE HOME MESSAGE: Teaching and assessment of students contribute significantly to their stress.
The effect of gender on physicians’ career intentions: A report from South Africa

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The increasing migration of physicians to more developed countries places strain on health systems in less developed countries. The feminization of medicine is also a factor which may impact on migration patterns of future graduates. It is therefore important for planning to determine how and where graduates intend to practice medicine.

This study explored the career intentions as well as the reasons for emigrating or remaining in South Africa. The study tried to identify whether gender and location of origin (rural vs. urban) affected future career choices i.e. further study or choice of specialty.

Collaborative research conducted at four South African medical schools, examined the factors affecting graduates' career intentions. Data was collected on career intentions (pursuit of postgraduate training, choice of clinical discipline, study location, career type), and demographics (age, gender). More than half the students in the survey were female. Similar percentages of men and women intended pursuing further medical training. Slightly more women (38%) than men (32%) reported being undecided about their desired specialty. When specifying a clinical discipline, a higher percentage of males reported an interest in Surgery (33%) than women (15%). Similar percentages of both genders specified intentions to specialize in Internal Medicine (15% male, 16% female) and Psychiatry (10% male vs. 9% female).

Women were, however, more likely to indicate interest in Pediatrics and Obstetrics/Gynecology. There were no statistically significant differences between groups in specification of desired training location, although slightly higher percentages of female students reported an intention to study in either their country of birth (42% vs. 37%) or country of medical training (17% vs. 13%) than male students. There was an association between gender and career type ($\chi^2=14.0, p=0.015$), with a slightly higher percentage of male students reporting that they intended to pursue academic/university careers (15% vs. 9%) while a higher percentage of female students reported being unsure (25% vs. 20%).

Despite predominance of females in medicine, rigid inequalities within medicine might still preserve male dominance in certain specialties. While female students were likely to pursue further studies in their country of birth, males seemed more inclined to pursue academic careers.
Experiential Learning with undergraduate students to develop the understanding of the contextual factors that influence human development.

MS E D VLOK * (SU)

The subject Human Development Applied in Occupational therapy was handed to me to lecture. Part of the requirements was a task to be done using an interview with a person to enable the student to develop an understanding of the influences of cultural differences on the achievement of the lifetasks of the person. Rethinking the purpose of the subject and the development in the occupational therapy course inspired me to revisit the task and to have a product that will enhance effective learning for the student.

The objects will be to give an:

- Overview of Subject Human Development in relation to Occupational therapy.
- Critical evaluation of the outcome of the assignment.
- What do I want the student to understand from the learning experience?
- How to create the assignment to encourage optimal learning -
- Optimal learning through experiential learning and reflecting on the learning cycle for the student.
- Reflect on the meaning of the assignment for the lecturer and student

SUMMARY: Reflection on the subject - Human Development applied in Occupational therapy and the effectiveness of the task given to enhance understanding the cultural differences within people.

Positive feedback from students. Quality of written work may imply understanding of theory, the pride and ownership of the learning process for the student.

How to enable the undergraduate student to look at people in a holistic manner and change awareness of diversity to understanding of diversity in a specific context.
Making things good, better, best: some service-learning experiences of medical students

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BACKGROUND: The purpose of higher education is not only “education for the market place” but also “education for good citizenship”. This is especially valid here in South Africa where we are under pressure to produce and retain skilled professionals for the public good. Service-learning, as a form of community engagement, can promote a sense of social responsibility.

STUDY OBJECTIVES: To explore the service-learning experiences of fifth-year medical students in a block that is a partnership between two schools in the Faculty of Health Sciences and local service providers.

WORK DONE: In the block Health and Healthcare subtitled “Making things better” an action-learning methodology was used to employ a service-learning curriculum model for fifth-year medical students. This was done to ensure:

- Relevant and meaningful service with the community;
- Enhanced academic learning;
- Authentic civic learning (social responsibility); and
- Structured opportunities for reflection.

The outcome of the service learning was evaluated through semi-structured questionnaires, individual and group reflections.

RESULTS: Initial results indicate that the majority of students rate the experience as highly valuable and would definitely recommend the activity to a peer: “Intentions to change” responses were balanced between medical skills and more attitudinal changes. Statements of powerful personal transformation are seen in the reflections.

TAKE HOME MESSAGE: The opportunity to interact with complex real-world problems through service-learning results in greater appreciation of the study field, enhanced personal values and heightened sense of social responsibility.
A Unique New Health Sciences Degree

DR A WRIGHT * (Family Medicine Dept, Health Sciences Education, Wits), DR D MANNING (Centre for Health Sciences Education, Faculty of Health Sciences, Wits), PROF B SPARKS (Dept of Family Medicine, Faculty of Health Sciences, Wits)

In 2005 the Wits Faculty of Health Sciences established a new degree, the 3-year Bachelor of Health Sciences. The degree was intended to prepare students for health related careers other than medicine. The creation of the new degree was premised upon changes in the structure of the medical degree, developments in the natural and social sciences, perceived changing needs of the health care sector with a wider spectrum of health care related job opportunities becoming available. The degree is unique in that it offers two tracks (Science and Humanities); it allows for widely diverse subject choices from interalia science, social science, and health science; and it includes a compulsory major, Fundamentals of Health and Disease offered by the Family Medicine Department.

a. To describe the establishment and progress of the Bachelor of Health Sciences degree (BHSc) at Wits.
b. To describe the structure of the curriculum and in particular, the two year major, Fundamental of Health & Disease.
c. To describe career options and choices of graduates.

A descriptive study.

The history, curriculum, results and future developments of the degree are described.

The BHSc degree established in 2005 with a 2nd year class of 36 now has 53 students in 2nd year with a first year intake of 75. The degree produced its first 14 graduates in 2006 with another 7 graduating in 2007. Most students opt for the Biomedical Sciences track, but the Human Sciences track shows a small annual increase in the number of students taking this option. While the degree is not intended as an entry into medicine, the majority of BHSc students do aspire to enter the graduate medical curriculum with a small percentage succeeding.
The career choices of graduates thus far include medicine (6); dentistry, law, honours in anatomy, molecular medicine, physiology, criminology also jobs in the insurance and pharmaceutical industries. Future developments include a biokinetics track, forensic science as a post basic study option, also medical journalism and managed care careers.

The rapid increase in student numbers indicates a significant desire to work in health related fields. The positive reception of the degree by future employers indicates that there is a demand for graduates with a broad based non-professional health sciences degree who have acquired a knowledge base and skills set not previously available in South Africa at the undergraduate level.
An Adapted SCORPIO for Patient Doctor Issues

DR AE WRIGHT * (Dept of Family Medicine, faculty of Health Sciences, Wits), PROF BLW SPARKS (Family Medicine dept, Faculty of Health Sciences, Wits)

In the integrated medial curriculum of the Wits, one of the central themes is that of Patient-Doctor issues. Ideally this theme should be taught in small groups preferably in a clinical setting. However big classes (220 + students) and insufficient resources, both human and physical, has meant that the Patient Doctor theme was mainly delivered by means of traditional large group lectures. An additional problem is that because the Patient Doctor lectures are given only once a week in the 1st and 2nd years of a graduate medical programme, the theme could lack coherence and be too diluted. In an attempt to offer the students a more practical, applied experience, an adaptation of the SCORPIO method was used both to consolidate lectures & to offer small group teaching.

To describe the delivery and evaluation of a SCORPIO for teaching patient-doctor issues to 3rd & 4th year medical students

A descriptive study. The rationale, content and student evaluation of the course will be presented.

Typically a SCORPIO involves students being given a lecture and then rotating in small groups through a series of teaching stations of 10 - 15 minutes each. The Patient Doctor SCORPIO is delivered towards the end of the 1st and 2nd years over 4 weeks, a quarter of the class participating each week. The 90 minute SCORPIO consists of 6 fifteen-minute stations each station being based on a large group lecture previously delivered that year: Examples of the stations are: ageing and loss; discussing alcohol, counselling a patient with a STI, coping with bereavement. The format for each station is usually a statement of objectives, possibly a brief reference back to the large group lecture and then an application, usually a role play of a consultation. Students complete a simple evaluation form at the last station in which they rate each station using a 5 point scale and add comments. The ratings for each session remain consistently in the top end of the scale with highly encouraging and enthusiastic comments. The positive response of the students has prompted us to think of ways of refocusing and replanning our teaching of the patient doctor theme to include more SCORPIOS and less didactic teaching.

An adapted SCORPIO format can be effectively used to teach patient-doctor issues even when a large class and limited resources restricts the possibility of routine small group teaching.
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