



Every problem holds opportunity - envisioning the future of problem-based learning in the digital age

V Abraham, L Makhele, P Skosana

Sefako Makgatho Health Sciences University, Ga-rankuwa, South Africa

Introduction. Problem-based learning (PBL) has been utilised in the BPharm program at SMU for over two decades. This has resulted in hundreds of fit-for-purpose graduates and pharmacists. The pedagogy is student-centred, promotes critical thinking and encourages collaboration, however, it is also resource-intensive and time-consuming.

Context. The BPharm program at SMU has undergone several changes since its inception, with the ethos of PBL slowly dwindling in this setting. Increased student intake, unequal workload distribution and perceptible institutional priority on research activities have presented major challenges to academic staff and ultimately impact the delivery of the BPharm program. The COVID-19 pandemic exacerbated this situation, as many were unprepared to transition the PBL offering into the digital space.

Key message. Incorporating PBL into emergency remote online learning from 2020 has had advantages and disadvantages. We have experienced many opportunities for the digitalisation of PBL in the BPharm program, which will be shared during the session. We also hope to learn from the health educationalist community of practice at large.

Impact. Many institutions and programs are considering switching to PBL methods, at least partially. PBL has been used effectively in several health professions training and one of its main advantages includes integration and application of knowledge to creatively solve real-life cases - without causing patient harm, further enhancing graduate attributes. However, facilitators need to be adequately prepared to utilise this methodology to its full capacity. This is especially relevant as we move from digitalisation in the fourth industrial revolution towards personalisation in the fifth industrial revolution. Thus our aims for the session are to identify opportunities, potential challenges and solutions of using PBL in the digital age, including critical perspectives of former students who have progressed to the role of academic staff currently delivering the BPharm program.

Incorporating the social justice curriculum into Medical education: A wicked problem

S Adam,¹ H Roos,¹ Y Hlophe,¹ W Cordier,¹ A Turner,¹ D Manning,¹ S Spijkerman,¹ A Meintjes,¹ M Brand,¹ K Mathabe,¹ I Lubbe²

¹ *University of Pretoria, South Africa,*

² *Central European University, Austria*

Introduction. Shortly before the start of the COVID-19 pandemic, we embarked on a recirculation process of a 20-year-old didactic curriculum

which was content-heavy and lacked diversity; a process that was rudely and abruptly distorted and tangled by the pandemic.

Methods. The project was purposively approached from a human-centred, value-based, solution-focused, action-orientated and systematic reasoning process, with a specific emphasis on the social justice curriculum. The five intertwined, non-linear design thinking phases of: empathise (stake-holder analysis and data collection via interviews and surveys; document review to determine the current burden of disease; integrate institutional values with national and international norms), define (data analysis and problem statement), ideate (possible solutions via specific modules and a thread throughout the curriculum), prototype (integrated draft curriculum) and test (stake-holder feedback and input in the near future) were adopted as a method to facilitate and expedite the recirculation process

Results. This project has defined the local burden of disease and social determinants of health and developed a constructive framework to integrate this into the curriculum. In addition, the core graduate attributes required by a graduate medical doctor was identified and has been scaffolded into the 6-year curriculum. We have built a framework to include ethics, leadership and African-languages into a student-driven longitudinal module.

Conclusion. We have defined a framework on which curricula can be designed in keeping with the principles of social justice in health professions education.

Learning in action at ABEM: promoting learning and replication of teaching faculty

D Afonso,^{1,2} A P Neto,^{1,6} L Silveira,^{1,5} S S de Oliveira,^{1,3,4} E Postal,^{1,3} L Carreira,^{1,8,9} D Silva,¹ B Pinheiro^{1,7}

¹ *Associação Brasileira de Educação Médica, Rio de Janeiro, Brasil*

² *UNiversidade do Estado do Rio de Janeiro, Brasil*

³ *Universidade Federal do Rio Grande, Brasil*

⁴ *Universidade Federal de Pelotas, Brasil*

⁵ *Universidade Federal do Rio de Janeiro, Brasil*

⁶ *Universidade Estadual Paulista, Botucatu, Brasil*

⁷ *Faculdade de Medicina de Campos, Brasil*

⁸ *Universidade Estadual do Pará, Belém, Brasil*

⁹ *Centro Universitário do Pará, Belém, Brasil*

Introduction. The Brazilian Association of Medical Education (ABEM) in a mission to “develop medical education (...) capable of meeting the health needs (...), contributing to raise a more just (...) society”, built a network of Collaborating Centers for Medical Education (CCME) - Public Universities – focused on training medical teachers and preceptors. The program, named Pedagogical Competence Development for Preceptorship and Teaching was a model developed in 2012, for training of trainers in a blended learning

strategy, in order to prepare them to replicate the experience in the training of new classes.

Methods. The educational planning of tutor's course, after experimentation and validation by these, was the pattern replicated in 48 courses until 2022. They worked in a team setting, in which a couple of tutors were supported by a learning mentor and a supervisor. In this pedagogical design, it was considered that as they learn to teach, the tutor will exchange places and actively experience the methodology implemented along with his students.

We wondered if this model was successful in increasing the teaching skills of tutors and educators of classes. The pedagogical concept guiding both courses was problematisation and andragogy, including active teaching learning methodologies.

Results. Through experimentation, implementation and reflection, tutors incorporated and validated strategies demonstrating immediate usability. Between 2012 and 2015 it was possible to hold 31 classes with a reach of all Brazilian states with funding from the Ministry of Health. After 2015, the 17 subsequent classes were subsidized with resources from the interested educational institutions. We currently have 1 242 educators certified by ABEM.

Conclusion. The strategy of developing pedagogical competence based on real problems by practicing active teaching methods proved to be effective by extending and embedding learning resources in teaching practice of tutors and educators.

How nursing students and facilitators view learning: a qualitative study

E Archer, R Meyer

Stellenbosch University, Cape Town, South Africa

Introduction. Learning among health professions (HP) students occurs in a variety of settings. These settings are subject to various contextual forces that influence the way learning takes place. Preparing HP students for effective learning within these settings requires active engagement. Active engagement also enables students to 'learn how to learn', which are essential skills for both the classroom, simulation and clinical environment.

While it is important to encourage active engagement to maximize students' learning, it should be noted that learning is also based on the students' perceptions of their experiences. An exploration into the way students understand learning, and their role within this, is important. Furthermore, understanding how facilitators perceive their role in students' learning will help shed light on how to best support students.

The aim of this study was to explore how 4th year nursing students and facilitators perceive learning and their role therein, with the purpose of informing future strategies to improve support for students. The research question was: What are students' and facilitators' perceptions and experiences of learning?

Methods. A qualitative methodology within an interpretive paradigm was used with convenience sampling. Fourth-year nursing students and their facilitators were invited to participate. Data were generated by means of interviews and focus group discussion. Qualitative data analysis was organized in three phases namely, data condensation, data display, and verification.

Results. Four themes were identified, namely learning is a structured process, there is a relational dimension to learning, context plays a role in how learning happens, and learning is a balancing act.

Conclusion. This study was catalysed by a curriculum renewal process that aimed to understand how to best support students in their learning. As we envisaged, this study culminated in a set of recommendations for faculty development initiatives to assist facilitators in improving their skills in supporting students' learning.

Experiences using videos to complement structured oral examinations in surgery

K Baatjes, I Conradie, J Edge, E Archer

Stellenbosch University, Cape Town, South Africa

Introduction. Surgeries require multiple skills to be considered competent. Variation of assessment strategies are vital in the evaluation of knowledge and technical expertise. The oral examination is the standard method to test knowledge and clinical reasoning, but reliability and validity concerns remain. Providing structure to orals may facilitate the measurement of course outcomes, and the use of mock assessments can assist trainees in preparing for exit examinations. This study explored the experiences of surgical trainees and examiners using a video-assisted, procedure-based, structured oral examination (SOE) in a face-to-face and virtual format.

Methods. This descriptive study at the Division of Surgery at Stellenbosch University, Tygerberg Academic Hospital, Cape Town, took a case-based SOE format using procedural videos. One group of registrars had face-to-face contact with the examiner, and the other group was assessed on an online platform, e.g., Microsoft Teams™, where the examiner was remote. After the SOE, a focus group interview was held with the trainees and individual interviews with the examiners, generating qualitative data.

Results. Themes were developed from the interview transcripts. These centre around the utility of videos in this examination format and technical issues during the SOE, e.g., the connectivity and audio-visual disturbances. Further themes revolved around the standardization of questions and preparation of the examiners.

Conclusion. Overall engagement by the trainees and examiners was high, and procedural videos as part of the mock SOE was experienced as valuable. The addition of video recordings to the online platform posed administrative and technical challenges. However, the trainees and examiners could log in from peripheral clinical training sites. Suggestions towards improvement emphasised the importance of standardized approaches and better examiner preparation. Examiners requested training and guidelines on examination practice. Future efforts should focus on the standardization of the examination format, optimizing technical issues, and improving examiner preparation.

Lifestyle determinants of type 2 DM amongst people living with HIV/AIDS in the Eastern Cape province

N E Bam

North West University, Mmabatho, South Africa

Introduction. Type 2 diabetes mellitus (DM) has serious consequences for those affected by HIV/AIDS. Little is documented on the lifestyle determinants of type 2 DM in people living with human immunodeficiency virus (PLWHIV). This study aimed to assess the lifestyle determinants of type 2 DM amongst PLWHIV who were on antiretroviral treatment (ARV). This study was undertaken in 10 community health clinics and 140 clinics in South Africa's Eastern Cape province.

Methods. A case control study was undertaken amongst PLWHIV who were on ARV in OR Tambo district. A sample of 177 (33%) DM cases with 2 (two) non-diabetic patients were selected as controls per case unpaired and totalled up to 354 (67%) controls.

Results: Cases and controls showed statistically significant differences on the duration of time on ARV ($p < 0.0001$), vigorous work ($p = 0.019$), participation in moderate sport ($p = 0.007$) and consuming daily fruit and vegetable servings ($p = 0.021$). Those reporting to be on ARVs for 6 to 10 years were three times more likely to be diabetic than those who had only been on ARV for a year or less (odds ratio [OR] = 3.0; $p = 0.017$) and in comparison, to participants who reported having one serving, participants who had four fruit and vegetable servings daily were 3.2 times more likely to be diabetic (OR = 3.2; $p = 0.002$).

Conclusion. This study revealed significant nutritional imbalances on fruit and vegetable servings and on participation in moderate sport resulting in poor diabetic control. Routine screening and measurements need to focus on dietary and physical lifestyle determinants of type 2 DM in order to counsel patients on ARVs on balanced nutrition and optimize outcomes in the quality care of PLWHIV. It is hoped the study will add value and promote health for all.

Does faculty development change teaching practice? Outcomes of the 21st Century Learning Design short course

P Barnard-Ashton,¹ L Crous,² S Moch²

¹ eFundanathi, School of Therapeutic Sciences, University of Witwatersrand, Johannesburg, South Africa

² Centre for Health Sciences Education, University of Witwatersrand, Johannesburg, South Africa

Introduction. Faculty development that focuses on health profession education, be it through webinars, workshops, short courses, or postgraduate degrees, is offered with the assumption that the participants will construct knowledge and apply new skills within their teaching practice. The 21st Century Learning Design (21CLD) and Blended Learning in Higher Education short course is offered to health professions and health sciences academics as an eight-week fully online course. Two cohorts have completed the course and submitted a three-part portfolio as their summative assessment, six-weeks after the course modules were completed. This study aimed to elucidate the nature of the application of 21CLD by course participants as an outcome of this faculty development course.

Method. The 32 in-depth reflections submitted for the summative portfolio of the course were screened for indicators of adoption of 21CLD and sequenced from no/limited indicators to multiple strong indicators. Seven participants were selected through stratified purposive sampling to target a range of experience. On informed consent, in-depth individual interviews were conducted, audio recorded and transcribed. Transcripts were qualitatively analysed using thematic content analysis.

Results. Two themes were identified. Theme 1: Becoming the 21CLD health professions educator characterised the nature of the adoption into the categories of 'the early and committed adopter', 'the mid-runner adopter' and 'the non-starter, antagonist adopter'. Theme 2: Ease of adoption of 21CLD into teaching practice, which described the categories of 'adoption enablers' and 'adoption constraints'.

Conclusion. The participants indicated that the course stimulated their creativity and allowed them to think differently about their teaching. The

mid-runner adopters indicated strong intention to use 21CLD but focused on the theme 2 adoption constraints to justify their current practice. The mid-runner adopters show potential to advance their journey of becoming 21CLD health professions educators, through a community of practice with the early and committed adopters.

Thirteen years and four-fours of blended learning: a decade before, during and almost post-pandemic

P Barnard-Ashton

University of Witwatersrand, Johannesburg, South Africa

Introduction. Most stories about blended learning in health professions education start with anxious tales of Emergency Remote Teaching during the early lockdowns of the COVID19 pandemic. While such stories offer crucial lessons that help inform our teaching practice, this is not where the story started in the School of Therapeutic Sciences at Wits University.

Context. In late 2009, I took the leap out of my safe position as an occupational therapy lecturer and accepted a two-year contract to drive the adoption of blended learning in our School. Thirteen years later, we have built a team (eFundanathi) that has helped shape the nature of teaching and learning in our School; influenced mindset and strategic direction within our University; advanced blended learning as an active, technology enhanced and student centred learning process through the design and development of the eZone; and were critical in the support and advancement of lecturer confidence and competence at online teaching when going fully remote during the pandemic.

As we take a collective breath and look back, not only at the pandemic response, but the decade before, this possibly reads as pretentiously far-fetched. While eFundanathi can claim all the above successes it was certainly far more multifarious; littered with adversity, digital apartheid, limited funding and obstinate nay-sayers. Having ridden the before, during and almost post-pandemic wave, this seaside story presents our 13-year journey of mistakes and tenacity to share the lessons we learnt and the path we hope to forge while putting the pandemic behind us.

Key message. This story will share four-fours: the lessons, the change-agents, the principles of success and the memorable moments.

Impact. It is heart-warmingly gratifying to see students and lecturers back in the eZone implementing 21st century learning principles to create active, technology enhanced, blended learning in therapeutic sciences education.

Promoting student self-awareness and reflective practice using verse and rhyme in anatomy education

C Barnes, C Sookoo, L Lazarus

University of KwaZulu-Natal, Durban, South Africa

Introduction. Dissection of the human body in the didactics of gross anatomy has been a cornerstone of medical education for centuries. Reflection is a multidimensional process including recognition, application and a bid to increase the depth of understanding. One such form of reflection is poetry writing which enables one to attempt to convey experiences and emotions to an audience in a meaningful manner where surprising insights can occur. Poetry is a dynamic and creative practice which can be used as a method of analysis and understanding. This study aimed to explore the value of a literary activity such as poetry in medical education with regard to student perceptions of anatomy during their first encounter with the cadaver.

Methods. A total of 104 poems were analysed from first ($n=62$) and second ($n=42$) year Allied Health Science students from the Department of Clinical Anatomy, University of KwaZulu-Natal (UKZN). Investigators independently reviewed poems pertaining to students' perceptions of anatomy and utilised a coding system to identify themes. This study was conducted with approval from the UKZN Research Ethics Review Committee.

Results. Five main themes were identified using thematic content analysis viz. emotional responses to dissection (65%), the cadaver as a guide and teacher (14%), body donation (5%), death and dying (4%), religion and spirituality (12%). Students used poetry as an alternate craftsmanship to evoke a creative approach in student self-reflection research based on their experiences in the dissecting hall.

Conclusion. Such exposure to self-reflection assignments in the early years of undergraduate medical education increases student self-awareness and promotes the creation of personal meaning of one's reactions and values in the context of student learning environments. This pilot integration of incorporating poetry into the curriculum was well received by students and tutors.

“Leading in Learning” - Developing educational leaders to enhance curriculum design

K Begg, L McNamee, J Van Wyk, F Cilliers, E Badenhorst, B Ige, L Pienaar, G Doyle

University Of Cape Town, South Africa

Introduction. Faculty development was identified as a key component of the curriculum transformation strategic imperative at UCT. Aligned to the “National Framework for enhancing academics as university teachers” (DHET, 2018), an Intensive Longitudinal Faculty Development Programme (ILFDP) was designed as described by Larry Gruppen (Steinert, 2014). Through the development of a critical mass of faculty members as educational leaders, it was envisaged that a more conducive environment for change initiatives would be created.

Context. A 12-month project-based fellowship programme in educational leadership was developed. The learning objectives encompassed: 1) developing individual and collective agency to lead educational change; 2) improving understanding of educational theory and scholarly practice; 3) enhancing knowledge and skills in curriculum design; 4) shifting praxis for curriculum design as co-producers of the transformed curriculum; and 5) strengthening teaching practice, reflection and review. The programme design included several interweaving elements: brief theoretical inputs at monthly contact sessions, the purposeful creation of an interprofessional multidisciplinary community of practice, and collaborative curriculum renewal projects aligned to the broader transformation process.

Key message and impact.

Key lessons identified on reflection

- Collaborative, co-creative curriculum change is possible when conducive spaces are made available.
- “Practice what we preach” - Modelling is imperative.
- Adaptability in approach is necessary to accommodate the various degrees of educational scholarship represented.
- Reflections are necessary and powerful for personal and organisational culture change.
- Embedding the intervention into organisational governance structures enables sustainability.

- “Critical Mass” effect multiplicative for organisational change.

The intensive longitudinal staff development programme is novel in South Africa as it merges a unique blend of faculty development for leadership, educational scholarship and change management with a focus on curriculum transformation. A further innovation is the focus on collective agency and leadership, and the collaborative co-creative approach to the fellowship and curriculum design.

Mental health and well-being of Anatomy students and staff in the learning environment post-COVID-19

V Bisetty, C Sookoo, L Lazarus

University of Kwazulu-Natal, Durban, South Africa

Introduction. The post-COVID-19 era indicates that the global pandemic associated with COVID-19 is essentially under control. However, the risk of a resurgence of the pandemic still affects people's work, study, and life, both physically and psychologically. The COVID-19 pandemic has had a significant impact on higher education in South Africa, with online instruction replacing face-to-face lectures. Now that learning is returning to normal, the upheaval that students and academics have experienced over the past few years may have impacted their mental health. Due to the various added challenges experienced during this era, more attention should be paid to their mental health and wellness. Furthermore, the mental health and well-being of academic staff has been overlooked, more so post-COVID-19. Reflective practice is the use of self-analysis to understand, evaluate and interpret experiences and actions to gain insight and assist in overcoming personal challenges. This study therefore aimed to glean an understanding of the mental health and emotional well-being of Anatomy students and staff within the learning environment in the post-COVID-19 era through reflective practice.

Methods. A qualitative approach was adopted involving the reflective writings of students and staff from the Department of Clinical Anatomy, University of KwaZulu-Natal (UKZN), on their mental health and emotional well-being in the teaching and learning environment after returning to campus post-COVID-19. Ethical approval was obtained from the UKZN Research Ethics Review Committee.

Results Four main themes were identified using thematic content analysis (i) unfavourable learning environments, (ii) intransigent behaviours, (iii) ease of interaction, and (iv) a sense of belonging. Such reflective practices will enable students and staff to better respond to challenges experienced in their learning environments.

Conclusion These findings will aid in addressing the mental health issues experienced by Anatomy students and staff in the post-pandemic era.

Poor cardiorespiratory fitness in first year medical students at a South African University

J Borresen,^{1,4} B Celie,^{1,4} R Laubscher,³ M Bac,² P Wood,² T Camacho,² K Nolte,² M Schwellnus,² D Basu,² M Schwellnus^{1,4}

¹ Sport, Exercise Medicine and Lifestyle Institute, University of Pretoria, South Africa

² University of Pretoria, South Africa

³ S A Medical Research Council, Cape Town, South Africa

⁴ IOC Research Center of South Africa, Pretoria, South Africa

Introduction. The personal health behaviours, including physical activity, of healthcare professionals influence their counselling practices as they relate to non-communicable diseases (NCDs). There are, however, limited data on the physical fitness of South African medical students. The aim was to determine the prevalence of below-average performance in the four components of fitness in first-year university medical students.

Methods. Cross-sectional observational study of 152 first year medical students (male=46, female=106; mean (SD) age 20.2 (2.7) years). Participants completed tests to assess cardiorespiratory fitness (heart rate recovery after a submaximal step test), flexibility (sit-and-reach test), muscle strength (handgrip), and muscle endurance (sit-ups and push-ups). The main outcome measure was prevalence of below-average performance in each component of fitness. Sex differences were reported using one-way ANOVA or a Chi-square test. Significance was set at $p < 0.05$.

Results. The prevalence of below-average fitness was 70.2% for cardiorespiratory, 23.7% for handgrip strength, 52.6% for sit-ups, 23.0% for push-ups and 2.0% for flexibility. No significant differences were noted between male and female participants in terms of the prevalence of below-average scores in any of the fitness parameters assessed. Females were more flexible than males ($F=40.6$ (8.4) cm v. $M=36.7$ (9.3) cm, $p=0.012$). Males had significantly better handgrip strength ($M=89.0$ (12.0) kg v. $F=59.3$ (10.4) kg, $p < 0.001$), muscle endurance with sit-ups ($M=33.5$ 9.0) v. $F=24.5$ (12.2), $p < 0.001$) and with push-ups ($M=30.3$ (14.0) v. $F=24.3$ (12.4), $p=0.009$). The average measurement of cardiorespiratory fitness (1-min heart rate recovery) was not significantly different between sexes.

Conclusions. First-year medical students have poor physical fitness, notably cardiorespiratory fitness and muscle strength, which are important markers for NCD risk assessment. The health profiles and behaviours of future healthcare professionals may influence how they guide their patients and therefore, tertiary institutions training health care professionals should consider developing interventions to improve physical fitness among students thereby facilitating improvements in their health, wellbeing and academic performance.

Poor sleep quality, low physical activity and low-moderate diet quality in South African medical students

J Borresen,^{1,2} B Celie,^{1,2} R Laubscher,³ M Bac,¹ P Wood,¹ T Camacho,¹ K Nolte,¹ M Schwellnus,¹ D Basu,¹ M Schwellnus^{1,2}

¹ University of Pretoria, South Africa

² IOC Research Centre of South Africa, Pretoria, South Africa

³ S A Medical Research Council, Cape Town, South Africa

Introduction. The personal health behaviors and lifestyle habits of health professionals may influence their counselling practices related to non-communicable diseases (NCDs). There are limited data on NCD risk factors among medical students, so this study determined the prevalence of modifiable behavioral and metabolic NCD risk factors in 1st year medical students at a South African University.

Methods. A cross-sectional observational study of 256 1st year students, who completed five online questionnaires regarding lifestyle behaviors (physical activity, dietary habits, smoking, alcohol consumption and sleep quality). NCD-related metabolic markers were measured (body composition, blood pressure, total cholesterol and random glucose concentrations). The prevalence (%) of risk factors was calculated using internationally accepted cut-off criteria and sex differences were reported using one-way ANOVA or the Chi-square test ($p < 0.05$).

Results. Risk factors with the highest prevalence were poor sleep quality (79.7%), low-to-moderate diet quality (66.8%), and low levels of habitual physical activity (64.1%), followed by suspected hypertension (34.0%), overweight/obese (26.2%), current/past smoking (13.3%) and the harmful use of alcohol (12.5%). Significantly more males were at risk for harmful drinking (22.1% vs 8.4%, $p=0.002$) and smoking (23.4% vs 8.9%, $p=0.002$). Females had a better diet quality (38.0% v. 22.1%, $p=0.007$) however, they reported exercising less than 3 times a week (61.0% v. 73.7%, $p=0.042$). 54.8% of females had a normal blood pressure reading compared with 24.6% of males ($p < 0.001$). 88.3% of all participants had 2 or more NCD-related risk factors, with males having a higher prevalence than females (92.2% v. 86.6%, $p < 0.001$).

Conclusions. First year medical students have a high prevalence of lifestyle-related risk factors, specifically poor sleep quality, low levels of physical activity and low-to-moderate diet quality. Sleep hygiene, regular activity and good nutrition should be promoted, and interventions focusing on nutrition, smoking cessation and alcohol consumption could be tailored by sex.

Nursing and emergency medical care student views on digital game-based learning: A quantitative pilot survey

D Brink, K Gerber

Nelson Mandela University, Gqeberha, South Africa

Background. Serious games and digital game-based learning (GBL) are increasingly being used in undergraduate health care education. Using digital GBL and technology, an interactive exercise demonstrating the actions a healthcare practitioner needs to take may improve learning outcomes, such as a greater understanding of clinical and laboratory procedures, a reduction in cognitive load associated with memorization, and an improved ability to transfer knowledge and skills to real-world scenarios. However, little is known about how health education students view digital GBL.

Objectives. To explore and describe nursing and emergency medical care (EMC) students' views about digital GBL regarding diabetic emergency management at a South African university.

Methods. An all-inclusive convenience sample of 24 second-year nursing and EMC students was used for a quantitative descriptive survey. An online, self-developed, self-administered survey was used to gather feedback from participants on an online simulation game (intervention) being informative, acquiring knowledge, having educational value, adherence to education and assessment guidelines post-implementation, and the need for additional training.

Results. The majority of participants ($n=21$; 88%) had positive views on the simulation game, which was reflected in the majority's agreement with positive statements about the value ($n=22$; 92%) and impact ($n=22$; 92%) this new learning method had on them.

Conclusion. In general, participants viewed GBL favorably. On the basis of these results, it is suggested that digital GBL could be implemented in the Health Science Faculty curriculum, which could allow students to collaborate with and learn from students in other health departments. However, further research is required with a larger and more diverse group of participants and other health sciences students to determine the feasibility of digital GBL.

Structured oral examinations (SOEs) on Zoom: meeting specialist examination challenges during Covid and beyond

V Burch,¹ J McGuire,² E Buch,¹ J Fagan^{1,2}

¹ Colleges of Medicine of South Africa, Cape Town South Africa

² University of Cape Town, South Africa

Introduction. Prior to the COVID-19 pandemic the Colleges of Medicine of South Africa (CMSA) conducted in-person, patient-based oral examinations as part of the specialist certification process. The pandemic necessitated a transition to Structured Oral Examinations (SOEs) hosted on Zoom. A review of our 30 months' experience in the surgical specialties was undertaken to support the post-pandemic use of SOEs.

Methods. A document review was undertaken of all timetables, examination planning notes and incident reports for all SOEs conducted in 12 surgical specialties and subspecialties (March 2020 – October 2022).

Results. A total of 885 surgical specialties candidates completed the online written examinations and 742 (83.8%) were invited to SOEs on Zoom, which were hosted and invigilated at 14 CMSA examination centres in Southern Africa. Seven candidates (0.9 %) withdrew. Data from 2 699 Zoom calls were reviewed. Each candidate engaged in a median (range) of 5 (1 - 14) Zoom calls with an online examination time (median, range) of 135 (30 - 210) minutes. Three disciplines added offline preparation time (median, range) of 80 (45 - 120) minutes. Most specialties used two examiners per call and conducted a median (range) of 4 (2 - 12) case-based discussions and/or 2.5 (1 - 12) topic-based discussions per SOE. Examiners prepared PowerPoint slides to "screen share" SOE material with candidates during Zoom calls. All 735 attending candidates completed their SOEs on Zoom. Less than 3% of SOEs were interrupted by IT challenges (internet connectivity, Zoom link disruptions, hardware failure), load shedding or poor-quality audiovisual transmission.

Conclusion. Based on our 30-month experience, the oral component of specialist examinations can be successfully conducted on Zoom using a multi-call arrangement with case-based and/or topic-based discussions using PowerPoint slides to "screen share" information with candidates. This is an attractive post-pandemic option since time away from work is minimal and travel and accommodation costs are greatly reduced.

Life stories of older people: an opportunity for transformative learning

S Burton

Rhodes University, Makhanda, South Africa

Objective. To describe an undergraduate elective module designed to transform how pharmacy students view and relate to older people. The module seeks to deepen students' understanding of the complexities and difficulties associated with ageing, to empower the students to become practitioners capable of caring for and meeting the healthcare and, more specifically, the medicine needs of older people.

Design. The module combines a theoretical and an experiential approach. The theoretical component is covered by student-led seminars, during which pairs of students present on topics relevant to ageing. Central to the module is the experiential component that involves the students conversing with older people. During the conversations, the students encourage the older person to tell their life stories and, in a conversational manner, explore their experiences of the ageing process and associated healthcare issues

and experiences. By employing guided reflections and engaged discourse throughout the module, the students are encouraged to identify, challenge and transform their understanding, assumptions and beliefs about ageing and their behaviour toward older people.

Results. Both formal and informal feedback and student reflections collected over the past two years suggest that the module makes a substantial contribution to students' beliefs and assumptions about older people. It provides students with deepened insights into the complexities, struggles and joys of ageing and a heightened awareness of the need to treat each person as an individual with a history and life story.

Conclusion. Listening to the life stories of older people can provide transformative learning opportunities that prepare pharmacy students to provide person-centred care.

Teamwork makes the dream work #Diabetes on(the)line

J Cairncross, R Kerbelker, M Marais, J Williams

Nelson Mandela University, Qheberha, South Africa

Introduction. The COVID-19 pandemic taught us to think beyond the healthcare norm and innovate while still delivering results and improving health outcomes. There was a need to change from face-to-face at the primary care clinic to a virtual delivery of the diabetes group education programme. The aim of this "story" is to describe the journey of how to implement a virtual diabetes group education programme to patients with diabetes from a poor socio-economic community.

Context. The story is narrated from the perspective of the project manager, a Family Physician. The setting is Delft, Western Cape, with staff from the primary care clinic, a group of facilitators of the diabetes education programme, patients with diabetes and an unemployed relative.

Key message. One requires structured planning and skills to convince the non-believers to join you and prove a virtual platform is possible in a public healthcare context. The virtual platform was perceived as acceptable by both facilitators and patients with diabetes. Older patients struggled to join virtual sessions. It was possible to use educational resources digitally with good patient understanding. Physical activity could be incorporated virtually. Facilitators were more anxious and experienced patient engagement to be more challenging conducting sessions virtually. Data usage was low and affordable. Facilitators and patients required support from the project manager, in addition to IT support in preparation and during delivery of all sessions.

Impact. It is possible to conduct virtual diabetes group education sessions with patients from the comfort of their home. It should be explored further beyond this pilot idea. It has the potential to extend access of this diabetes group education programme to patients from rural areas.

Understanding the influence of longitudinal integrated clerkships on the career journeys of medical graduates

F Coetzee,¹ S van Schalkwyk,² I Couper¹

¹ Ukwanda Centre for Rural Health, Stellenbosch University, Worcester, South Africa

² Stellenbosch University, Cape Town, South Africa

Background. Longitudinal integrated clerkships (LICs) are increasingly being implemented across the globe for their educational benefits and the recruitment of rural medical practitioners. As new LICs are established, it

is important to explore the extent to which these benefits manifest, and the influence of LICs on the career journeys of graduates. The Stellenbosch University LIC has been running for eleven years, and to date the career outcomes of graduates have not been described.

Objectives. This research sets out to explore factors that influence the career journeys of graduates from Stellenbosch University's LIC.

Methods. A qualitative interpretivist study was conducted. Eight graduates – five or more years postgraduation – were interviewed by means of semi-structured interviews which were recorded and transcribed. Thematic analysis was performed. Participants were asked to draw a depiction of their career journeys, and these pictures and an interview guide were used as prompts during the interviews.

Findings. Three themes were generated from the data, namely (i) feeling prepared for the career journey, (ii) acquiring a new motivation and career goals and (iii) unexpected influences on career journeys. The availability of posts and transformative influences are important factors in the career journeys of LIC graduates. LIC graduates were enabled by their undergraduate training to explore non-traditional career options and they preferred working in rural environments. Although individual priorities caused many participants to work in urban settings, they indicated a desire to return to rural environments.

Conclusion. The LIC training at Stellenbosch University acts as a significant influence on the early career journeys of LIC graduates. This is possibly achieved in two ways. Firstly, the LIC supports the development of professional identities among its graduates. Secondly, the LIC supports transformative learning within a safe learning environment that leads to changes in perspectives regarding their responsibility towards patients and communities.

A modified Delphi-review of pharmacological competencies needed for dietitians, nurses and physiotherapists in South Africa

W Cordier, D Manning, P du Toit

University of Pretoria, South Africa

The scope of practice of healthcare practitioners describes the services they are deemed to be competent in, and thus serves as a framework for curriculum alignment. Often such scopes lack discipline-specific inference, impairing curriculum design, and risking that competencies would be inadequate or bolted-on. The study aimed to determine the most important pharmacological competencies for dietitian, nurse and physiotherapist graduates via a modified Delphi-study. Delphi-experts ranging from academic, accreditation and professional societies were requested to rate competencies in terms of their importance and expected level of competence.

Of 108, 161, and 79 competencies provided to the dietetic, nursing and physiotherapy experts, 80, 153, and 28 were considered important for inclusion, respectively. Of these, 41, 48, and 16 diseases were considered necessary to include, respectively, which aligned to the professional scope. For example, physiotherapists highlighted the importance of movement-related, cardiovascular, and pulmonary diseases. Furthermore, practitioner-specific elements were considered, such as food-drug interactions for dietitians. Interestingly, pharmacogenetics-associated concepts, speaking to pivotal future competencies of personalised medicine, were considered relatively

unimportant. Several underlying tenets of pharmacology (pharmacokinetics and pharmacodynamics) were less important than concepts building from them (such as mechanisms of action). This observation stresses co-creation of curricula between basic and clinical sciences to reinforce foundational sciences required for clinical competence, but not overreach. Consensus on the expected level of competence was lower, ranging from understanding to analysis, with the latter of importance in disease management. Although dietitians and nurses had greater consensus, lower consensus was observed for physiotherapists, suggesting ontological differences affecting decision-making and need for stratification.

Pharmacological competencies deemed relevant to dietetics, nursing and physiotherapy professions were determined. Given the importance of vertical alignment of the basic sciences, co-creation between basic and clinical staff will be needed to ensure that minimum requirements are met for competency development.

Postgraduate training beyond the scope of practice: A burnt-out student is not a competent one

W Cordier

University of Pretoria, South Africa

Introduction. The world has changed dramatically over the past decade, with numerous challenges brought into students' lives. South Africans daily lives have been affected dramatically due to, among others, academic protests, loadshedding, a pandemic, and political unrest. Students are not removed from this, and, unfortunately, are affected in their academic settings which perturbs competency development.

Context. The past year three years have shown me first hand the hazards that my postgraduate students face, which has been a learning school for me as postgraduate supervisor and programme coordinator.

Key message and impact. Observing the challenges that students in our department faced made me realise that capacitating them to be pharmacologists is pointless if they are not developed to be resilient individuals who can face the onslaught of difficulties that may arise time management; financial constraints; pressure of academic life; career development; goal setting; and so forth. During this Seaside Story I share my experience in my profession over the past three years, and the reciprocal learning that occurred from observing my postgraduate students. Based on my reflections, I also share the Longitudinal Research Journey initiative that has been newly established in our department, focussing on the design of learning opportunities relating to actualising themselves as developing adults, creating a space for open discourse and community of practice formation, and reflecting on its current evaluations.

Launching an online facilitation course – a learning journey

I Couper,¹ K Brits,¹ J Couper,¹ T Crowley,² J Blitz,¹ M de Villiers¹

¹ *Stellenbosch University, Cape Town, South Africa,*

² *University of the Western Cape, Cape Town, South Africa*

Introduction. A multi-discipline team of health professionals planned an online course for facilitation of learning through the AFREhealth Learning Management System (LMS). The need for facilitation skills for online learning across African institutions was recognized during the pandemic. The course development team came from different disciplinary backgrounds and

levels of experience with online learning. Three face-to-face workshops were held to plan and prepare the course, including clarifying our assumptions about the meaning of facilitation for learning (FfL).

Context. A 7-week online course was designed for facilitators with variable experience in health professions education across Africa. Each of the course units was a 90-minute interactive online workshop using Zoom, with preparatory material and post-session activities for asynchronous learning on the LMS. The first iteration of the course was delivered to 20 health professionals of different backgrounds participating from 10 institutions in 9 countries.

Impact. The development team collaborated well, using their different viewpoints to develop a novel course. This focused on learning through online interaction, centered around a learning journey, using a boat metaphor and online learning tools. Each team member was stretched to learn new online skills and to work as a team. The participants took time to adjust to the shift in approach, which modelled our concept of facilitation, without didactic input. They responded enthusiastically and recognized the teamwork of the course facilitators despite this not being an objective of the course. They grew more confident in the practice of reflection, which was central to each workshop.

Take home message. Going beyond our comfort zone opens up new learning. Designing an online course to enable others to learn so that they in turn can enable students to learn required mental gymnastics. Modelling facilitation in the way that we supported learning required deliberate attention and reflection on our part.

Learning together in times of disruption: Reflections from the Africa ECHO network

I Couper,¹ M de Villiers,¹ F Suleman,² P Brysiewicz,² J Couper,¹ N Nadesanreddy²

¹Ukwanda Centre for Rural Health, Stellenbosch University, Cape Town, South Africa

²University of KwaZulu-Natal, Durban, South Africa

Introduction. ECHO is an online network of health care professionals developed over the past 20 years. It was initiated by Dr Sanjeev Arora, in New Mexico, in response to a pattern of late diagnosis of Hepatitis C patients, as a process of sharing knowledge virtually with healthcare workers in rural clinics. His ECHO model promotes knowledge as power, whereby all teach, and all learn.

Context. In 2022, as we were recovering from the COVID-19 pandemic, UKZN and SU collaborated to develop an African ECHO network for health professions educators in times of disruption. Following a workshop during the SAAHE 2022 Conference, a South African 'pilot' began in July and continued until November with 10 bimonthly lunchtime sessions of one hour duration. Real scenarios and experiences in learning were used as a basis for discussion and reflection. A 'friend with experience' was invited to the session for additional input and perspective about the topic.

Experience and impact. The average attendance was 15-25 participants, in addition to the project team. Participants enjoyed the open-ended discussions and engagement with one another. The sessions intentionally created a safe place to discuss uncertain and vulnerable scenarios, with open-ended and curious questions being posed and input provided by a 'friend with experience', chosen for the topic of the session. More questions were raised than answers, which was viewed as a positive process.

Key messages. We will explore lessons learnt from the pilot, which included intentional spaces, roles and identity, authenticity, generative energy and adaptation to complexity, sharing mistakes and practices. The focus is reflection on what gives meaning to HPEs and encourages human change efforts.

The perspectives of lecturers on the engagement with educational technologies during a fully online diploma

C Cunningham

University of Cape Town, South Africa

Introduction. The Post-Graduate Diploma in Emergency Care was designed to only be presented online with an interdisciplinary cohort of healthcare professionals. Designing an online programme differs from hybrid or in-person programme design and in the online sphere, the lecturer contends with technology as well as pedagogical and content issues. Some of the technological decisions include extending learning management systems, interface design, considerations of media diversity and selection of learning technologies. In this study we considered online learning design and the use of technology from the lecturer perspective, extending to how the properties of the online classroom were experienced by the lecturers.

Methods. All lecturers, course conveners and learning designers that were involved in the 2021 course was invited for an interview. Ten interviews of 40 - 60 min were conducted, and the data are currently being analysed using thematic analysis.

Results. We will be ready to present the findings at the SAAHE conference in June. Anecdotally, pedagogical principles differ when teaching online and most lecturers found it challenging. Learning opportunities on how to utilize digital technologies and other skills required for online education seems to be a need.

Conclusion. The Division is the largest emergency care training facility in Africa and has a particular role to play in improving emergency care education and delivery on the continent. By optimizing the online offering, understanding the methods of delivery and how lecturers engage with educational technologies, emergency care delivery across the continent, especially in rural and remote areas can be improved. The outcomes of the study may be used to improve other innovative online offerings and further digitalization of health care professional education.

A handheld, wireless ultrasound probe to learn anatomy: Perceptions of medical undergraduate students

J M de Lange,¹ K J Baatjes,¹ C Marthinussen²

¹Stellenbosch University, Cape Town, South Africa

²Innohealth, Cape Town, South Africa

Introduction. Point-of-care ultrasound (US) has become an important part of patient care across various medical specialties and the increased use thereof has led to a greater demand for the integration of US training in the early medical undergraduate curriculum. The use of handheld wireless US devices is not currently integrated within the undergraduate anatomy medical curriculum of Stellenbosch University and the additional value of wireless ultrasonography, in relation to the clinical practice of anatomical knowledge, therefore, warranted further investigation. This study aimed to explore undergraduate medical students' perceptions on the use of handheld wireless US scanning to enhance knowledge and understanding of Anatomy for clinical application.

Methods. During the routine dissection sessions, students visualised anatomical structures of the musculoskeletal system, by scanning themselves, using handheld, wireless US devices. After the session, an electronic survey was distributed to the students for completion and three ultrasonography questions were included in the routine practical test.

Results. The complete response rate for the survey was 14.49%. The highest student agreement was observed when assessing the convenience of practice of wireless US devices (Question 6, 4.41 ± 0.74), while the lowest agreement was reported for confidence in the participant's capability of generating US images (Question 8, 2.63 ± 1.24). Two main themes were developed from the open-ended questions at the end of the survey: the instructional integration of US and US within the clinical setting. Furthermore, an average of 51.94% were obtained for the US section in the routine practical test.

Conclusion. This research demonstrated that readily available access to handheld wireless US scanning has the potential to enhance students' longitudinal learning experience and improve their anatomical comprehension. The latter would aid them, as future clinicians, in US application in the clinical realm and in contributing to improving the healthcare system, particularly in resource-constrained areas.

Using written reflective reports to identify aspects of student engagement

K Dikgomo,¹ S Hendricks,^{2,3} T Mutsvangwa²

¹Nelson Mandela University, Gqeberha, South Africa

²University of Cape Town, South Africa

³Leeds Beckett University, United Kingdom

Background. Written reflections are widely used in health sciences education to assess postgraduate learning and facilitate student engagement. Different forms and frameworks can identify physical, emotional, and cognitive engagement. The aim of this study was to determine if reflections can be used to identify aspects of student engagement.

Methods. The study used secondary data collected from written reflective reports submitted as part of a summative assessment in a health innovation and design (HID) master's course that applied design thinking methodology. Students participated in group activities with community stakeholders.

Results. All domains of student engagement were evident in the written reflective reports. The reports showed physical and cognitive engagement was influenced by design thinking methodology and academic requirements. Emotional engagement was identified in task and self-related domains of academic emotions.

Conclusion. Written reflections can identify various aspects of student engagement, but do not provide a quantitative measure of strength. Nevertheless, they provide valuable data for health professional educators to improve educational experiences.

Self-identity discrepancy theory: Exploring returning South African Cuban-trained medical students' sense of belonging

B M Donda

University of Kwazulu-Natal, Durban, South Africa

Background. The Nelson Mandela-Fidel Castro Collaboration programme (NMFCMC) between South Africa and Cuba was established in 1996. South African students, undergo five years of medical training in Cuba and

finish the final eighteen months of training in South Africa. These students experience academic difficulties on their return.

Methods. All twelve NMFCMC students enrolled at the University of Kwazulu-Natal in 2015 participated in this study. Data were elicited using focus group interviews, narrative interviews, found photovoice and the Collage Life Story Elicitation Technique.

Results. Challenges faced by participants resulted in identity discrepancy, which in turn promoted unfavourable attitudes, affect, psychological and physical behaviours towards participants' belongingness.

Conclusion. Returning NMFCMC students experienced difficulties in assimilation due to identity discrepancies and frustrated sense of belonging. Focusing on reinforcing positive aspects of identity, and interpersonal relationships through moderating the tendency of local teachers and students to emphasise the "otherness" of the NMFCMC student is crucial.

Open Educational Resources as tools for collaborative engagement in health professional education

G Doyle, V Mitchell

University of Cape Town, South Africa

Worldwide, the COVID-19 pandemic motivated educators' accelerated engagement with online technologies in order to facilitate and allow for student learning and communication. The question is still to be seen what will happen post-pandemic. Will educators continue to develop teaching resources which engage students rather than focus on creating conventional online material? During the Emergency Remote Teaching period at the University of Cape Town (UCT) we noted that most educators created narrated PowerPoint presentations to ensure the continued transmission of disciplinary knowledge. However, for a few educators, the pandemic and isolation opened new opportunities for sharing teaching resources inter-institutionally, locally and globally. Some of these teaching materials were published as Open Educational Resources (OERs) with Creative Commons licenses that give permission for sharing without infringing copyright restrictions. OERs are especially beneficial to middle-income countries because these freely available resources lessen the financial burden of creating teaching resources, cut back on time commitments in preparing teaching material and expand access to high-quality resources. However, the current requirement for a PDF format for publishing OER is a throwback to text-driven teaching resources, which do not foster participatory interactions.

If OERs published online could use digital modalities such as video, images, sound and animations they would encourage constructive engagement of students' learning. In addition, new opportunities arise for collaborating with colleagues inter-institutionally to publish OERs, thus transforming current pedagogical practices. At UCT's Faculty of Health Sciences (FHS) educators are offered support and encouragement to create OERs and publish them on platforms such as YouTube. Our presentation will generate a discussion on publishing OERs in a FHS and showcase content created over the past two years. We aim to facilitate collaborative discussions, for creating interactive high-quality resources while interrogating the potential for producing more resources inter-institutionally from institutions in South Africa.

Dirisana + collaborations for interprofessional education (IPE)

A Dreyer,¹ H Pitout,² E Viljoen,² R Eccles³

¹ University of Witwatersrand, Johannesburg, South Africa

² Sefako Makgatho University, Pretoria, South Africa

³ University of Pretoria, South Africa

Introduction. Dirisana+ is a multi-national collaborative team. The consortium consists of five partner institutions in across two countries in Southern African and three programme countries in the European Union. The collaboration centres on improving undergraduate and postgraduate student learning experiences with the aim to improve the workplace readiness of our graduates through training aligned with community and societal needs. This platform fosters relationships and collaboration for multi-disciplinary collaboration in innovation in health sciences education in southern Africa. Aiming to develop an equitable, diverse, and inclusive learning community, respond and reflect to challenges, and advocate for dynamic working relationships in under-represented areas in Southern Africa. The poster will capture the Interprofessional education activities that have been carried out during this collaboration to promote and quality assure cost-effective technological innovations in teaching, assessment, and research.

Reported outcomes to share. To share the scoping review results of the pedagogical approaches and teaching and learning materials that underscore interprofessional education globally and in South Africa.

- To share the use of games to clarify the interprofessional roles.
- To reflect on the planning and development of an interprofessional and collaborative practice module.
- To share the interprofessional education and collaborative practice in the training of healthcare students in Namibia and South Africa.

Conclusion. Dissemination of these outcomes has taken place through the Dirisana+ IPE committee workshops to allow each of the consortium partners to engage with the findings. Using the SAAHE platform to disseminate the outcomes will support further engagement.

Poetic voice of lived experiences of women in Academia

A Dreyer,¹ R Richards,² L Keiller²

¹ University of Witwatersrand, Johannesburg, South Africa

² Stellenbosch University, Cape Town, South Africa

The journey experienced by women in Higher education spans across the areas of teaching, research and leadership. As academics and scholars within these areas, women professionals find few opportunities to share what and how they have navigated this space. Using the concept of storytelling and poetry as a safe form of expression in Africa, we give voice to the experiences that have often been difficult to articulate. The experiences of women as they discover their leadership competencies and academic identities, and the support, motivation and successes they harnessed to complete their PhD. The collaborative sharing of poetic pieces highlights new ways to actively engage outside of the existing closed communities.

Two expected story share outcomes.

- To share poetic experiences of women in academia as they live their leadership competencies and academic identities.
- To provide a snippet to the recently submitted chapter that showcased a novel expression of lived experiences.

Evaluating a digital game: Does it stimulate self-regulated learning and critical thinking in Toxicology students?

C Du Plessis, G Dullaart, C Marks

Stellenbosch University, Cape Town, South Africa

Many researchers investigated the impact of gamification in an educational context with favourable results, such as an increase in engagement, user retention, knowledge, and cooperation ((Ruhi, 2015, Adams & Masuret 2022, Adendorff et al 2022, Smiderle et al., 2020). Gamification facilitates learners to develop skills in self-regulated learning. It stimulates intrinsic motivation where the student develops spontaneous exploration and curiosity for the topic (Hanus and Fox, 2015). Self-regulated learning skills are among the most important skills that help students plan and control their learning and take measures to carry out all learning tasks with full awareness (Alhalafawy and Zaki, 2022).

Toxicology students are frequently overwhelmed by the volume and complexity of information to learn. In an effort to make learning meaningful and fun, an online game was developed, called Toxicolitaire. The game challenges students to critically evaluate poison case studies and aims to develop critical clinical reasoning.

The study aims to investigate the advantage and disadvantages of the digital card game, specifically whether self-regulated learning and critical thinking took place while students participated in the game.

This is a small-scale study with mixed methods in two phases. In phase one we use a quantitative survey to test and review the interview questions prepared for the main and second phase. In the second phase, a qualitative, interpretative research design is applied for the bulk of the data, which is collected in the focus interest group interviews. This data will be analysed with critical discourse analysis, done manually. Initial findings indicate that students respond positively to Toxicolitaire.

The 10th South African medical school: A pre, inter and post-pandemic journey

E du Toit,¹ P Caiger,¹ E de Vries,^{1,2}

¹ Nelson Mandela University, Gqeberha, South Africa

² University of Cape Town, South Africa

Introduction. The 10th medical school in South Africa, at Nelson Mandela University in Gqeberha, received SAQA approval in December 2020 and opened its doors in March 2021. This was during the COVID-19 pandemic, with frequent lock down regulations limiting in person classes. The aim of this presentation is to describe the process.

Context. This will be a descriptive presentation on the incredible journey of a small but passionate team to welcome an initial intake of 50 students in 2021.

Key message. The curriculum development had taken several years. The educational philosophy of this programme is to roll out a vertically and horizontally integrated curriculum in Basic Medical Sciences, Contextual Skills, and Clinical Sciences. The vision for graduates has been graphically represented by the Mandela doctor, it's aim to graduate doctors with a solid foundation of basic sciences, who are fit for purpose, primary health care focused, caring and competent generalists. This doctor will be community orientated and work as a member of the interdisciplinary health team. The continuous refinement of the curriculum and teaching, learning and assessment strategies were held accountable to this aim. In 2021, classes

often had to be online during lockdown periods. The team of lecturers adapted to this challenge, as well as the students. Each student has a learning device and receives academic and digital literacy training in first year. Students are given support to deal with challenges that can affect their academic performance, with the availability of a full-time student success coach.

Impact. A successful first- and second-year programme has been delivered, with third year being offered in 2023 and detailed planning of the clinical years taking place. Attention to the constructive alignment of curriculum and vision is given to ensure sustainability to produce fit for purpose doctors for the Eastern Cape and South Africa.

Novel approach of utilising a Group Objective Clinical Examination for learning and teaching

B Espen, I van der Walt

Stellenbosch University, Cape Town, South Africa

Introduction. Objective Structured Clinical Examination (OSCE), used to assess clinical skills, often in high-stakes, summative examinations. Students find these examinations highly stressful as they are tasked to perform a variety of skills within a limited time frame. OSCE evaluates the shows how component on the Millers assessment pyramid.

Context. The MBChB programme at Stellenbosch University has undergone curriculum renewal. High stakes summative assessments include OSCEs at 18 months, 3 years, and 5 years. Undergraduate students are unfamiliar with the format of an OSCE as this format of examination is not used in Basic Education system. Use of an unfamiliar assessment tool adds to their stress and may influence examination performance. We wanted to expose our students to the OSCE format prior to the high-stakes examination at 18 months. Due to the resource-intensity of an OSCE, personnel, time, and financial burdens, it was decided to use the approach of a Group OSCE (GOSCE). Students, in groups of 25 are subdivided into 5 groups of 5 students. They rotate through 5 stations, each assessing a different skill type. One student will perform the timed skill, whilst the remaining 4 students observe the performance and grade using a rubric. The examiner will facilitate a reflective discussion re student performance, including the observers into the conversation. The group will then move to the next station. Each student will receive one opportunity to do the skill, receive feedback from an examiner and from peers.

Key message. Utilising a GOSCE as a novel formative assessment may be a cost-effective method to expose students to the format of an OSCE whilst simultaneously enhance their learning through feedback.

Impact. The GOSCE will be written into the formal skills curriculum of the undergraduate medical programme. We anticipate including it into Faculty Development.

Lived experiences of South African diagnostic radiography students of the July 2021 civil unrest

H Essop, K Naidoo, S Lewis, G Koch, T Khoza, M Phahlamohlaka, N Badriparsad

University of Pretoria, South Africa

Introduction In July 2021, South Africa (SA), experienced a wave of civil unrests following political events, bringing most sectors of country

to a standstill. Despite this severe disruption, essential services provided by healthcare professionals had to continue, which also encompassed clinical training for radiography students and many other students from health sciences.

Aim. To explore and describe the undergraduate diagnostic radiography students' experience of the civil unrest that occurred in SA in 2021.

Methods. A qualitative, interpretive phenomenological design was employed as it enabled the researchers to facilitate focus group interviews to gain insight into the lived experiences of the students during this time.

Findings and discussion. Five higher educational institutions that offer training in diagnostic radiography participated in the study. Four themes emerged from the study data. The themes identified are inclusive of the students' emotional and psychological well-being, the availability of support mechanisms, the influence of disruptions on clinical training and recommendations to support students in future disruptions. Despite the negative effects that emanated from the unrest, the students demonstrated noticeable resilience.

Conclusion and recommendations. The research pertaining to lived experience of radiography students enables academic institutions to enhance support structures in the event of future civil unrests occurring. The advantage of this is twofold, whereby students are afforded social justice during their clinical training, whilst being provided the opportunity to grow and be part of the team providing essential health services to save the lives of others.

Collaborative assessment in a Pharmacy law and ethics module

T-L Fogarty

Nelson Mandela University, Port Elizabeth, South Africa

Introduction. Collaborative assessment is an approach to evaluate student learning outcomes in an online learning environment and has the potential to mitigate cheating and plagiarism, particularly in under-resourced environments where online invigilation is not possible. In collaborative assessment, students work together to complete tasks, solve problems, or answer questions, providing a more comprehensive assessment of their knowledge and skills.

Context. This presentation describes how collaborative assessment was used in a law and ethics module presented in the final year of the Bachelor of Pharmacy degree at Nelson Mandela University.

Key message. While innovative, the approach does have benefits and challenges. The presentation focuses on assessment for and as learning, rather than the assessment of learning. Feedback and reflection in collaborative assessment are presented in how they can enhance student learning and engagement.

Impact. Recommendations for educators are provided to effectively integrate collaborative assessment into teaching practices and overcome the challenges posed by online assessment. By embracing collaborative assessment in the era of online assessment, educators can create more meaningful and effective learning experiences that prepare students for the demands of the 21st century.

Understanding the use of digital anatomy learning platforms in a second-year medical student cohort

J Foiret, M Volschenk

Stellenbosch University, Cape Town, South Africa

The use of digital anatomy learning platforms is potentially academically beneficial. A pedagogical framework describing the use of digital anatomy learning platforms has not yet been developed. Laurillard's conversational framework offers an approach to explore the use of learning technologies in curricula. This study aimed to explore second-year medical students' experiences of using a digital anatomy learning platform during their studies at a South African university. A mixed methods design, framed in the interpretivist paradigm, was utilised. Implementation occurred in two phases: Whole population ($N=280$) sampling was used in phase 1 to survey students' usage of and access to digital anatomy learning platforms. Purposive sampling based on students' usage of digital anatomy learning platforms was used in phase 2. Focus groups ($n=11$) and individual interviews ($n=2$) were conducted to understand students' use of the learning platform. Qualitative data was first deductively analysed, using a priori codes developed from Laurillard's conversational framework, and subsequently inductively analysed. Two themes emerged: ways of learning and influencers of learning. Findings from the deductive analysis indicate that students engaged mainly in acquisition-based learning. Additionally, students encountered various factors that influenced their learning behaviour. Participants who showed an advanced affective domain engaged with their anatomy studies and the digital learning platform with greater efficacy than those who did not. The importance of affective domain development was identified through inductive analysis, which potentially indicates a gap in the conversational framework. Digital anatomy learning platforms may strengthen approaches to learning anatomy if implemented systematically, together with sufficient training on these platforms. Authors declare that there is no conflict of interest.

Towards the development of a pedagogical digital competency framework for health professions education

A George, A Ruch

University of the Witwatersrand, Johannesburg, South Africa

Introduction. Effective technology-based teaching requires more than digital competence. It requires pedagogical digital competence that integrates the types of knowledge, skills, attitudes, and values required to teach effectively. Existing non-health professions education (HPE) digital competency frameworks provide valuable insights into the competencies required, but their varied scope and focus make them unsuitable for HPE. Existing health-related competency frameworks focus on health worker competencies, often with insufficient regard for teaching competencies. Where teaching competencies are mentioned, they refer to broad competencies that are difficult to translate into policy and practice. We present a core HPE pedagogical digital competency framework to contribute to the conversation about the competencies health professions educators require to teach effectively with technology.

Methods. Our framework was derived from a content analysis of three non-HPE and four HPE competency frameworks. An initial examination of the 22 competence areas (fields in which professionals must perform tasks capably) and 57 competencies (sets of behaviour patterns needed to perform tasks proficiently) across the frameworks led to two learner-focused competence areas being excluded. The content analysis involved grouping the competency strategies (action plans to demonstrate the ability to perform a skill successfully) from the seven frameworks into core competencies and then competence areas.

Results. The seven frameworks differed in scope. The non-HPE frameworks were comprehensive, providing detailed descriptions of educator competencies with competency strategies, while the HPE ones provided limited competencies and actionable guidance for effective teaching. Our proposed core HPE pedagogical digital competence framework consists of three broad competence areas, 10 specific competence areas, and 25 competencies with competency strategies adapted from the seven frameworks.

Conclusion. Our competency framework addresses the limited focus on teaching, especially teaching with technology and the lack of actionable guidance in existing HPE competency frameworks. We present our framework for discussion and to promote further research.

Investigating the effectiveness of a web-based learning tool to improve isiZulu clinical communication skills

S Reddy, R Gokool

University of Kwazulu-Natal, Durban, South Africa

Effective communication skills in a healthcare environment are vital to successful doctor-patient consultations. Miscommunication and misdiagnosis are common phenomena in the healthcare context. Communicating with patients in their mother tongue is invaluable in establishing rapport. In this light, UKZN is committed to transforming the MBChB curriculum by integrating isiZulu within the programme. MBChB year 1 includes a year-long isiZulu module, with further resources created for years 2 and 3. However, further integration is required. Anecdotal evidence from medical students during their clinical years and interns indicates a lack of isiZulu resources beyond the year one isiZulu course. The dire need to improve isiZulu clinical communication skills during hospital rotations in rural areas is also reported. This need has been reiterated by a preliminary study conducted on MBChB students at the University of Kwazulu Natal (Gokool et al., 2021).

The pilot study focused on designing an isiZulu web-based learning tool with Skills Lab content. This innovative online learning tool offers a practical and sustainable solution to improve isiZulu clinical communication skills. While results from the pilot study were overwhelmingly positive, students revealed a few changes to improve the website. Students suggested more skills content for clinical years and the need for more interactive activities. This work-in-progress project investigates the effectiveness of using a web-based learning tool to enhance isiZulu clinical communication skills. The study aims to examine the efficacy of the web-based learning tool, specifically focusing on one theme in the Year 2 MBChB curriculum – the cardiovascular theme. Ethics clearance to conduct the study on Years 2-6 MBChB students is still pending. Students will be invited to participate in the study to critique the theme and improve the website.

Failing your idol's student... A lesson in owning your expertise.

C Gordon

University of Cape Town, South Africa

One day in 2022, as I tried to beat my inbox back, a very unexpected email popped up: A request to be an external MMed examiner. It came from a person who leaves me breathless with their brilliance. Someone who is prolifically published, and has supervised countless PhD and Masters students.

Step 1 of the self-doubt: Dear Prof, I have marked MPhils before but never an MMed. Am I really suitable?

The Prof. replied that I was because this was a qualitative project and I have qualitative expertise. So, I agreed. And then I got the paper. And it was baaaaaaaaaaaaaaaaad. I read it again, and it was still poor. I couldn't pass the student.

Step 2 of the self-doubt: But THAT glorious Prof had been the MMed supervisor! How could this be?? I second-guessed myself about 10 times. And then I locked that Prof in a cupboard. In my mind, of course, not a real cupboard! And I just looked at the typed text in front of me. This was an undoubted... FAIL.

And that's what I submitted, in good, though perplexed, conscience.

The lesson for me here should not need to be relearned anymore, because I have been in HPE for 12 years now, and I am not an impostor. I learned (again) that I AM enough, and I KNOW enough to give a good opinion on a piece of academic writing. I need to stop second-guessing my own expertise and own it instead!

Happiness in health professions education

C Gordon, L Govender

University of Cape Town, South Africa

Introduction. The importance of positive emotions in learning is receiving increasing attention. During the COVID pandemic lockdowns, one teacher in Obstetrics & Gynaecology took her students' emotional wellbeing as the starting point for her online content creation. Taking an educational risk, she made numerous light-hearted and entertaining videos about core topics in the discipline, in an attempt to induce deep, as well as joyful learning. The videos were wholly unconventional in medical education, and they relied on humour and performances carried out by the teacher. This research explores students' positive emotional responses to the videos, as well as the effect these emotions had on learning and student wellbeing.

Methods. At the time the study began, ~1 600 students could have accessed the videos. Phase 1 of the study, which will be presented here, considers the survey data. The target sample size is 311 students. Both recent graduates and undergraduates who experienced positive emotions while watching the videos were invited to participate using convenience and snowball sampling.

Results. Students experienced numerous positive emotions, ranging from joy, appreciation for the teacher, love, laughter, amazement, feeling energised which facilitated motivation, diligence, enjoyment of learning, enthusiasm, and even inspired students to want to specialise in O & G. Some students also felt a positive impact on their mental health and ability to cope during lockdown.

Conclusion. The importance of positive emotions in learning should be foregrounded in health professions education since it has the potential to significantly improve students' experiences of learning. Furthermore, teachers need to make themselves more vulnerable in order to be more human, as this allows students to feel more at ease, which is a prerequisite to experiencing positive emotions.

Experience and behaviour(s) of students who use Nyaope drug at a South African University

L S Mphahlele,¹ S Govender,² I Govender,¹ K Nel²

¹ North West University, Potchestroom, South Africa

² University of Limpopo, Polokwane, South Africa

³ Sefako Makgatho Health Sciences University, Pretoria, South Africa

Background. The use of illicit drugs affects people globally. The use of *nyaope* (*whonga*) has been increasing in South Africa amongst the youth, especially university students. Its use is associated with a wide range of negative consequences, such as poor academic performance, theft, rape, risky sexual behaviours, and social dysfunctionality.

Aim. To explore the self-reported experiences of students who use *nyaope*. The setting was the University of Limpopo.

Methods. The health belief model (HBM) was used as a theoretical paradigm in this study. A qualitative research approach with a phenomenological, exploratory design was used. The researchers wanted to obtain first-hand in-depth information. The sample of six participants was purposively selected. Criteria of trustworthiness were used to ensure the rigour of the findings. Thematic analysis was used to analyse data. This study was conducted from 01 March 2019 to June 2019.

Results. Four major themes emerged from the analysis, which were supported by existing evidence. The main themes that arose were reasons for *nyaope* use, excessive drug use were Decline in mental and psychological wellbeing and Intentions to stop using *nyaope*. The sub themes were: Peer pressure, Academic pressure, Decline in academic performance, Isolation from others, Discrimination by peers and others and Criminal activities.

Conclusions. Participants reported experiencing a decline in academic performance, deteriorating relationships with others, poor physical and psychological wellbeing, behavioural changes and perceiving that they were discriminated against.

Travel diaries – reflecting on a one-year editorial internship with Medical Education

L Govender

University of Cape Town, South Africa

Introduction. Ever wanted to know what happens behind the scenes in an international peer-reviewed journal? Perhaps you're an early-to-mid career educator, like me, and still trying to understand the dynamics of academic publication. This seaside story might help to shed a little bit of light. From July 2022 – June 2023, I have been privileged to complete a one-year editorial internship with the international, peer-reviewed journal Medical Education. In this seaside story, I share my experience and personal narrative of this one-year internship with the SAAHE community of practice.

Methods. Medical Education releases a global call for editorial internship applications once per year. 3 interns are selected, and for one year meet regularly with the Editor-In-Chief of Medical Education, Kevin Eva. Additionally, interns are assigned to deputy editors for long (2-month) or short (once-off calls) assignments, to deepen their engagement with the journal. Topics covered run the gamut from logistical (e.g. how manuscripts are distributed, reviewed and published) to the nuanced (e.g. what is meant by publication ethics and who should be responsible).

Results. After one year of engagement as an editorial intern, I have a better understanding of the operational logistics of Medical Education, gained some valuable, broad insights into academic publication, and made friends! I share these ideas here to encourage others to take on similar opportunities, in order to broaden inclusivity in the sphere of academic publications.

Conclusion. My editorial internship with Medical Education has been one of the best opportunities for learning, networking and collaboration in my

career thus far. I would highly recommend it to others and share my story here as a means to encourage such participation.

Nutritional knowledge and practices of Health Sciences students

A Gresse, K Bodenstien, R Chiloane, J Fourie, N Abdollatief, M Munshie, Z Plaatjies

Nelson Mandela University, Port Elizabeth, South Africa

Background. Food insecurity, hunger, bad eating habits and poor food choices are common problems amongst university students. Adequate nutrition in the adolescent years is particularly important to ensure normal growth and development, physical well-being and mental health. However, this is greatly limited due to restrained budgets, poor food accessibility and poor knowledge of adequate nutrition.

Aim. The nutritional knowledge and practices of health science students were tested and the impact of a practical and simple recipe book, developed for students, was evaluated.

Method. A quantitative, cross-sectional, descriptive survey and pre-test and a post-test research design were used in two different studies. Knowledge and practices were tested with a self-administered online questionnaire (282 health sciences students). The results were used to develop a recipe book and test the impact of the book on a sample of 187 students with a pre and post-test.

Results and discussion. Some of the results regarding knowledge and practices, indicated that 87.6% of the students knew that they should reduce salt by excluding high salt foods for a healthy lifestyle and 75.5% of the students knew that being active is part of a healthy lifestyle. Food insecurity was found amongst 12.5% ($n=36$). Although not significant, the use of the recipe book did not seem to make a difference in knowledge and cooking skills and there was also no significant difference between the results of the students who attended the cooking classes and those who did not.

Conclusion. Most of the students do have the correct knowledge about a healthy lifestyle but do not always apply the knowledge. The provision of a recipe book and one cooking class did not make a difference, but future research in promoting such a book and having more classes may lead to a better result.

Views on undergraduate medical emergency care education from South African Medical Schools

D T Hagemester,^{1,2} M Labuschagne¹

¹ *University of The Free State, Bloemfontein, South Africa*

² *Free State Department of Health, Bloemfontein, South Africa*

Background. Early-career medical practitioners in South Africa are exposed to a wide range of clinical emergencies during mandatory community service. We set out to collect perspectives of educators in the eight established medical programmes in the country on the training of undergraduate medical students for managing emergencies as graduates.

Methods. In-depth interviews with key informants were performed at the eight medical programmes graduating practitioners at the time. Qualitative data were coded and analysed for categories and themes.

Results. Three major themes emerged, namely 'Curriculum and educational science', 'Content and methods' and 'Reality of teaching'. 'Curriculum and educational science' included the categories 'Educational goals', 'Curricular

structure' and 'Curriculum review'. In 'Content and methods', major categories are 'Diseases in the community', 'Skills as outcomes', 'Educational methods', 'Coordination and updating content' and 'Assessment'. The 'Teaching reality' is influenced by the categories 'Institutional culture', 'Time and resources', 'Staff categories involved', 'Institutional memory' and 'Challenges with students.

Conclusions. Emergency care training is an integral part of undergraduate medical training in South Africa, though the specific settings at institutions are vastly different. Emergency medicine plays a growing role as discipline once departments have been established. Common challenges are the mismatch between resources available, the increasing student numbers, and managing, updating, and coordinating the programmes. Coordinating and integrating the training to achieve the required outcome objectives is demanding given the multitude and diversity of role players involved.

Steering higher education course design into a student-centered, blended learning direction with a flagship pilot

H Hambrock, E Venter, M D Kristen

Sefako Makgato Health Sciences University, Pretoria, South Africa

During the 4th industrial revolution, the ocean of knowledge and new technologies is growing by the minute and preparing students with a blended student-centered approach for a challenging world of work, is still unknown waters to many instructors at a medical university in South Africa. At the University most of the instructors are still applying a traditional teacher-centered teaching approach and have reservations to steer towards a student-centered learning approach.

To demonstrate the value of such a blended student-centered learning experience, the Centre for University Teaching and Learning (CUTL) identified an anatomy course with high student retention. The Instructional Designer and the Instructor collaborated on designing a flagship course including student-centered pre- and post-quizzes, formative and summative assessments, flipped classroom approaches, and gamification principles based on seamless and whole-brain learning strategies.

The instructor will run the flagship course as a pilot in the first term of 2023 and will adjust the course during the term, where needed. After the pilot, the flagship course will be demonstrated to more lecturers at the University.

The study will follow a mixed-methods strategy, namely concurrent triangulation that includes a qualitative (survey) and quantitative (performance comparison) data collection process.

The results/findings will include the successes and challenges of the students and the perceptions of the instructor will be used for the re-designing of the courses. The findings will also be used to design more exemplar/prototype templates for the instructional design of other health sciences courses at the university.

The Power of the Story: Occupational narratives as a pedagogical approach towards decolonising hpe curriculum

M Hannington

University of Cape Town, South Africa

In Health Professions Education (HPE), the use of case-based learning is common practice, but often reduces the populations we serve to a nameless

person, identified by age and diagnosis. In contrast, shifting to narrative-based learning, introduces the patient's story to the learner. Research has demonstrated the power of stories, helping learners to see situations from different perspectives and even causing shifts in core beliefs. To decolonise curriculum, efforts to redress the process of coloniality can be fostered by incorporating previously silenced stories. Sharing of narratives is closely linked with how many non-Western communities ground their knowledge systems and this approach can be found widely within literature in higher education.

Occupational narratives are a form of storytelling that allow people to reveal the overall meaning of their life events, by focusing on their occupations. As human beings we are occupational in nature and our narratives become the foundation for our identity. We come to know who we are relative to what we have done. Health is not the absence of disease alone, but the full engagement and participation in our chosen occupations. Due to the universality of occupation, narratives that are centred around doing become relatable, allowing for connection between the story and learner. When connection is elicited, deep learning can occur. However, telling stories alone is not sufficient. Engagement in occupations is intrinsically linked to context, therefore narratives should be grounded in local environments. Through purposeful sharing of the real-life stories of South African people, a holistic picture of experiences can be gained, fostering localisation of knowledge production. Two different examples of how narrative based learning has been used in an OT curriculum will be described: stories as a supplement to theory and an example of student's engaging in the process of collecting stories to deepen their learning.

Understanding safe learning space for undergraduate occupational therapy students at the University of Cape Town

M Hannington, N Mbambo, K Ramavhanda, M Lebelo

University of Cape Town, South Africa

Introduction. The use of the term 'safe learning space' is often used in health professions education (HPE), when wanting to convey a learning context that supports learning without judgement. However, there is both a dearth of literature and no consensus on the definition of safe learning spaces. This can be attributed to the multitude of contextual factors in the South Africa HPE landscape, making the use of one definition almost impossible. Critique of the concept highlights that emphasis placed only on unconditional support may counter the educational aim of encouraging critical thinking. If safe learning spaces in SA are intended to support learning in a diverse student population, it is imperative to have a context-specific understanding, informed by student experience. This research aimed to understand how undergraduate OT students define and experience the concept of safe learning spaces.

Methods. A descriptive qualitative research design was utilised for the study. Purposive sampling, with maximum variation, allowed for selection of 12 undergraduate OT students. Three focus groups were used to facilitate discussion, with thematic analysis of the data to identify themes integral to the experience and definition of safe learning spaces.

Results. The research is still underway, with data collection projected to be completed by March 2023. The researchers intend to explore student's lived experiences to identify themes that provide further insight into what safe spaces are in the South African learning context, how we know they are safe and if they do support the learning process.

Conclusion. This research will provide a foundation to inform teaching practices in OT programs in South Africa, with potential transferability to other areas of HPE. It also intends to identify concepts that can inform future research on safe learning spaces with the intention of inclusivity and decolonisation.

Moving mountains: inspiring lecturers in the health sciences to reconceptualize learning experiences

C Hartmann, S Pattinson, L Kempshall, L Crous

University of the Witwatersrand, Johannesburg, South Africa

Students return to campus after the COVID-19 pandemic has left many health sciences lecturers uncertain about how they should approach teaching in the new era of blended learning. In the Faculty of Health Sciences, University of the Witwatersrand, we ran a series of 3-hour workshops based on the Arena Blended Connected (ABC) learning design framework to assist staff in reconceptualizing students' learning and their teaching. In this seaside story, we share our experiences of facilitating the workshops and reflections on participants feedback, to identify stumbling blocks which hindered participants' ability to reconceptualize the learning experiences. A teacher identity, an inability to think of learning outside of a timetable or venue and a lack of technological skills were important barriers to lecturers' broadening their ideas of teaching beyond a traditional, didactic approach. We share our experience of what assisted lecturers to move past these 'mountains' and become inspired to reconceptualize the learning experiences that they design. These insights will assist attendees as they develop their own practice and help their colleagues to re-imagine student learning.

Impact of academic interventions on success in health professions education A review of studies

G Hendricks, E Badenhorst, L McNamee, B Ige, L Pienaar, G Doyle, K Begg, J van Wyk

University of Cape Town, South Africa

Introduction. Institutions are actively increasing the representation of previously disadvantaged students enrolled in South African health professions courses. Due to inadequate secondary schooling, many students continue to face undue stress and are at risk of slow progress/academic exclusion if not adequately supported in the higher education environment. This study explored published literature to identify academic interventions, facilitators and barriers to academic success among health science students. **Methods.** A systematic search in PubMed, CENTRAL, Scopus, EbscoHost and Google Scholar from January 2017 to January 2022 was performed. We independently selected studies, extracted data, and thematically synthesised the studies.

Results. While 1 531 studies were identified from the search, a total of 18 studies were eligible for full-text analysis. Study methods included both quantitative and qualitative studies and the majority ($n=12$) reported on interventions in the United States. Only one South African study was eligible for inclusion. Our analysis indicated that student support was offered either through faculty, staff and interconnected peer interventions. Academic support was presented at course level (numeracy and English literacy courses) and class level (strategies for improving memory or retention).

Student success initiatives included optimal use of support resources, time management and skill development such as goal setting and note-taking. Other initiatives were supplemented by interconnected peer and coaching networks as well as mental health support. Barriers to academic success included demographic factors (socioeconomic status, family support, race/ethnicity), quality of previous teaching and learning and pre-entry academic factors.

Conclusion. Effective, sustainable partnerships among faculty, staff and other interconnected support structures are important to improving the teaching and learning climate to support disadvantaged students' success in higher education /or health sciences settings. Specific recommendations include the use of longitudinal analyses and ongoing monitoring and evaluation for ongoing research in this area.

Embracing asynchronistic online teaching: A social constructivist educator's story

K Henrico

University of Johannesburg, South Africa

Introduction. My teaching philosophy has always been embedded in a social constructivist paradigm. This paradigm is easily embedded in a face-to-face classroom setting. And being at a University that prides itself on face-to-face teaching, I became a master of my philosophical craft. Social Constructivism states that meaning is socially constructed, and how we make meaning of the topics discussed in class will depend on our own social context back home and the social context we are exposed to in the classroom. So, in essence we learn together and from each other (including the facilitator) in a manner that relies heavily on collaborative learning where the learners are actively involved in the learning.

Context. In 2019 I chaired an international task team as part of U21, with the goal of developing an asynchronistic, international fully online Postgraduate Diploma in Clinical Simulation. All of these concepts are somewhat unfamiliar to a social constructivist educator. Additionally, when thinking about Clinical Simulation Education, an online offering does not come to mind. Our first fully online intake was in the second semester of 2022.

Impact. It was important for me to create a community of practice and still enable the learners to collaborate on various topics and allow them to discover and construct knowledge as they interact and work together. In this seaside story, I will share some of the methods I applied to achieve this, as well as my own and my learner's experiences within this course. By integrating various technologies into our LMS (Blackboard), I managed to create a personal presence and a platform for collaborative learning for all learners, while keeping the asynchronistic nature of an online international course. Join me on a tour of my virtual classroom.

The perceptions of scenario facilitators on psychological safety

K Henrico

University of Johannesburg, South Africa

Establishing a safe container is currently seen as the best practice in simulated learning environments. This safe container refers to an environment where a level of Psychological Safety (PS) for the learner is achieved. PS refers to the belief that a learner can express their ideas and/or concerns without fear or negative consequences during a learning activity. When learners are immersed in a psychological safe environment they often demonstrate

a willingness to express themselves physically, cognitively, and emotionally. Students who participate in simulation-based scenarios often experience psychological distress during such events if they are immersed in an environment that is not psychologically safe. The onus rests on the scenario designer and facilitator to achieve learner PS. This phenomenon has been researched in the field of nursing during both the briefing and debriefing phases of simulation.

Educators that facilitate simulated scenarios can only achieve a safe container when they understand the term PS and the concepts that are associated with this topic. The aim of this study was to explore the perceptions of scenario facilitators on psychological safety at a large-scale simulated rescue training exercise. To achieve this, this study posed one open-ended question to scenario facilitators via google forms. The question elicited the facilitator's understanding of PS. This study already collected data, and data analysis is currently being done. Results will be reported on during the presentation.

This baseline study will provide insight into how the facilitators perceived PS during the rescue event. By doing so the study will provide valuable information that will allow simulation scenario designers and facilitators to incorporate the learners' PS during future simulated scenarios.

Assessing the impact of international virtual exchange on undergraduate health students' personal development and learning

Y Heymans,¹ C Strosnider,² J Pool,¹ M J van Vuuren¹

¹North-West University, Klerksdorp, South Africa

²Georgia State University, United States of America

The aim of this research was to explore how an international virtual exchange (VE) program between two universities across international borders contributes to the personal development and personal learning of undergraduate health students. The last decade has seen a significant increase in the importance of globalisation, internationalisation, global citizenship, and Global Citizenship Education (GCE) in higher education (HE) discourse. HE plays a vital role in preparing students with the knowledge, skills, and attributes to address 21st-century challenges and ensure a more socially just, inclusive, and sustainable world. However, preparing students to function as responsible global citizens requires moving beyond the transmission of knowledge. Health students, irrespective of the discipline, need to be educated to deal with complex transnational global health challenges, which demand new methods of thought, solutions, and implementation.

The qualitative research was anchored in a constructivist-interpretivism paradigm. The study population included registered second-year health and social care students from two universities across international borders (South Africa and the United States of America) (N=106). Voluntary sampling was used with 29 (n) students giving written consent that their personal reflection could be used for research purposes. Data was analysed using ATLAS.ti.

The introduction of VE was met with high praise from participants. Responses highlight the importance of including GCE in the curriculum in preparing healthcare professionals to work collaboratively across boundaries within an increasingly globalised world. Participants appreciated the opportunity to collaborate with peers from different institutions and

cultures, and to gain a deeper understanding of diverse perspectives and approaches. Participants reported improvements in skills such as cultural sensitivity, communication, collaboration, and problem-solving. This study's findings suggest that VE can be a valuable tool for promoting GCE and collaborative learning among undergraduate health students, ultimately supporting their personal development and learning as global citizens in the 21st century."

Reflective portfolio to promote critical thinking, ethics, and leadership in a Pretoria School of Medicine

S Adam, C Werner, A Turner, Y Hlophe

University of Pretoria, South Africa

In designing the new medical curriculum student attributes were selected that will facilitate a Day 1 doctor to excel. The day one doctor emanating from the University of Pretoria should reflect, think critically, and should understand how to incorporate principles of medical ethics and leadership. Literature has shown the benefits of using portfolios as a tool to promote longitudinal, continuous learning. An online portfolio will promote easy access to students to allow them to reflect at their convenience.

The aim of the study is to implement an online reflective portfolio to teach critical thinking. Introduce concepts of medical ethics and leadership to undergraduate medical students, BSc Honours students in the Physiology Department and promote Machine Learning as a tool to interpret reflective data. A rubric will be used to assess student reflections.

Results on reflections in the first pilot study on the third-year medical students, prior to clinical exposure; some students feared they would not be able to communicate adequately with patients, others indicated excitement to start clinical work. Post clinical exposure students mentioned the importance of theoretical work taught in year 1-2 of the medical degree and the importance of languages skills, teamwork when solving case studies, the need to re-visit skills taught in the skills lab. Others mentioned how the COVID-19 period disadvantaged them since they had never been exposed to long hospital hours prior to Covid-19. The importance of the nurses in the clinical setting was irrefutable. Facilitators provided feedback to students.

Hopefully, after the three pilot studies and consultation with all the relevant stakeholders the implementation of a functional, longitudinal online reflective portfolio will re-emphasize a student centered medical program. In addition the contribution of the reflection data towards a better understanding of machine learning will promote intra disciplinary and faculty research.

Exploring interprofessional education in health sciences: a South African case study

Z Hu

University of Johannesburg, South Africa

Teaching and learning are collaborative processes that require the support and participation of professionals from diverse backgrounds. This is of particular significance in the field of health sciences for future healthcare providers. Interprofessional education is recommended to strengthen students' knowledge and the sharing of good practices in the health sciences department. The implementation of interprofessional education has proven to be beneficial in preparing students for the world of work. Despite the advantages, there is a lack of studies encouraging

interprofessional education at universities in South Africa. This study was underpinned by the adapted model 'Concerned-Based Model for Student Development, as a theoretical lens. A qualitative single case study design was adopted in this study. A purposive sampling strategy was selected to recruit participants. The findings revealed that students shared a positive view toward interprofessional education. They believed interprofessional education significantly strengthened their content knowledge and practical skills collaboratively with other professions. This study contributes to the understanding of interprofessional education at a higher education institution in the South African context. It also provides an opportunity for academics to develop network learning communities with professionals in their subject areas to strengthen collaboration. Since this study was limited to the South African context, it is recommended to include participants from global higher education institutions to share good practices.

Reflections on teaching advancement at universities in health professions education

L Hudson,¹ A Abrahams,² J Du Plessis³

¹ *Cape Peninsula University Of Technology, Cape Town, South Africa*

² *University of Cape Town, South Africa*

³ *Central University of Technology, Bloemfontein, South Africa*

The Teaching Advancements at Universities (TAU) Fellowship, established in 2015, aims to develop a faculty of socially just academics in various disciplines, across all South African Higher Education institutions. It strives to build and support the professional development of academics as scholars, change driven leaders and mentors, in teaching and learning. This framework of staff development is expertly woven throughout the TAU Fellowship programme by experienced academic advisors. In this presentation, three academics, each from different institutions across the country will reflect on their expectations, observations and experience of TAU. Our reflections include synergies that we could never have anticipated, and the realization that we are fundamentally connected through our shared vision to collectively improve our learning and teaching. The communities of practice and change agent networks formed at TAU pave the way for ongoing conversations amongst participants from various disciplines who are grappling with similar teaching and learning issues, where these similarities bring them together to find solutions to common problems. We learned that change agents in education are those who are doing new things in education and who are trying to spread those ideas to improve their educational practices. Using collaborative engagement, TAU stimulated the awareness that change agents are emotional champions, developmental strategists, intuitive adapters and continuous improvers. Through an interconnected and inspiring lens, we, as Health Professions Educators, were empowered to bring to life the true spirit of Ubuntu.

Audiology students' clinical communication and information giving skills during newborn hearing screening simulations: Preliminary findings

A Kanji, J Watermeyer, N Nagdee, J Beukes

University of the Witwatersrand, Johannesburg, South Africa

Introduction. There is a growing need to include and strengthen communication skills training within undergraduate curricula and to explicitly incorporate a focus on patient-centred communication as part of

patient-centred care. Whilst this has been explored in a few international studies with traditional methods of clinical training, the current COVID-19 pandemic has brought online methods of training and practice to the forefront of clinical education. One such method of training involves the use of simulated learning opportunities. Although simulated learning can be used as a technique to supplement real world experiences, more research is needed about the use of this technique for communication skills training. This study aimed to describe students' practices of clinical communication skills when providing feedback to a simulated caregiver (standardised patient) within newborn hearing screening simulated sessions.

Methods. A qualitative research design was employed. Video recordings comprising feedback sessions during simulated newborn hearing screening sessions were analysed. A total of 10 interactions were video recorded. The analysis incorporated an interactional sociolinguistic focus examining content and students' communication strategies when providing information to patients.

Results/Findings. Findings are aimed at providing insight into what practices worked well, the challenges encountered and how these were managed by student clinicians, how information was given, rapport and how this was attended to, as well as how students engaged with simulation aspects.

Conclusion. Analysis of simulated interactions has the potential to inform the development of a communication skills training package tailored towards the needs of students during simulated consultations, and potentially facilitate their preparedness for real case scenarios.

A model for design of online health professions education faculty development courses in sub-Saharan Africa

L Keiller,¹ C Nyoni,² C Van Wyk²

¹ Stellenbosch University, Cape Town, South Africa

² University of the Free State, Bloemfontein, South Africa

The design of faculty development courses requires a contextually aware theoretical foundation. Therefore, the study aimed to determine the feasibility of a specific conjecture map as a model for designing online health professions education faculty development courses in sub-Saharan Africa through a heuristic evaluation approach. The authors hypothesise that using heuristic evaluation strengthens an educational model's theoretical basis and feasibility.

Twenty-five health professions educators from nine sub-Saharan African countries participated in this multi-phased study. In the first phase, the participants completed a survey evaluating the model and the accompanying author-generated heuristics. Then, participants' recommendations were used to make revisions. In the subsequent phase, participants reviewed these revisions and commented on the feasibility of the model within their local context. All six heuristics were revised following the initial phase, where 80 problems had been identified. Upon revision, the model was deemed feasible by all except one participant. There was a strong relationship and inter-rater agreement of feasibility between 0.84 and 0.95 regarding the model's practicality, demand, acceptability, and adaptability. Revisions to the final model and guidance documents incorporated all changes the participants recommended, confirming the model's feasibility. Theoretical models are often developed through a top-down approach, omitting the practice-based considerations that could change the formulation of the model. This study demonstrates the convergence of a theoretical and process

model with theoretical, expert and end-user data triangulation. Further research is needed to test this empirically developed model.

Correlation between academic achievement and satisfaction on e-learning courses for healthcare professionals

F Kelly

Foundation for Professional Development, Pretoria, South Africa

Introduction. Student evaluations, or student satisfaction surveys, have long been one of the main methods used in the assessment of teaching competence and quality of educational programmes. This is despite the growing evidence over the last 20 years showing that these measures are usually biased and invalid.

Methods. Academic achievement and satisfaction data from students enrolled with FPD on e-learning short courses or qualifications between 2020 and 2022 will be analysed to determine if there is a correlation between the two variables. It is hypothesised that academic achievement will correlate positively with satisfaction.

Results. This study is currently being conducted and the results will be ready for the SAAHE conference.

Conclusion. The findings from this study will assist FPD, and other institutions of higher education, in understanding and interpreting student satisfaction data. If our hypothesis is proven correct it will add to the growing body of evidence calling into question the validity and reliability of student satisfaction as a measure of educational quality.

Partnership in education – a case study of the NIMART Training programme

F Kelly, A Peters

Foundation for Professional Development, Pretoria, South Africa

Introduction. Since the roll-out of Nurse Initiated Management of Antiretroviral Therapy (NIMART) in South Africa, the Foundation for Professional Development (FPD) has offered a short course in NIMART. This theoretical training should be followed by a practical mentorship programme, managed by the Department of Health and Regional Training Centres. Little is known about what portion of nurses go on to complete the practical mentorship programme and ultimately practice as NIMART nurses. The study objectives were to determine 1) the proportion of FPD NIMART trained students that go on to complete the practical programme and 2) the barriers that prevent former students from completing the practical.

Method. Data was collected through an online questionnaire. Former NIMART students who had successfully completed the FPD course between 2018 and 2021 were invited to participate.

Results. The survey was completed by 111 respondents (response rate: 11.6%). Most respondents had either not started the mentorship programme at all (45%) or had started but not completed it (21%). Of the 32 respondents who had completed the mentorship programme, 58% were currently practicing as a NIMART nurse. From another perspective only 16% of all the survey respondents were currently practicing as a NIMART nurse. The barriers to completing the mentorship programme included lack of information, guidance, and support on how to complete the mentorship programme, lack of access to cases to complete the logbook, and challenges with finding mentors.

Conclusion. Private companies, the South African government and international donor agencies have spent millions of Rands to sponsor NIMART training for Professional Nurses working in public health facilities. Training programmes that require the participation of more than one institution or organisation need careful collaboration and coordination so that training results in increased capacity on the ground.

A safe learning environment based on the experiences and perceptions of a millennial generation

E Kempen

University of the Free State, Bloemfontein, South Africa

Evidence suggests that any learning experience should happen in a safe learning environment where students can interact, experiment and construct new knowledge. However, more information about the elements is required to create a safe learning environment for the millennial generation, especially in optometry education. This study aimed to identify the factors contributing to a safe learning environment for millennial optometry students.

Methods. An intrinsic qualitative case study was conducted with undergraduate students from the Department of Optometry at the University of the Free State, South Africa. After applying nine different teaching-learning methods based on the experiential learning cycle, students were asked to complete an open-ended questionnaire. A total number of 307 questionnaires were analysed. Two focus group interviews were also conducted to provide additional data to supplement the data and ensure the triangulation of data.

Results. Essential elements based on student respondents' opinions, feelings and perceptions were identified. Students feel safe in a familiar environment where they are familiar with each other, the educators, and the environment, e.g. the optometry clinic. Small group learning also creates a safe and familiar environment. Both these elements create an environment where they feel safe to ask questions. Students value an environment where they can learn without influencing their marks or disadvantaging the patients. They enjoy learning from their peers but also need personal contact with educators. Elements such as consistency and an achievable objective also emerged from the data.

Conclusion. These findings suggest that to respond to the real need of millennial students, insight into students' perceptions to identify their needs and the learning environment is necessary to optimise learning pedagogies. By including these elements in the training environment, optometry students can take responsibility and accountability for their learning.

Student-centered learning in knowledge transformation

M B Khatri-Chhetry

Walter Sisulu University, Mthatha, South Africa

Problem statement. The students construct the knowledge, and the lecturer is a facilitator of learning. (Kember, 1997). Lea *et al.* (2003:322) summarize student-centered learning as: "It is active learning with a deep understanding that increases the sense of autonomy, responsibility and accountability of the student with mutual respect between the learner and teacher, it is a reflexive

approach to the teaching and learning process on both teacher and learner." This study explores the effectiveness of student-centered learning.

Methods. Pre-test-post-test design, a quasi-experimental design (Pre- and post-course test questionnaires).

Results. With a 95% confidence level, there is a statistical difference between the pre and post-test scores ($p < 0.00$). The students alone struggle to grasp the gist of reading and apply it practically. The lecturer's assistance is still significant in knowledge and skill transformation.

Discussion. In March 2022, 49 first-year undergraduate students from Bachelor of Medical in Clinical Practice, WSU, were included in the study. Students were divided into five groups of eight and one group of nine. They were given one-page reading materials to read individually for 20 minutes and discuss in group for 30 minutes. Each group presented their reading to the whole group and wrote 10 extended matching questions with 25 marks.

The lecturer discussed the topic with PPT slides followed by two roles play. Then the students were divided into the group of six that were different from the previous group and practiced roleplay. At the end of the roleplay, the student wrote the post-course test of the same ten questions to compare if there was any improvement.

Limitation. It is a classroom study with small sample size, so the results are unsuitable for generalization.

Recommendation. To be conducted in a more extensive student community to evaluate whether student-centered learning can happen effectively.

Medical imaging and therapeutic sciences students' experiences of service learning

G Koch, K Naidoo

Cape Peninsula University of Technology, Cape Town, South Africa

Introduction. South Africa (SA) is portrayed as a developing country with numerous socio-economic challenges. Approximately 25% of its citizens are living below the poverty line, hence various community members, stakeholders as well as higher educational institutions (HEIs) stepped in and started contributing towards improving the lives of their fellow citizens. Service learning (SL) has been introduced in the Radiographic Management curriculum of third-year, undergraduate medical imaging and therapeutic sciences (MITS) students in the form of a service learning community project (SLCP). No study has been conducted with South African MITS students' and their experiences of SL. The researchers, therefore, aimed to explore the experiences of those students who have participated and successfully completed a SLCP.

Methods. This study followed a social inquiry approach using a qualitative research design. A purposive sampling technique was used as it allowed the researchers to select a sample positioned within the inclusion and exclusion criteria. The population of this study included all registered MITS students at the research site, from all categories of radiography, who completed a SLCP. Data collection was undertaken in two phases namely; phase one: document analysis of reflective reports and phase two: audio recorded, one-on-one interviews. Participation was completely voluntary. Thematic analysis was used to analyse the data.

Results. Participants shared their initial feelings of concern and anxiety for undertaking a project of this nature for the first time. A sense of team spirit was alluded to by many participants. A number of challenges such as transport issues and finding a service provider was also highlighted.

Conclusion. In conclusion, the findings of this study provided a fair understanding of the experiences of MITS students undertaking a SLCP. These experiences are unique due to the context and WIL component of radiography education.

Summative assessments methods in higher education coursework - A key to real-world health participation

L Koch, F Breytenbach, M van Niekerk, M Botha, B Bhagoo, T Rauch van der Merwe

University of the Witwatersrand, Johannesburg, South Africa

Introduction. Teaching and learning methods have evolved rapidly to incorporate new technologies and 21st century skills to provide a deep learning experience for postgraduate healthcare students. Deep learning is facilitated by collaboration, innovative group projects and the use of technology. However, the pinnacle of assessment – final examinations – often remains in a traditional, written, individual format. The anti-climax of current assessment methods can leave both students and educators frustrated when then deep learning in class is not reflected in exams. The aim of this presentation is to showcase a process of introducing innovative summative assessment activities to allow for critical alignment with exit level outcomes and a student's ultimate ability to apply skills to impact real-world health needs.

Methods. The Wits Occupational Therapy postgraduate team initiated a collaborative project to develop new summative assessment activities across three concurrent postgraduate courses. The process consisted of five steps: 1. Review current assessment practices and complete an exercise in critical alignment of exit level outcomes, critical cross-field outcomes and 21st century skills. 2. Brainstorm real-world measurable health participation activities that meet local and global health needs. 4. Select activities that meet the outcomes of the course and create summative assessment activities. 5. Implement summative assessment activities. 6. Evaluate process and adjust as necessary.

Results. This presentation reports on steps one through three and shares real-world summative assessment methods that engage students in real-world health needs such as writing position papers, scientific letters, policy briefs, driving advocacy campaigns through social media engagement, organizing CPD workshops and engaging in conference proceedings.

Conclusion. With creativity and innovation, it is possible to step away from the traditional written exam format and into a new form of assessing postgraduate students that truly examines their real-world skills while still encouraging high levels of knowledge integration.

Communication skills training: Forging partnerships for experiential learning

Y Kooverjee,¹ B Bolton²

¹*Nelson Mandela University, Gqeberha, South Africa*

²*Train Pain Academy (NPO), Gqeberha, South Africa*

Introduction. Communication skills are a core competency in health professions education. Medical schools have adopted many approaches in order to develop this competency. Experiential methods have been shown to enhance communication skills training. However, experiential learning is both labour- and cost-intensive, which requires innovative solutions in a

resource-constrained setting. Our solution was to recruit experts and willing partners from the wider health professional community.

Context. Nelson Mandela University is South Africa's newest medical school, with the first cohort of 50 students beginning in 2021. Clinical communication forms a core component of the MBChB I & II curriculum at our medical school. Being a new module in a new medical school, finding adequately skilled staff to facilitate teaching and learning of clinical communication was a challenge. Whilst waiting for appointments to be filled, core staff had limited availability and expertise to assist outside of their own modules. This required us to consider partnerships in the wider health professional community.

Key message. We knew what we wanted to teach. We identified an expert in clinical communication skills teaching to partner with us. Together we designed a program that we thought would be effective, with small-group experiential workshops at the core. Small-group experiential workshops are labour- and skills intensive, as each group requires a facilitator and a simulated-patient for 6 - 8 students. Making this work required us to look for partnerships in the wider health professions community.

Impact. It would have been impossible to present experiential learning for this module without the support of partnerships from outside the academic setting. These partnerships appear to have been well-received at a student level. This program could provide a model for other courses requiring intensive skills training.

Perceptions of undergraduate Oral Health Science Students on clinical teaching and teacher behavior

T Ralephaya, K A Mothup, C Mala, J Molepo

University of the Witwatersrand, Johannesburg, South Africa

Introduction. The undergraduate clinical programs include academic training in the following streams: Bachelor of Dental Science (BDS) and Bachelor of Oral Health Science – in the stream of Oral Hygiene (BOHSc).

Clinical skills are imparted by exposing students to patients through clinical clerkships. During these clerkships students acquire amongst other skills: diagnostic, patient management and patient-physician communication skills. The students rotate in different clinical disciplines in the Wits Oral Health Centre service rendering wards.

Aim. To determine the perceptions of undergraduate oral health sciences students on clinical teaching and teacher behaviour at the School of Oral Health Sciences. A convenient sample of students enrolled for BDS and BOHSc was selected to participate in the study. A validated questionnaire adopted from a study by Okoronkwo et al. (2013) was used in the study. The questionnaires was divided into three parts. Part 1 consisted of the background information of the respondents, Part 2 had eight items that focused on teaching skills for determining effective clinical teaching and Part 3 consisted of 15 items (teacher behavior) for clinical teacher effectiveness with a four-point scale ranging from strongly agree to strongly disagree.

Results. The majority of the respondents were females, 76% ($n=36$) and 61.7% ($n=29$) were in the 20 - 24 age group followed by 18 - 19-year group. All students reported that teachers had both clinical and teaching knowledge. 76% ($n=35$) reported that teachers had pedagogical knowledge and well as knowledge of subject matter (97.83%; $n=45$).

When the participants ranked the most important behaviors in a clinical setting, both groups ranked giving constructive and timely feedback and less student-teacher ratio as important teaching behaviors. The direct entry group also added empathy as being important while, the graduate entry group ranked Authoritativeness as important.

Conclusion. The perceptions of students are crucial in improving clinical teaching.

Feedback: People matter

A Lupton-Smith,^{1,2} N Herman³, S Schmutz^{1,2}

¹ Stellenbosch University, Cape Town, South Africa

² Centre for Health Professions Education, Cape Town, South Africa

³ Centre for Teaching and Learning, Cape Town, South Africa

A poor understanding of feedback may severely hamper its effectiveness towards the learning and lifelong development (Boud & Molloy, 2013; Carless & Boud, 2018; Carless, 2020). Therefore, an understanding and appreciation of feedback by students is essential (Carless, 2020; Malecka, Boud & Carless, 2020; Molloy, Boud & Henderson, 2020). Student perceptions and experiences of feedback has not been explored in the Division of Physiotherapy at Stellenbosch University (SU). The aim of this study was to explore undergraduate physiotherapy students' perceptions of feedback in the Division of Physiotherapy at SU.

A explorative, descriptive qualitative design within an interpretivist paradigm was used. Data was generated from semi-structured interviews. All fourth year physiotherapy students at SU were invited to participate and the first 12 volunteers were included. Data was analysed using thematic analysis (Braun & Clarke, 2006, 2021; Nowell et al., 2017) using Atlas.ti version 9.1.2 (ATLAS.ti Scientific Software Development GmbH, Germany). Ethical approval was received from SU and all participants provided informed consent.

The preliminary findings are presented. Four themes were identified namely: feedback is underpinned by relationship; responsiveness is enhanced when the person is at the centre; there is a strong affective component to feedback; feedback is towards more than academic improvement. It is apparent from these themes that the people involved in feedback matter and the effectiveness of feedback is dependent on the interplay between the self and others involved in the process. Feedback was perceived to be more than an academic or cognitive exercise but also contributed to personal and professional growth and was underpinned by a dialogue.

The study highlights that all people engaged in feedback, should give attention to the other individuals involved and the intertwined relationships. Everyone involved needs to be aware of what they bring to the feedback engagement and the dialogue which ensues.

The development and use of a novel clinical vignette in blended learning for simulation-based learning

A Makkink

University of Johannesburg, South Africa

Introduction. Case-based learning (CBL) is an important teaching tool for encouraging students to think as medical experts. Using blended learning principles to present a case where students can choose which information they require has the potential to improve learning where contact time is limited, as was the case during the COVID pandemic or where access to simulation facilities may be limited.

Context. This seaside story uses a *de novo* online clinical vignette as a foundation for a blended, case-based learning vignette that used follow-on Blackboard activities. This system was postulated to improve student interaction, access to guided practice and to improve the learning experience. Student users were positive about the online CBL vignette and indicated that it provided several advantages to improved learning within the practical simulation environment, including improved confidence. In addition, integration with existing knowledge and other subjects was confirmed and immersion was improved. Benefits identified by student users included improved understanding of the real world of practice and encouraging thinking out of the box. There were suggestions that more multimedia would be a valuable improvement as well as students having access to additional similar activities. The program will begin with an introduction to the vignette and the relevant links to literature. A short introduction will be provided after which attendees will be given access to the system to familiarise themselves with how it works from both a student and facilitator perspective. Sharing the experiences related to this online vignette may encourage other educators to consider similar teaching and learning adjuncts.

The simulation tool limiting assessment bias (satlab) for simulation assessments: an evaluation of inter-rater reliability

A Makkink, I Mabina

University of Johannesburg, South Africa

Introduction. Healthcare training programs must ensure that students and graduates have the necessary learning opportunities and are assessed using appropriate methods to ensure competence. The Simulation Assessment Tool Limiting Assessment Bias (SATLAB) was conceptualised with the aim of addressing some of the perceived limitations in simulation-based assessment and uses a hybrid system developed by combining attributes of global rating scales and checklists. One of the core aims of SATLAB was to improve reliability in assessment. The aim of this study was to determine inter-rater agreement between assessor pairs using SATLAB.

Methods. The study followed a cross-sectional design that used retrospective data from a cohort of first-year simulations conducted and assessed using the SATLAB at a South African university. Ethical approval was granted by the university's REC. Data were analysed using SPSS (v27.0) and Intraclass Correlation Coefficient (ICC) was used to compute the reliability estimator between each assessor pair using the two-way mixed method with absolute agreement at 95% confidence limit. A value greater than 0.90 depicted excellent agreement, values between 0.75 and 0.9 depicted good agreement, values between 0.5 and 0.75 depicted Moderate agreement, and values less 0.5 depicted Poor agreement.

Results. A total of 9 328 data points made up the sample. Inter-rater percentage agreement ranged between 30,6% and 88,9%. ICC between assessor pairs had varying results with two assessor pairs demonstrating excellent agreement, 16 good agreement, five moderate agreement and 3 poor agreement.

Conclusion. This study provides evidence that the SATLAB produces good levels of inter-rater agreement that can potentially be translated into improved reliability and validity in simulation based assessment. The SATLAB is therefore a potential assessment method to be considered when seeking to improve reliability and validity of simulation based assessment.

Making a rural-workforce: Exploring influence of habitus in the professionalisation of HSS from rural SA

N Mapukata

University of Cape Town, South Africa

Background. The chronic shortage of health care professionals (HCPs) is a global challenge. In rural South Africa, this shortage is compounded by maldistribution of health workforce. In response, the World Health Organization developed guidelines for the transformative scaling of health professions' education, to ensure sustainable expansion and to include reforms to training so that outcomes are goal-oriented. In reflecting on these recommendations, it is prudent to take into account particular circumstances in South Africa that have influenced the development of health workforce.

Objective. To describe the lived experiences of students of rural origin and determine the influences of the learning environments as these students adapt to become HCPs.

Methods. I employed a Bourdieusian lens to operationalize habitus and used a collective case study design to generate deep conversations with final-year health sciences students (HSS) of rural origin studying at the University of Cape Town. I extracted data from in-depth interviews ($n=21$) and journal reflections ($n=10$) using Saldana's four-phased approach.

Results. Through this study, I present theory of practice as a relational multiprofessional framework as it was possible to document the different forms of capital that HSS of rural origin had access to. The university provided opportunities for their habitus to constrict and dilate in different phases. Participants experienced a series of transformative shifts that accrued benefits for patients whilst some had to navigate incidents of racism and discrimination.

Conclusion. This study made it possible to trace inherent values and strengths of rural communities that have often been overlooked in previous studies and confirmed a role of primary health care centres as spaces for multidisciplinary teamwork and reciprocal learning. A policy review is proposed to address the underpreparedness of rural students for post matric education and a multimodal approach is recommended in the making of a rural health workforce.

The role of habitus in facilitating rural health sciences students' adaptation to a SA university

N Mapukata

University of Cape Town, South Africa

Background. In making a rural workforce, scholarly evidence attests to equitable access to healthcare if students are drawn from rural communities. Yet, even with directed efforts to increase the number of rural students registering for programs offered by faculties of health sciences, rural students remain underrepresented. This significantly hampers efforts to increase the number of health care professionals particularly those willing to work in rural areas. Habitus as a theory and methodological approach is used as a tool to unpack the dispositions that are required in character-building and components that contribute to an academic habitus. In a university setting, habitus is seen as a formative influence on how students from different social classes engage with the education system. Consequently, acquiring a professional identity is a journey that must be understood within the construct of a university and its historical context.

Objective. To examine the role of habitus as rural students adapted to become health sciences students (HSS) at the University of Cape Town (UCT).

Methods. Emanating from a larger PhD study, this study employed a qualitative design approach. Twenty-one in-depth interviews were conducted to explore the journey of rural origin students ($n=21$) as they adapted to becoming HSS at UCT.

Results. Findings revealed three themes that confirmed duality of their habitus. Whilst access to UCT was associated with an aspirational habitus, becoming a HSS presented numerous challenges. Their levels of disorientation were attributable to unmet expectations, workload and class stratification. Participation in sports, church, friends, group work and professional socialization facilitated adaptation to UCT culture.

Conclusion. Navigating through a transforming habitus culminated into experiences of 'living in two worlds at the same time'. A range of emotions highlighted the time it takes for rural origin HSS to acculturate to UCT, and the impact thereof on their mental health.

Standards for Scaffolding in Health Sciences Educational Programmes: A Global Consensus Study

B Masava,¹ C Nyoni², Y Botma²

¹ *Paray School of Nursing, Thaba-Tseka, Lesotho*

² *University of the Free State, Bloemfontein, South Africa*

Introduction. Health sciences programmes operate in complex, unpredictable contexts, underscoring the need for scaffolding of the learning processes. Yet, the scaffolding approaches remains fragmented, and lacks a shared approach of how programmes could maximally benefit from integrated scaffolding. Standards have the potential to promote comprehensive implementation of educational practices such as programmatic scaffolding. There are no reported standards related to scaffolding practices in these programmes.

Aim. To develop standards for scaffolding in health sciences educational programmes through global consensus.

Methods. An online modified Delphi technique, following the recommendations on Conducting and REporting of DELphi Studies (CREDES), was applied. An international panel, drawn from diverse geographical and professional backgrounds using purposive and snowball sampling, refined draft standards. Descriptive statistics was utilised to analyse demographic data and consensus agreements for the inclusion of standards and criteria. Qualitative analysis of textual comments ensured the synthesis and inclusion of critical divergent views and additions.

Results/Findings. A total of 22 experts drawn from around the globe agreed to participate in the study. Most experts ($n=18$) held a PhD; and an average of 19 years' experience in health sciences Education. Four standards and 27 criteria were included after achieving consensus during the two Delphi surveys rounds. The standards focused on areas such as structuring and sequencing educational activities, resources/tools for scaffolding, structuring the programme, and instructional strategies that support learning.

Conclusion. The principle-based standards developed in this study could direct, support and evaluate scaffolding practices in health sciences programmes. The standards' emphasis on macro-, meso- and micro-scaffolding, present numerous opportunities for design and application of contextually sensitive scaffolding strategies at every level of curriculum implementation.

Usability of standards for scaffolding in a health sciences programme: A feasibility study

B Masava,¹ C Nyoni², Y Botma²

¹Paray School of Nursing, Thaba-Tseka, Lesotho

²University of the Free State, Bloemfontein, South Africa

Background. Global educational standards, developed through a rigorous consensus approach, has the potential to enhance the efficiency and quality of health sciences education. However, these critical standards are socially constructed and often associated with varied interpretations, underscoring the need for their testing for contextual feasibility and adaptability in health sciences programmes.

Aim. To describe the usability of standards for scaffolding in a health sciences programme.

Methods. A multi-method design described the standards usability in a three-year pre-registration nursing programme in a low-resource setting. Panelists with experience in discipline and context of the programme were purposively sampled. Data collection occurred in two phases: user-based and an expert-based usability evaluation. The users compiled a self-assessment report of scaffolding practices in the programme. The panel used an author-generated heuristics checklist and findings from the self-assessment to support or refute any of the standards. Descriptive statistics were applied to determine the standards' degree of conformity and non-conformity against the stated heuristics. Comparative and content analysis identified usability flaws from the completed heuristics checklists and verbatim interviews from the users.

Results. The experts shared an average of 16 years of experience in teaching in higher education, quality assurance and programme accreditation. Generally, the standards were usable, with fourth standard obtaining the highest usability score of 27. Seven usability strengths and three usability flaws were identified. Usability flaws were on challenges on misinterpretations of terminologies, and lack of evidence on some standard's criteria.

Conclusions. The standards were applicable and useful in evaluating and enhancing scaffolding practices in a selected programme. The pilot study served its purpose to reveal the context-based 'truth' regarding the fidelity of a health sciences programme evaluation on scaffolding, as well as identifying the best contextual conditions in which the standards for scaffolding health sciences programmes would work best.

Perceptions of HIV infection risk by public health students at an education campus in Botswana

S F Matlala,¹ K Malefho^{1,2}

¹University of Limpopo, Polokwane, South Africa

²Institute of Development Management, Gaborone, Botswana

Introduction. Countries build higher education institutions and invest in health sciences students as they are the future health professionals. It is therefore important to ensure that students are healthy so they can grow to become health professionals and increase the human resource for health. Despite many preventive efforts, HIV infections continue to climb amongst students and other young people, leading to AIDS remaining the leading cause of death globally. Higher education campuses have been identified

as high-risk settings for HIV infection, therefore, exploring students' views about their risks to HIV infection may help in designing innovative interventions.

Methods. A qualitative, exploratory, descriptive study using semi-structured interviews with purposively selected second year Public Health students was conducted. Individual interviews continued until data saturation was reached and all interviews were audio-recorded. Ethical issues of voluntary participation, ethical clearance and permission from authorities were observed. Audio recordings were transcribed verbatim and analyzed thematically. The study satisfied trustworthiness criteria for qualitative studies.

Results. Due to data saturation, 5 female and 3 male students participated in the study. Four themes and 12 sub-themes emerged. Themes include acknowledgement of risk to HIV infection, witnessing various risk factors for HIV infection among students, fear of HIV infection and challenges with disclosure of HIV positive status.

Conclusion. Acknowledging the risk may lead to behavior change while existence of risky behaviors is concerning. These findings provide health promotion officers with valuable information for planning of appropriate interventions to ensure that students remain healthy until they graduate as health professionals.

Prevalence and knowledge of risk factors of self-medication practice among health sciences students

S F Matlala, R Mphahlele

University of Limpopo, Polokwane, South Africa

Introduction. Self-medication is the use of medicines to treat self-diagnosed illness without supervision of a health professional. It is a major public health problem and poses health risks due to incorrect self-diagnosis, incorrect administration, and failure to recognise contradictions, and drug interactions. Self-medication has a high prevalence among health sciences students worldwide. Students do self-medication due to convenience and their assumptions that they are already competent to prescribe. Given its worldwide prevalence and its risks, it is important to determine its prevalence amongst health sciences students at a university in South Africa, as well as determine students' knowledge of its risks.

Methods. We used a descriptive cross-sectional design. Participants were health sciences students studying to become nurses, pharmacists, and medical doctors. The population was 286 stratified proportionally into the three categories. A self-developed and validated questionnaire was used to collect data. Research ethics were observed. Data was analysed using SPSS (version 27.0) using descriptive statistics. Numbers, percentages, and cross-tabulation were used to present categorical variables while mean and median were used to present continuous variable (age). Knowledge of risk factors was tested using inferential statistics (chi-square).

Results. Prevalence is high (95.1%), with females (57%) higher than males (43%). The most prevalent reasons were long waiting time in health facilities, being busy with studies, and cost savings. Conditions includes headache (87.9%) followed by cough and common cold (63.2%), as such, analgesics (85.3%) and cough suppressants (60.7%) were commonly used medicines. High percentages of students are aware of drug toxicity (68.8%), adverse drug reaction (65.1%), incorrect diagnose and choice of treatment (59.6%) as risks.

Conclusion. Self-medication is high among health sciences students, as such they should be educated on the risks to improve their knowledge and change their practice. Facilitating students' access to appropriate health services on campus may reduce self-medication practice.

Identifying learning needs to enhance clinical competence of new graduate nurses in the public hospitals

K Matlhaba

University of South Africa, Pretoria, South Africa

Background. Development of clinical competence is a process and a new qualified nurse in the early stages of the continuum may be at the novice or advanced beginner level. Nurses' skill and knowledge level increases over time with clinical experience which may take more than 12 months for the new qualified nurses to feel comfortable and competent in the working environment. Therefore, the first two years in the profession post-graduation, is regarded as the transition period that is a process triggered by a change as the new graduate registered nurse is transitioning from student to professional life.

Objectives. To report identified learning needs of new professional nurses to enhance their clinical competence to ensure that they are able to provide excellent quality nursing care to the patients with confidence. The study was conducted at seven public hospitals in the three districts of the North West province, South Africa.

Methods. A qualitative approach was used to understand the perceptions of operational managers regarding the learning needs for new graduate nurses to enhance their clinical competence. A purposive sampling was used to recruit operational managers who are direct supervisors of new graduate nurses.

Results. Four themes emerged from data analysis, which are (i) ethos and professional practice; (ii) management and leadership skills; (iii) assessment and observation skills and (iv) documentation and record keeping.

Conclusion. This study provide valuable information regarding the learning needs of new graduate nurses. These identified learning needs can be considered gaps that needs more attention and further research during the training and preparation in the nursing programmes. Understanding these learning needs can provide insight into how to better transition student nurses to registered nurses so that they are able to adequately and safely take care patients and work successfully as new nurses.

Virtual practical examination for student nurse educators during COVID-19 pandemic: A narrative review

K Matlhaba

University of South Africa, Pretoria, South Africa

Background. Assessment is a crucial element of any effective teaching and learning strategy at all stages of education, primarily for higher education particularly human and health sciences. Since the disruptions caused by COVID-19 pandemic, research studies have mostly focused on the effectiveness and relevance of e-learning in teaching and learning in nursing education. However, there is a gap in the literature exploring challenges and opportunities relating to virtual health science education practical examination for student nurse educators. Therefore, this review aimed to address this gap and provide recommendations for future research.

Objective. This narrative review synthesises the current evidence on

opportunities and challenges presented by Health Sciences Education practical examination for student nurse educators during COVID-19 pandemic.

Methods. The review search was conducted in Google Scholar, PubMed/MEDLINE, Science direct, Directory of Open Access Journals, Complementary Index, SCOPUS, and Cumulative Index to Nursing and Allied Health Literature (CINAHL). To answer the review question, an adapted narrative literature review process was followed. The Joanna Briggs Institute Critical Appraisal tools was used for quality appraisal for qualitative and quantitative studies. The search was conducted between August and November 2022 with the search terms include 'online practical assessment', 'virtual practical assessment', 'e-assessment practical tests', 'electronic assessment practical', 'digital practical assessment', 'virtual practical examination', 'student nurse educator', 'student nurse lecturer', 'student faculty nurse' and 'student nurse teacher'.

Results. The following aspects are discussed (i) Opportunities including benefits to both student nurse educators; facilitators and institutions (ii) Challenges with accessibility and connection, and attitudes of students and facilitators.

Conclusion. Virtual practical examination in Health Sciences Education has proven to be controversial among scholars due to opportunities and challenges presented during the COVID-19 pandemic and also opportunities which are believed to be beneficial to both the students, the facilitators as well as the institution.

Implementing required mental health first aid training in a doctor of pharmacy program

K McKeirnan, K MacCamy, J Robinson, M Willson

Washington State University College of Pharmacy and Pharmaceutical Sciences, Spokane, United States

Background. Mental Health First Aid (MHFA) is an eight-hour course that teaches participants to identify, understand, and respond to signs of mental illnesses and assist individuals experiencing a mental health crisis. In 2022, MHFA training was added as a required component of the Applied Patient Care (APC) laboratory course series that is required each semester of the didactic curriculum. The objective of this work is to describe the implementation of MHFA training for student pharmacists in the didactic Doctor of Pharmacy curriculum at a college of pharmacy and to evaluate students' perceptions of the training.

Methods. Three faculty members participated in a MHFA train-the-trainer program between November 2021 and January 2022 in preparation for training to student pharmacists during spring semester. Pre- and post-training surveys were developed and administered to evaluate the students' perception of the MHFA training. The survey included yes/no and Likert-scale items. Data were analyzed using the Mann-Whitney U Test.

Results. A total of nine MHFA trainings were offered in the APC laboratory courses during January and February 2022. Ninety-nine percent of eligible students ($n=237$) participated in MHFA training. Survey responses revealed 48% of student pharmacist participants reported knowing someone who may be in a mental health crisis and intending to reach out to that person, 28% reported knowing someone who may be at risk for suicide and intending to reach out to that person, and 24% reported intending to personally seek help for their own mental health.

Conclusions. MHFA training was successfully implemented as a required component of a didactic curriculum in a Doctor of Pharmacy program. Similar programs could be implemented in other colleges and school of pharmacy worldwide to offer students training on caring for the mental health of themselves and their patients.

Obstetric violence as a Seaside Story

V Mitchell,^{1,2} P Segalo³

¹ University of Cape Town, South Africa

² University of the Western Cape, Cape Town, South Africa

³ University of South Africa, South Africa

When we think about a seaside story our minds move towards fun in the sunshine with the beautiful sight and sound of rhythmic waves lapping onto the seashore. In a similar way, when our thoughts move towards childbirth, ideas of gentle kindness and nurturing are foregrounded as we imagine the movement and entry of a new life into this world. Being competent and skilled at supporting birthing individuals is a core curricular need for undergraduate medical students. They enter their obstetrics clinical rotation feeling excited about taking on the responsibility of facilitating births. However, less visible is their nervousness and trepidation fueled by what they have heard from others.

Our presentation will focus on obstetric violence - a harsh reality both locally and globally. With the expanding recognition of the enormity of this problem, there is an urgent need for alternative thinking combined with imaginative doing to engage in shifting established practices in which abuse, neglect and mistreatment of birthers has become normalized. Students helplessly witness these events in their efforts to learn.

We will showcase a transdisciplinary project that illustrates and illuminates disrespectful birthing experiences through sewn artifacts created by an embroidery initiative with a women's community collective in Gauteng. The images act as knowledge-building visual forces that reflect the everydayness of the violences experienced by these 17 women, resonating with students' anecdotal stories at the University of Cape Town. These images have the potential to disrupt the current practices and to act as a tool of advocacy to promote respectful maternity care and more acceptable role modelling for student learning. Furthermore, our project moves beyond the boundary of medical and midwifery training into a collaboration that involves intersectionality across disciplines and communities. It breaks through traditional bounded academic work highlighting the power of patient voices.

Enhancing student nurses' ethical competence using hi-fidelity simulation

M Molabe

University of Johannesburg, South Africa

Background. The rapid progress in electronics, communication technology and artificial intelligence has enhanced the world of simulation in nursing. The 4IR has shaped the world over the last few centuries with the advent of "the steam engine; the production line; the computer; and the internet, and the latest revolution merging the physical and virtual domains. Nursing education must keep abreast with the industrial revolutions. Hi-fidelity simulations offers an innovative teaching approach that mimics a vital aspect of clinical cases.

Objectives. To identify and explore ways in which hi-fidelity simulations

could enhance ethical competence for student nurses at a higher education institution in Johannesburg.

Method. A qualitative, exploratory, descriptive, and contextual research design was used. The population was nurse educators teaching ethics, and nurse educators and clinical nursing preceptors using high fidelity simulations at a selected higher education institution in Johannesburg. Purposive sampling was used for the study. In-depth, online, individual interviews were employed to collect data until data saturation was reached. Giorgi's thematic descriptive data analysis method was employed for data analyses and provided four themes and ten related sub-themes. This paper focuses on the use of high-fidelity simulations to enhance student nurses' ethical competence.

Results. High-fidelity simulation devices, such as computerised manikins that perform human functions realistically, have been seen to enhance student nurses' ethical competence as they allow student nurses to practice skills and interventions in a more artificial and less threatening environment, allowing them to integrate theory into practice.

Conclusion. This presentation will show how fidelity-simulations enhances student nurses' ethical competence through stimulating their thinking and augmenting their knowledge of ethics.

Assessment overdose and side-effects: The causes and impact of test-anxiety in pharmacy students

C Mostert, C Van Wyk, M Julyan

North-West University, Potchefstroom, South Africa; University of Free State, Bloemfontein, South Africa

Introduction and aim. Assessment is a process of evaluating evidence students provide regarding their attainment of the competencies set out in a qualification. Assessment affects learning and anxiety levels in profound ways. Results in a self-administered questionnaire were reported, inquiring into pharmacy students' experiences of assessment, including the modules and assessment types in which they experience the most anxiety and reasons cited as the cause of anxiety and the impact of assessment pressure in their lives.

Methods. A quantitative study was conducted by statistically analysing the data obtained from a self-administered questionnaire. The target population included 170 final year North-West University pharmacy students, resulting in 110 completed questionnaires.

Results. Pharmacy students reportedly experienced the most test-anxiety in Pharmacology (54%) and Pharmaceutics (30%). The assessment methods in which they experienced the most anxiety were oral assessments (87%), invigilated tests (56%), big class tests (46%). The top three reasons for test-anxiety were cited as: Workload (67%), ineffective communication (36%), and content difficulty (33%). Students (60%) agreed that the pressure experienced during assessment negatively impacted their life. The aspects of life which were most affected by the negative impact of assessment were cited as physical health (19%), emotional demeanour (14%) and quality of life (12%).

Conclusion. There are various reasons why final year pharmacy students experience test-anxiety and many contributing factors. The impact of test-anxiety affects aspects of students' lives negatively in a significant way.

Gender differences in quality of life among first-year medical students

A Mostert, M P Jama, G Joubert, L J van der Merwe

University of the Free State, Bloemfontein, South Africa

Introduction. Female medical students experience more stress, emotional exhaustion, and burnout than their male counterparts. There is limited data regarding gender differences in the quality of life (QoL) domains of undergraduate medical students in South Africa. The aim of the study was to compare the QoL domain scores (physical health, psychological health, social relationships, and environment) of female and male University of the Free State (UFS) first-year medical students.

Methods. A quantitative cross-sectional study was done using the self-administered WHO Quality of Life Abbreviated Version (WHOQOL-BREF) questionnaire with additional demographic information, including gender. The anonymous questionnaire was made available online (Evasys system) to the target population, including all 195 first-year medical students from the Faculty of Health Sciences, UFS.

Results. The overall response rate was 39% ($n=76$), of whom 29 (15%) respondents were male and 47 (24%) female. In each quality of life domain, the mean QoL scores (0 - 100) were lower in female respondents. The order of the female respondent's quality of life domain scores (lowest to highest) were psychological health (58.4), social relationships (59.1), physical health (62.2), and environment domain (67.3). In contrast, male respondents' quality of life domain scores were ranked (lowest to highest) as follows: social relationships (69.1), physical health (73.3), environment (73.7), and psychological health (74.8). Statistically significant differences were shown between the physical health ($p=0.0091$) and psychological health ($p<0.0001$) domains of male and female respondents.

Conclusion. All four QoL mean domain scores were lower in female respondents, with statistically significant differences for the physical and psychological health domains. Female students may be at an increased risk for mental health and wellness issues, which should be addressed in planning support initiatives. Web-based support services can be developed to address challenges related to the quality of life, e.g., sleep and rest and negative feelings.

Self-care behaviours and practices of professional nurses working in primary healthcare clinics

M Muhlare

University of Johannesburg, South Africa

Methods. A quantitative, cross-sectional and comparative descriptive research method, was used to conduct the study on professional nurses working in primary health care, City of Johannesburg, Gauteng. Stratified random sampling was used and 209 professional nurses participated. A demographic questionnaire, Self-care Activities Screening Scale (SASS-14), Nature of Supportive Work Environment questionnaire, and Self-care Work and Home Environmental Factors (SWHEF) questionnaire were combined.

Results. The finding revealed:

- Health Consciousness: 86.6% of professional nurses are alert to changes with their health and 75.2% constantly exam their health.
- Sleep: 62.2% of professional nurses do not find moments to be more connected to self and 66% rarely sleep 7-8 hours a day
- Intra and interpersonal coping skills: 77.6% of professional nurses do not do any physical activities e.g., exercises.

- Nutrition: 71.7% of professional nurses do not eat fruits and vegetables regularly and 59.4% rarely eat healthy foods (less sugar, salt, fried snack).
- Supportive work environment: 70.8% of professional nurses do not feel valued, respected in their job, while 69% do not receive good support and guidance from their seniors.

Conclusion. The study determined there is a need for self-care and supportive work environments for professional nurses working in primary healthcare settings. Without awareness and the promotion of self-care and supportive work environments, professional nurses will continue to experience a negative perception of themselves and their work environment as they continue caring for their patients, families and communities.

Factors impacting the transfer of online pre-clinical skills training to facilitate a blended learning model

L Enoch, R Abraham, V Singaram

Nelson Mandela School of Medicine, Durban, South Africa

Introduction. During the SARS-CoV-2 pandemic, various online instructional strategies were piloted in clinical skills training. The sudden transition to the remote platform circumvented the rigorous planning associated with curriculum reform. This study aimed to explore students' and tutors' perceptions of factors that promoted or hindered successful learning transfer and to propose a blended conceptual model to guide affective, cognitive, and psychomotor clinical skills training in the pre-clinical phase of medical education.

Methods. A mixed-method quasi-experimental study assessed third-year students' transfer of clinical skills and knowledge following online learning in 2021. Students and their tutors completed online surveys with open and closed-ended questions regarding factors influencing their experience of the adapted teaching methods. Descriptive statistical analysis was used for the quantitative data. Qualitative responses were thematically analyzed.

Results. One hundred fourteen students (48%) and seven tutors (100%) responded to the surveys. The questionnaires' internal consistency and construct validity were determined using Cronbach's α -Coefficient. There was an overall positive response (86%) to the acceptability of the online clinical skills programme. Using online simulations with targeted onsite practice was reported as effective in clinical skills training. Tutors perceived students as well-prepared for the skills laboratory. Five emergent themes, qualified by a linear model of asynchronous and synchronous online and onsite teaching with the evaluation of the instructional design and institutional support, informed the proposed blended learning guide for clinical skills training in the pre-clinical phase.

Conclusion. Blended clinical skills learning that included the flipped classroom concept was well-accepted. Virtual patients proved a convenient cognitive preparatory tool for skills training and potentially optimised teaching delivery. This study found that the adapted teaching frameworks incorporating an online clinical skills component into a modified onsite curriculum augment learners' transfer of knowledge to the clinical skills laboratory. An integrated five-step blended model is proposed for future interventions.

Reviewing academic coordination on the rural distributed training platform in South Africa

J Muller

Stellenbosch University, Cape Town, South Africa

Introduction. Challenges and facilitators to distributed training are well documented in the literature, which include increased distance from the academic home, human resources for health challenges, student access to support systems and identifying learning environments to match learning outcomes. In the case of the Rural Clinical School (RCS) in the Western Cape, 'academic coordinators' were employed on site to fulfil the role of coordinating and supervising student learning and community engagement.

Methods. Qualitative research exploring the history and development of the RCS conducted in 2017 included semi-structured individual and focus group interviews with consenting academic coordinators. Their experiences of developing and working on a rural distributed training platform in South Africa were explored. Data were inductively analysed. Ethical approval and institutional permission were obtained for this study and all participants provided consent.

Findings. In addition to previously published challenges that clinical supervisors who are employed by the health system face, the RCS academic coordinators also reported facing challenges related to professional isolation, boundary blurring between providing student support vs acting as clinical educator, juggling multiple line-managers and administrative responsibilities, navigating the new field of academia, and not having the potential for career progression.

Conclusion. Reflecting on the expressed needs of the RCS academic coordinators four conditions that may promote sustained and continuous academic coordination at rural or remote distributed training sites are explored. Namely 1. Living and working local 2. Having a dual role in academia and the health system 3. Having access to academic support and 4. Regular engagement with the academic home. These recommendations can be adopted to optimise and sustain academic engagement on the distributed training platform especially in light of the current expansion of health professions training and subsequent need to attract and retain clinician-academics in remote locations.

The educational partnership in interprofessional collaboration (EPIC): from zero to hero

J Muller, L van der Walt

Stellenbosch University, Cape Town, South Africa

Introduction. Initiating and establishing interprofessional education (IPE) at a health sciences faculty is not a new idea, actualizing proposals and getting buy in from various departments is a well-documented headache across the globe and countless guidelines exist as to how to do it right. This seaside story shares the experiences of a faculty team still in its honeymoon phase of developing opportunities and integrating IPE into existing programmes by harnessing catalysts to promote their cause. We would like to share the objectives, activities, and outcomes of this whirlwind experience as we forge our way along this EPIC journey.

Context. During 2022 the Stellenbosch University Centre for Health Professions Education was challenged to include IPE in their strategic plan and the promotion of IPE across all programmes was recommended. Subsequently a think tank for an educational partnership in interprofessional collaboration (EPIC) game plan was initiated in the simulated clinical skills unit in September.

Key message. This story explores the process from conceptualisation, initiation and implementation including the facilitators and opportunities that helped make this initiative move forward and the outcomes to date.

Some of which include a faculty development workshop on interprofessional education and collaborative practice with representatives from 15 academic departments; the birth and remit of the EPIC special interest group which has representatives from all 6 professional programmes; and the development and implementation of a Faculty IPE calendar for 2023 inclusive of 10 IPE opportunities.

Impact. As every honeymoon phase has its end, we will present our proposed sustainability plan with the limited resources we have and open the door for discussion and guidance from sages who have been running this marathon for a long time.

Coloniality of medical education in South Africa

H T Musarurwa

Walter Sisulu University, Mthatha, South Africa

Medical education in South Africa was deeply influenced by colonialism, which imposed Eurocentric norms and values that favoured the needs and interests of colonial settlers over those of the indigenous population. This resulted in a medical education system that was exclusive, biased, and inadequately prepared to meet the needs of the majority of South Africans. The legacy of colonialism in medical education has contributed to persistent health disparities, with marginalized communities suffering from higher rates of preventable diseases and poorer health outcomes. Addressing the coloniality of medical education in South Africa requires a critical examination of its historical roots, as well as the development of more inclusive and culturally responsive medical education programs that better meet the needs of all South Africans. The challenge of coloniality must be met with a commitment to rectifying past injustices and ensuring that medical education serves the interests of all people, regardless of race, ethnicity, or socioeconomic status.

Assessment quality assurance for first year, basic medical science module at a new medical school

S Nagiah,¹ P Caiger,¹ E du Toit,¹ S Schoeman²

¹Nelson Mandela University School of Medicine, Gqeberha, South Africa

²Kent and Medway Medical School, Canterbury, United Kingdom

Introduction. The first medical school in Gqeberha adopted an integrated spiral curriculum approach to deliver the basic medical sciences. This is done via a single year-long module comprising fundamental concepts in physics, chemistry, biochemistry, cell biology, and human anatomy and physiology. Rigorous evidence-based blueprinting and item review processes were developed to ensure constructive alignment and optimal item development for assessments.

Methods. The blueprinting strategy used the relative curriculum weight (learning objectives) of each learning event, and the importance of the topic covered in the context of the module and programme. This approach generates a percentage contribution of each event to the module's assessment. The number of assessment items (questions) per learning event is calculated to reach the desired overall number of test items to deliver a valid and reliable assessment for the module's learning.

Pre-test development of items is done through regular interdisciplinary peer-review sessions, including item-writing training to contributors. Input from specialists in various fields further facilitates integration of various disciplines. Post-test quality assurance on the assessment as a whole and

individual items are done using test level and item analysis statistics to establish the reliability of results obtained and to flag any flawed items for review. This data advises on categorization of items based on the quality within the question bank.

Findings and conclusion. This process allows the curriculum to be adequately represented and assessed, supporting the validity and reliability of the assessments. The involvement of academics who teach in subsequent years in the review processes facilitates vertical curriculum alignment to support retention of knowledge in students to meet degree outcomes. Academics can further refine and make assessment adjustments to the module in an evidence-based approach using reflective practice. The collaboration of academics from different scientific and healthcare disciplines encompasses the integrated nature of the MBChB programme.

Medical imaging and therapeutic sciences students' reflections from a service-learning community project

K Naidoo, G Koch

University of KwaZulu-Natal, Durban, South Africa

Introduction. A service-learning (SL) component was integrated into four undergraduate medical imaging and therapeutic sciences programmes. The students were tasked to partner up with a community partner of their choice and a service provider to deliver a service to their community partner. As part of an assessment outcome, students were asked to reflect on their individual journeys whilst engaging with their respective projects. Therefore, the aim of this study was to explore the reflections of these students who have undertaken and successfully completed a service-learning community project.

Methods. The Gibbs' Reflective Cycle was used as a methodology for effective reflective practice. Students were provided with guidelines on how to incorporate the model to achieve constructive reflections. Data was analysed thematically to obtain common themes and subthemes. Students were purposively sampled.

Results. Eleven students volunteered to participate in the study and provided permission to access their reflective reports. Students indicated initial feelings of anxiousness for undertaking such a large project, however, most students acknowledged that they had developed managerial skills. This project provided a new perspective for many students for how they view their patients that they provide a radiological service for.

Conclusion. In conclusion, this task provided educators with valuable insight into the experiences of students undertaking such a project which can now be used to improve the facilitation of SL. Additionally, this project has resulted in a transformation of the students' outlook and has resulted in an enhanced professional appreciation for their roles as aspiring radiographers.

Readiness of medical and nursing students at the University of KwaZulu-Natal for Interprofessional Learning

K Naidoo, E M Mhlongo, P P Khuzwayo

University of KwaZulu-Natal, Durban, South Africa

Background. Poor communication and professional hierarchy compromises patient safety and care. It is therefore important to include teaching and learning on interprofessional collaborative skills for both nursing and medical students. In 2022 a pilot project was launched at the University

of KwaZulu-Natal (UKZN) to introduce the concepts of interprofessional education (IPE) to students. This study sought to assess the readiness of senior nursing and medical students for the inclusion of interprofessional learning in their curricula.

Method. All 3rd and 4th year nursing students and 4th year medical students were invited to complete the Readiness for Interprofessional Learning Scale (RIPLS). The survey consisted of 19 Likert scale items measuring concepts relating to teamwork, professional identity and roles and responsibilities. A total of 345 students took part. Descriptive and inferential statistical analyses were performed to assess differences between the cohorts of students.

Results. The overall mean RIPLS scores were 80%, 82% and 96% among the third-year and fourth-year nursing and fourth-year medical student groups respectively, indicating strong readiness for IPE among the students. The four-year medical student group scored significantly higher overall as well as for the subscales of teamwork and collaboration and professional identity than either of the nursing student groups. There were no significant differences between the groups regarding the domain of roles and responsibilities.

Conclusion. The findings of this study indicate that both senior nursing and medical students possess positive attitudes and perceptions towards shared learning. Despite limited exposure to other health professionals in their curriculum, 4th-year medical students displayed greater levels of readiness for IPE than senior nursing students. Further investigation is needed to explore possible barriers and facilitators to IPE in medical and nursing curricula.

They/Them – a step towards inclusivity in anatomical education: a collaborative auto-ethnography

J Naidoo, Z Tshabalala

Nelson Mandela University, Port Elizabeth, South Africa

Introduction. Academic institutions involved in the training of healthcare professionals have a social responsibility to the community and country they serve, which warrants that they discern the cultural and contextual conditions surrounding them. South Africa has been at the forefront of legally protecting the LGBTQIA+ community from unfair discrimination, however, much is to be improved upon regarding person-centred healthcare needs of this community. Since anatomy forms one of the pillars of medical education, it necessitates an approach towards inclusivity in various aspects of anatomical curricula, to address the context of communities. This paper aims to outline the use of pronouns in anatomical education, as a tool for inclusivity, and its role in decolonising and continuously developing health professions education within the South African context.

Methods. The study reports on a co-constructed auto-ethnography on the experiences of conscious inclusivity in anatomical education by the authors. The experiences are initially outlined, thereafter, reflections and analysis of literature are considered. Relational ethics in co-constructed auto-ethnography was applied.

Results. Cultural and thematic analysis identified themes which are categorised under Pronouns in Practice, Contextually South African, and Designing Diverse Learning. Reflections and experiences shared by the authors are during the development and creation of an anatomy curriculum at a South African medical school.

Conclusion. A paucity of literature exists addressing the role of anatomy in

advocating inclusivity in health professions education in a South African context. The experiences shared indicate a subtle and effective way to develop medical curricula towards social responsiveness. By mitigating the assumption of pronouns, one creates a sense of ease to an often-marginalised community offering them improved and person-centred healthcare.

Academic exclusion policy and processes for health sciences students in South African higher education institutions

S Nalla, C Vincent-Lambert

University of Johannesburg, South Africa

Background. Academic exclusion is practised in national and international Higher Educational Institutions. Academic exclusion has a significant impact on any student's future. The associated stress and anxiety remain a source of conflict between the affected role players. Reasons for and the rationale behind academic exclusion remain complex and multifactorial resulting in South African Universities developing policies for academic exclusion. We investigated core themes within institutional policies and practices relating to academic exclusion and the potential rationale for such within a health professions educational context.

Aim. To investigate and describe contemporary practices and approaches to academic exclusion within South African Higher Education Institution and identify similarities and differences in approach, including rationale for academic exclusion.

Methods. Reviewed academic policies and procedures related to academic exclusion across six different South African Higher Education Institutions. Through simple content analysis, similarities and differences in approach were identified. Critical reflection undertaken on the rationale and potential implications of such practices in the local health professions education context.

Results. All institutions had policies that addressed academic exclusion and linked this to continued poor performance and/or failure to progress thus completing qualifications within the maximum allocated time. The rationale for academic exclusion is multifactorial and included the Prevention of Fruitless and Wasteful Expenditure, Maintenance of Academic Standards, and Credibility and Protection of the Student and Community. All six institutions surveyed were noted to allow for an appeal process which differed significantly between institutions.

Conclusion. There is a clear and defensible rationale for the causes of academic exclusion in Faculties of Health Sciences. The practices prevent students from continuing should be guided by policies and procedures that are clear and contextually relevant. The right to appeal academic exclusion is supported, however routine arbitrary support for such appeals without clear merit defeats the aims, objectives, and rationale for academic exclusion.

mHealth and e-Learning in health sciences curricula: Staff perspectives on utilisation, constraints and future possibilities

H Noorbhai

University of Johannesburg, South Africa

Background. Literature demonstrates that we have yet to reach a consensus about which indicators are needed to assess and teach quality health sciences and medical education through technology or innovation. There is a greater

need for a tool or platform that is properly constructed, validated and tested within health sciences.

Methods. This study (which is part of a larger project) assessed staff perceptions of the importance and relevance of different aspects of e-Learning and mHealth in curricula at four universities in South Africa. The specific objectives of this study were to: (i) assess health sciences staffs' perceptions and understanding of these two applications; and (ii) establish challenges and opportunities of e-Learning and mHealth applications in the health sector, as well perceptions on the importance and relevance of these applications to their curricula and future practices. A combination of Focus Group Discussions (FGDs) and a key-informant interview was used. A total of 19 staff from four universities participated. Atlas.ti was used for the data analysis and the findings were coded using a primarily deductive thematic coding framework.

Results. The findings revealed that not all staff members are equipped or trained with new applications or technologies. Most participants believed that diverse technologies could be integrated with mHealth and e-Learning. Furthermore, participants agree that a new multi-modal platform, in the form of a learning management system with relevant applications (with possible plugins) integrated, tailored towards health sciences, will benefit all stakeholders, and be valuable to higher education and health sectors.

Conclusion. Digitalisation as well as digital citizenship is gradually being integrated into teaching and learning. It is imperative to adapt the health sciences curricula through constructive alignments and promote health sciences education in the current 4IR. This would allow graduates to be better prepared for digitalised practice environments.

"I really don't know what we do": Professional identity formation towards interprofessional identity

C N Nyoni,¹ W Cordier²

¹ *University of the Free State, Bloemfontein, South Africa*

² *University of Pretoria, South Africa*

Health professionals must work together as a team for improved patient health outcomes. Interprofessional education, which describes occasions where students from two or more health professionals learn from, about, and with each other, has been heralded as a strategy that can foster the development of healthcare teams. In addition to the misconceptions that exist on the concept of interprofessional education and practice, health professions educators battle with the concept of developing learning activities that foster interprofessional identity and team function. Professional identity is a precursor to interprofessional identity and students must have a strong and well-formed professional identity as they engage in interprofessional learning. This workshop explores in-depth, the concept of interprofessional education, identity, and teams. Participants will focus on their individual professional identity and strategies that can be used to enhance the sharing of such identity in interprofessional identity formation. The outcome of this workshop includes scaffolded educational strategies that can be used in the development of professional identity and interprofessional identity.

At the end of the workshop the participants will be able to; i) define interprofessional education, learning and identity, ii) discuss key concepts of interprofessional identity and its role in healthcare, iii) describe professional identity and its contribution to interprofessional identity and discuss teaching strategies and research approaches towards professional identity formation

Brazilian online assessment with ABEM 2021 National Progress Test

P S Oliveira,^{1,4,5} D Afonso,^{1,3} A Palhares,^{1,2} L Carreira,^{1,6,7} E Postal,^{1,4} B Pinheiro,^{1,8} D Silva^{1,9}

¹Brazilian Association of Medical Education, Brasília, Brazil

²São Paulo State University (Unesp), Botucatu, Brazil

³Rio de Janeiro State University, Brazil

⁴Federal University of Rio Grande, Brazil

⁵Catholic University of Pelotas, Pelotas, Brazil

⁶State University of Pará, Belém, Brazil

⁷State of Pará University Center, Belém, Brazil

⁸Campos Medical School, Campos de Goytacazes, Brazil

⁹Recife Health Department, , Brazil

The Brazilian Association of Medical Education – ABEM, for more than a decade has been carrying out the Progress Test in Brazil, organized from centers that group together a set of about ten schools each. Each center organizes and annually administers its own test. Since 2019, Abem developed a strategy to expand the participation of medical schools and centers, with a view to carrying out, from 2021, an ABEM National Progress Test.

Based on the limitations imposed by the COVID-19 pandemic, ABEM proposed the application of the test online in 2021 at the national level. Abem currently has 18 centers that bring 182 medical schools, which represents 52% of all Brazilian schools.

The participation of 130 medical schools (37.3% of Brazilian schools) was counted, and the enrollment of 67,871 academics, of which 48,946 took the test. The average increase in the performance of first-year students compared to sixth-year students was 29.6 percentage points (32.4% to 62.0%). The Basic and Public Health areas showed the lowest variation in the correctness rate between the initial and final periods of the course (20% and 25%, respectively). The total average of correct answers, in the last year of the course, was 62%.

The averages of students in the final year of the course do not seem to be very different from those obtained in different parts of the world or when compared to a Brazilian initiative from 2015. However, there was an increase in the range of performance variability among final year students when comparing the averages of the different participating centers.

Results, based on a large number of schools and students, point to the need to consolidate the progress test as an evaluation strategy for Brazilian medical education, based on ABEM, an association responsible for the care of students, schools and medical education.

Multiple minds: The impact of collaboration on conceptualizing a PhD proposal that works

S Pattinson, C Hartmann

University of the Witwatersrand, Johannesburg, South Africa

Embarking on a PhD in medical education is a formidable prospect. The quality of the proposal plays a major role in defining what the nature of this experience will be. In this Seaside Story we will share our experience of taking part in a PhD proposal writing course during which we developed our PhD proposal with input from diverse group of researchers from different disciplines and continents over a six month period. Their feedback and experiences allowed us to break away from what was familiar and explore what was possible. The opportunity to express our ideas and have them reflected back and refined through different lenses, as well as to hear about

their own personal research journeys, resulted in the development of a clearer conceptual framework with a well-articulated research problem addressed by more relevant and varied research methodologies. The result was a proposal for research that is not only feasible but has the potential to meaningfully answer the research questions that energized us to explore the PhD in the first place. In sharing this story we hope to encourage others to widen their thinking when conceptualizing their PhD research and provide some insights on how to look for suggestions and inspiration from unexpected sources.

Re-enfranchising the Arts into the mission of human wellness

M G Phalwane, M E Seleka

Sefako Makgatho Health Sciences University, Pretoria, South Africa

The battle between epochs, generations and world views orchestrated by the inevitable intraspecific competition among humans has resulted in less Scientific solutions regarding what is and what should be allowed into the modern approaches to human health. In this qualitative study, the researchers investigated the role of the arts among humans and their well-being. We attempted to establish the innate health resources that nature has endowed all human beings with, though neglected in the quest for modernity with its over-the-counter mode of symbiosis. The results of this social engineering have been the rendering of intrapersonal healing chemistry inactive. This study therefore, aimed to establish the facts regarding how the ancients and the moderns have used the power of the arts towards the well-being of humans and the survival and preservation of the species prior to the commercialization of health. Data for the study were generated through texts that already exist in the public domain. Textual analysis was used as a method of analyzing data. The results of the study revealed that the re-creative power of the arts has played a vital role in the preservation of the species. They have demonstrated the correlation between the limbic system, recovery, and sustenance of the human species. It is hoped that the study will add to conscientization with regard to the anti-thesis of auto-immune destruction, which is in this case, auto-immune regeneration. In light of the above, this study, therefore, recommends that the ministry of health, particularly the public health should encourage health practitioners to supplement their modern scientific approaches with equally scientifically agreeable benefits of the arts.

Exploring the enablers and barriers to health care professionals completing professional development e-learning short courses

S A Pillay, F Kelly

Foundation for Professional Development, Johannesburg, South Africa

Introduction. There has been a rapid escalation in the number of courses, being offered online over the last ten years. Online training addresses some of the critical barriers to accessing postgraduate training including cost, geographic accessibility, time out of work to attend training, etc. Online training can be used as a powerful channel to upskill health care professionals.

FPD was able to rapidly create training material on pertinent Covid-19 related topics, secure funding and make this available to health care professionals in 2020. While enrolment numbers were between 2000 and 7000 on most courses, conforming to the definition of Massive Open Online Courses (MOOCs), completion rates were low between 15% and 50%. This is a concern to stakeholders for two reasons below:

- If health care professionals are not completing the courses, are they able to obtain skills to improve their practice and patient care?
- Is the investment in creating and making these courses available justified, as non-completion may negatively affect the outcome of the training?

Results. While the number of active students on the courses was in line with what was identified in the studies at 55%, the average percentage of students that completed the seven courses was 3.4 times higher than the average completion rates. There was also a 75% overlap in the support an institution can provide to improve the completion rates in the survey and the responses from interviewees. Improved communication and engagement and, more time to complete the courses were rated likely and highly likely by 80% of students to improve completion and this was echoed in the feedback from interviewees with the addition of using more audio and video content instead of text. The areas of support that students felt would be likely to improve completion rates would also address the barriers they had raised.

Reflective practice of anatomy teaching assistants in a post-COVID-19 era

R Pillay, V Bisetty, L Lazarus

University of Kwazulu-Natal, Durban, South Africa

Introduction. Anatomy is often perceived as a difficult discipline. Due to rising failure rates and subpar academic performance, the University Capacity Development Programme at the University of KwaZulu-Natal has funded an initiative whereby postgraduate students are employed as Teaching Assistants (TA) to assist medical and allied-health science students in addressing these bottlenecks. TAs can positively influence the learning environment by enhancing student understanding and retention as well as having an impact on students' academic and career choices. Reflective practice is considered a fundamental skill for personal and professional development. Given the current implementation of a hybrid learning approach, this investigation aimed to report on TA reflections in the post-COVID-19 era.

Methods. This qualitative study was designed to explore the experiences of Anatomy TAs in a post-COVID-19 era through an analysis of their reflective writings. A total of 6 self-reflective pieces from TAs at the Department of Clinical Anatomy, University of KwaZulu-Natal were collected and analysed.

Results. The following themes were identified: (i) perception of students and attitude toward work, (ii) teaching methods favoured by students, (iii) unpopular teaching methods and d) recommendations to improve teaching and learning in a post-COVID-19 era.

Discussion and conclusion. The results indicate that students display a desire to learn and prefer the question and answer-type teaching method. All TAs were of the view that in-person tutorials will foster better student engagement and improve academic performance. The TAs also feel that further professional training is necessary to better equip them for teaching in the post-COVID-19 era.

Postgraduate Master of Medicine students perspectives on patient records and it's effect on their Research

S Prahladh, J M Van Wyk, D Naidoo

University of Kwazulu-Natal, Durban, South Africa

Background. Registrars in specialisation encounter numerous difficulties in completing the mandatory research component of the Master of Medicine programme as poor patient record-keeping at most hospitals hinders the research process.

Objective. To investigate current types of medical patient recordkeeping systems (electronic vs paper) in health professions' training facilities, and we explored the effect data accessibility on specialist training and research.

Methods. Mixed methods study that included both descriptive and analytical components. The cross-sectional survey had 168 postgraduate student participants (N= 610) enrolled in the UKZN College of Health Sciences Master of Medicine program, and 11 follow-up interviews to collect data. The survey and interviews explored issues related to medical recordkeeping in the participant's department or hospital, emphasising their experiences with data accessibility while conducting research. The quantitative data was analysed using descriptive statistics, and the qualitative data was analysed thematically. Ethical approval was received from the institution's Biomedical Research Ethics Committee.

Results. Of the 168 participants, 94 (56%) reported that the accessibility of data hindered their research, while 56 (33%) indicated data access did not affect their research. Only 30 (18%) participants had no difficulty obtaining data for their research, while the rest (n=138;82%) expressed great difficulty in obtaining data for research. A total of 110 (65%) participants revealed that paper-based recordkeeping was mainly being used while electronic recordkeeping was reported by others (58; 35%). Many (n=125;75%) expressed the need to improve hospital data management practices, and 39 (23%) reported that plans were being implemented to improve data management practices. Participants expressed frustration in accessing data even in departments that used electronic systems and they raised concerns regarding data security.

Conclusion. The migration to an electronic patient recordkeeping system has not yet been implemented in many hospitals. Poor recordkeeping is impacting training and research.

Prevalence of psychological distress amongst undergraduate university nursing students

N Radana

Nelson Mandela University, Gqeberha, South Africa

Globally, mental health of students is becoming a matter of great concern. A substantive body of literature gives evidence on how the stressors of higher education in general and healthcare professions contribute to high levels of psychological distress in healthcare students. The contextual and psychosocial issues in the South African landscape add to the phenomena of stress, anxiety and general occupational and social dysfunction. There is scarcity of literature in the Sub-Saharan Africa region regarding the extent of prevalence of psychological distress amongst undergraduate nursing students, this is particularly concerning as it impacts on the mental health well-being of students. The aim of this study was to determine the extent of psychological distress in a cohort of nursing students. The sample consisted of 884 students from four (4) universities situated in 3 provinces from the 1st to the 4th year level of study. A descriptive, cross-sectional design was used. The General Health Questionnaire (28) was utilized for data collection. Data analysis was through descriptive statistics, as well as analysis of variance, one sample and independent t-tests. Results showed evidence of significant psychological distress mainly related to social dysfunction, anxiety and somatic complaints. The main identified factors contributing to higher levels of stress were financial and time constraints as well as interpersonal conflict and social interaction in the workplace. Practical implications are

that these results need to be considered when planning interventions of support.

Bringing back PLAY in higher education

G Rencken

University of KwaZulu-Natal, Durban, South Africa

Introduction. Students learn best when they are active in the learning process, eager to participate in learning activities, willing to put in the effort to improve, motivated and inspired. Retention of learning content requires engagement on multiple levels.

Context. The necessary measures taken to limit the spread of COVID-19 and ready South Africa's healthcare sector for an anticipated surge in cases required a significant adaptation in the way students were taught. The first-year students in Occupational Therapy (OT) in 2020 were the first group to fully experience this shift in teaching from a fully contact-based approach to online lessons. They have also experienced all the subsequent shifts from a fully online approach, to hybrid teaching methods and blended learning, and now back to contact-based classes where this is felt to be the best benefit. These students are now mostly in their final year of the undergraduate programme.

Students show better retention of learning content when they are engaged on six levels: cognitive, physical, emotional, behavioural, social, and cultural. Lessons were structured to have cognitive learning content (neurophysiology, theory of visual perceptual development and treatment, the frame of reference and grading), with an immediate application of this theory through play - where students participated in games and visual perceptual activities with their classmates (physical, behavioural, social and emotional learning), with a feedback session where they reflected on the game experience through the theoretical lens.

Key message. Bringing playful experiences into contact-based lessons, with students experiencing the therapeutic games used in OT in a safe, social environment enhanced learning.

Impact. Engaging students on multiple levels, in safe spaces where they can explore treatment options and immediately relate this to the scientific and theoretical underpinnings of a specific frame of reference for treatment results in increased understanding, integration of knowledge and effective application.

Making friends and influencing people - changing the trajectory of primary school learners in KZN

G Rencken

University of KwaZulu-Natal, Durban, South Africa

Introduction. Barriers to education and learning difficulties in schoolchildren become harder to overcome beyond the foundation phase of education.

Context. Since 2018, the Occupational Therapy Department at the University of KwaZulu-Natal has provided a service to a specific quintile 3 school, whereby learners identified by their teachers are assessed by the final-year students. A group therapy series was offered to these children. These sessions were logistically challenging, with a high transport cost, as well as disruptive to the academic programme for an already vulnerable learner, who missed an entire day of school to attend these. A meeting was held with the school stakeholders to hear their needs, frustrations, and

goals for their learners, and plan a path together, as friends and partners. After COVID-19 disruptions and the return to full-time schooling and therapy services, many learners were identified, with the priority need being 38 learners at the end of 2022. These children were assessed for visual perceptual and sensory-motor barriers to learning. The referring teacher completed SNA 1 forms for these learners, and the relevant SIAS process was followed. Their assessment scores were grouped and analysed, and a school-based intervention programme was designed for groups of children. The intervention programme can be implemented by the teacher, can benefit all learners in the class, and minimise stigmatisation or negative identification of struggling learners by singling them out. A training day to empower and equip them in the administration of the school-based programme and its benefit is planned.

Key message. Collaborating with teachers in an interprofessional way is essential to reach the vast numbers of children with barriers to learning in KZN.

Impact. Continued relationships with teachers in an interprofessional manner have the potential to change the trajectory of some of these learners.

Online assessment and feedback experiences during the pandemic using the AEQ with occupational therapy students

G Rencken, P Govender

University of Kwazulu Natal, Durban, South Africa

Introduction. The COVID-19 pandemic brought about a global crisis in higher education, where students were required to transition to exclusive online teaching and learning. This study explored students' experiences of online assessments and feedback to inform future practice.

Methods. This study utilised a descriptive cross-sectional quantitative design with purposeful sampling to describe student's experiences of online assessments. Data were collected from occupational therapy students in 2022. The Assessment Experiences Questionnaire was sent to all eligible participants ($n=166$). Data were analysed using SPSS version 28.

Results. Students reported that 'tackling' assignments made them think (79.75%; $n=63$). More than half of the students learn more from doing assignments than studying course material (61.25%; $n=49$). Majority of students felt they did not receive timely feedback through online assessments (67.5%, $n=54$), which impacted learning. More than half of the students use feedback in preparation for assignments (56.25%; $n=45$), hence timely and quality feedback is needed.

Conclusion. Occupational Therapy students had a positive experience of online assessments; however, the transition was difficult. It is recommended for lecturers to consider the difficulty of online assessments, the number of assessments and timely feedback for an effective online learning process.

Developing an interdisciplinary one health module for undergraduate students at the University of Pretoria

H Roos, S Adam, M Q Quan, W Renkin, A Turner, K May, Q S Sonntag

University of Pretoria, South Africa

Introduction. The University of Pretoria (UP) is unique in that it has a renowned Faculty of Health Sciences as well as a Faculty of Veterinary Sciences. This presented an ideal opportunity to develop and implement an

interdisciplinary One Health undergraduate module for medical (MBChB) and veterinary science (BVetSc) students in a merged, large class. A blended learning module was designed to incorporate technology-enhanced learning, asynchronous lectures, synchronous “World Café” discussions (small groups), and daily assignments (in groups or individual tasks). Mixed groups of students (ratio 2 MBChB: 1 BVetSc) were assigned to foster co-operative learning and diversity. Researchers documented the processes, changes in theories, as well as students’ perceptions, attitudes, and knowledge of both interdisciplinary, blended learning and one health.

Methods. This study was conducted at the Faculty of Health Sciences (School of Medicine) and the Faculty of Veterinary Sciences at the University of Pretoria. The study population included third year MBChB and fifth year BVetSc students.

The overarching research design is Collaborative Action Learning Action Research. Creating an interdisciplinary learning space is the first step (Action Learning). Research outcomes can then be used to improve understanding and develop theories explaining the change (Action Research). A mixed methods study was conducted to complement our action research methodology. At entry, students completed a Qualtrix questionnaire to assess their baseline knowledge of One Health, experience with technology-enhanced teaching and interdisciplinary education. Students completed the same questionnaire post-module. In addition, students participated in focus group discussions to enrich feedback post-module.

Results. The response from students were overwhelmingly positive, although more concise discussions during the World Café exercise was suggested. Some disconnect between 3rd and 5th year students were also stated.

Conclusion. This study elucidated gaps in the current model of One Health education and provided insights into conducting interdisciplinary modules.

The unwieldy journey of the EMS clinicians transition into academia

J Sheahan

Cape Peninsula University Of Technology, Cape Town, South Africa; University of Cape Town, South Africa

The transition from a clinical environment into academia has been widely described as an extremely challenging journey for many healthcare professionals. My experience was no different. After years of clinical practice it was assumed that I would be an amazing educator, and I was deceived into believing that. At the time that I was in my first teaching role, I had no idea that I had no idea what I was doing. I did exactly what my colleagues were doing, or what most of the lecturers did that taught me at university. Surely that’s good enough? It wasn’t...

It took me 5 years of being a full time educator, a post graduate diploma, and a master’s degree in health professions education to stop referring to myself professionally as a paramedic, and start referring to myself as an academic. During those 5 ‘transition’ years I was teaching...teaching really badly! At the end of the day, students were the ones suffering because I was made to believe that because I was a clinician with years’ experience, I will certainly be a good teacher.

What would I have wanted from my workplace when I started as a novice educator? Guidance, support, mentorship, someone to tell me that PowerPoint is not the only way to teach. I’m currently undertaking doctoral studies in which I am investigating how this clinician-to-educator transition is experienced by EMS professionals. My goal is to develop a contextually

relevant transition support framework so that no future clinicians who want to become educators have to experience being as professionally lost as I was when starting the journey into academia. I believe my story fits well into the sub-theme of health professions education and sustainability, and sharing my experience may highlight that support for novice educators in higher education could be lacking.

Challenges and experiences of Nurse Educators in Gauteng: Developing new Postgraduate nursing diplomas

K Shopo, N Buthelezi

North-West University, Potchefstroom, South Africa

Introduction. Legislation in South Africa mandated the alignment of degrees with higher education, and this led to the re-positioning of nursing education. According to the Higher Education Act 101 of 1997, all curricula for higher education must promote advanced learning, the development of skills and knowledge that will address community needs, as well as the innovation and skills-building essential for a country’s development and successful involvement in the global economy. All of the nursing programmes, from undergraduate to postgraduate level, had to be developed using a competency-based approach.

Aim. To explore and describe the challenges nurse educators in Gauteng experienced when developing the curriculum for the new postgraduate nursing diploma programmes

Methods. An exploratory descriptive qualitative research design was employed in the study. Purposive sampling technique was used to select participants who met the inclusion criteria. A total of thirty (n=30) participants took part in focus group interviews, each of the four groups comprised six to twelve participants. Data gathering took place between March and April 2022. Thematic analysis was followed using Tesch’s eight steps of data analysis.

Results. Five themes and fourteen sub-themes were generated from the data analysis. Nurse educators experienced psychological and emotional impact, challenges with communication and interpersonal interactions, transformation and empowerment, they encountered barriers that had an impact on their allocated curriculum development tasks, and finally they demonstrated resilience with the curriculum development.

Conclusion. Participants described both the good and bad experiences they had while developing the programme. There is a need for nurse educators to be trained and supported during curriculum development process.

Culturally competent care: Experiences of maternity patients in the North West Province, South Africa

K Shopo, T Rabie, A Du Preez, P Bester

North-West University, Potchefstroom, South Africa

Introduction. Midwives providing care to a culturally diverse society must know and understand the important cultural practices for women receiving maternal care. On the part of the midwives, balancing an act of respecting cultural beliefs and practices while maintaining the professional standard of care is an art.

Aim. To explore and describe the experiences of women receiving maternal care regarding cultural practices and their perception about midwives providing maternal care.

Methods. A phenomenological, qualitative and descriptive design approach

was chosen for this study. Women receiving maternal care (antenatal and postpartum) within five public hospitals in the North West Province of South Africa, were purposively sampled. A total of fifty ($n=50$) in-depth individual interviews, guided by an interview guide, were conducted in English or Setswana. The interviews were digitally audio-recorded and transcribed verbatim followed by thematic analysis. The independent co-coder also conducted data analysis to enhance rigour. Thematic data analysis was followed based on Tech's eight steps of data analysis.

Results. Participants described specific self-care practices which are essential to them during the antenatal period. These included restricting movement and social activities, wearing loose clothing, not smoking and attending the antenatal clinic. Important cultural practices included consulting traditional healers for protection against evil spirits throughout the pregnancy journey. The cultural practices in the postnatal period involved using traditional medicines to protect the newborn as well.

Conclusion. Pregnant women use both traditional medicines whilst also adhering to Western guidelines of attending antenatal clinic. Their perception regarding maternal care was that their cultural practices are not allowed in hospitals.

Assessment research: convergences and divergences in theoretical frameworks, findings and implications

D Sims,¹ L Pienaar,² F Cilliers²

¹University of the Western Cape, Cape Town, South Africa

²University of Cape Town, South Africa

Assessment in the field of Health Professions Education is of critical importance, not just for driving student learning in desirable ways, but because, ultimately, patient safety is at stake. Understanding how assessors practice assessment, and why, was the object of two doctoral research projects at the same institution during the same time period. Unfortunately, (PhD) research too often takes place in silos as each student individually seeks to engage knowledge and eventually uncover a unique perspective for their research study.

The persistent lack of communication and collaboration across (PhD) research projects, along with a lack of encouragement of discussing the use of different theoretical and conceptual frameworks on a similar research phenomenon across different studies, may harm not only the student (their development, understanding and progress) but the research (quality of findings; abstraction and theory-building). Exploring a phenomenon from different perspectives is valuable, for they enable specific and nuanced, but varied and diverse, understandings. This in turn leverages room for future research, theory-building and pragmatic implications. Convergences in theories and results strengthen final interpretations and implications; divergences offer opportunities for improving rigour and avenues for future research.

We hope to demonstrate, through comparing and contrasting activities, a coming together of two doctoral students' research projects for convergence and divergences in theoretical frameworks (social realism and health behaviour theory), findings (models of assessment practices and factors influencing resultant assessment actions) and final outcomes (recommendations for the professional development of assessors and the enhancement of assessment practice). This symposium seeks to enhance and enrich our collective understanding and advancement of theory around assessors and their assessment practices in Southern contexts.

Mobile-based formative feedback in optometry clinical training

V S Singaram, N E Khan

University of Kwazulu-Natal, Durban, South Africa

Introduction. Regular feedback and formative assessments are often neglected in resource-constrained environments due to a lack of quick, accessible, easy to use digital tools. The disruptions of the COVID-19 crisis have underlined the need for more digital tools to support educational continuity and formative assessment in clinical training environments. This study explores the development and use of a formative feedback application (App) to facilitate feedback-seeking behaviour, self-assessment, bi-directional feedback, and feedback utility.

Methods. This is a two-phase project. Phase 1 included the development and implementation of the mobile feedback app. Phase 2 involved a mixed methods study exploring how final year optometry students at the University of KwaZulu Natal engaged with and perceived the impact of the App on the feedback culture in their clinical training. Quantitative data was retrieved from the App database and qualitative data was obtained from focus group interviews with students and their preceptors.

Results. The majority (77%) of feedback requests via the App related to clinical skills and procedures. Self-assessment competency ratings were lower (5.9) than peer (7.8) and preceptor ratings (8.2). Feedback effectiveness was highly rated (9.0). Qualitative results showed the majority of students and preceptors felt the App was easily accessible, comfortable and user-friendly; promoted introspection for learning, psychological safety in communication and confidence in giving and receiving feedback. Although some felt that the narrative feedback is limited due to space constraints, the majority felt that it was student-centred and demonstrated the student's willingness to learn.

Conclusion. The novel formative feedback App was well received as the students and staff found it simple, effective and time efficient. This study also found the use of the App not only increased the frequency of bi-directional feedback but also enhanced the quality of formative feedback. The learning culture and student-preceptor interactions were also improved.

Students' perceptions of the factors that contribute to stress and anxiety during simulation-based assessments

H Slabber, S Dlamini

University of Johannesburg, Johannesburg, South Africa

Introduction. Simulation based assessments are known to be stressful for students and to induce anxiety amongst students. This anxiety has the potential to negatively affect student performance. It is important to determine what factors Emergency Care Practitioner (ECP) students perceive as contributing to their stress and anxiety during simulation-based assessments.

Methods. This study employed a qualitative descriptive methodology. ECP students from all years of study at the University of Johannesburg were invited to participate in the research. Students who agreed to participate were then sampled until data saturation was reached. The data was collected through one-on-one interviews, which were then transcribed verbatim, coded and then grouped into themes. The coding procedure was done using manual coding using word processing software. Data saturation occurred after six interviews.

Results. Five themes emerged from the interviews. The researchers

identified that: the academic impact of the simulation assessment drives anxiety; waiting in a common area causes anxiety to build; a fear of scrutiny exists; lack of simulation fidelity and technical issues with the mannequins cause anxiety; and comparing their actions to their peers caused self-doubt anxiety.

Conclusion. This research shed light on the various factors that drive anxiety and stress during simulation-based assessments. Educators can use this information to create a setting which limits the stress and anxiety induced by simulation-based assessments.

Educational partnerships beyond Health Sciences: Value of diverse perspectives in refining an interprofessional community-based project

R Smith, C Janse van Vuuren, M van Rooyen

University Of The Free State, Bloemfontein, South Africa

Introduction. Increasing linguistic diversity has seen language barriers become an important global healthcare system challenge. Trained interpreters are essential in ensuring best health outcomes for limited-English proficiency patients. The healthcare professional's ability to effectively collaborate with a trained interpreter is therefore a core skill that must be addressed in undergraduate training curricula.

The School of Health and Rehabilitation Sciences and School of Nursing established an interprofessional education partnership with the Department of Linguistics and Language Practice at the same institution, through a community-based, early childhood development (ECD) project that provided students a real-world opportunity to learn with, from and about each other.

Method. Interprofessional groups of health sciences students visited ECD centers in the Free State to conduct semi-structured interviews with mothers and educational facilitators. Interpreting students facilitated the communication between limited-English proficiency interviewees and health students. To review if the project met the desired teaching and learning outcomes, students were invited to participate in a semi-structured focus group interview. They had to reflect on their experience of working in an interprofessional healthcare team and with a trained interpreter. A thematic analysis was conducted to highlight key findings.

Results. Two-hundred and twenty-six health sciences and nineteen language practice students participated in the project (N=245). Thirty-eight students participated in one of six focus groups (n=38). The key themes that emerged were the value of cross-learning and interprofessional learning of transferable skills, awareness of the limitations of one's own scope of practice and/or experience, and valuing the contribution of others.

Conclusion. The experience improved health sciences students' skills and positively impacted their attitude toward working with a trained interpreter. Interprofessional education partnerships extending beyond health sciences have the potential to positively impact health inequities caused by a language divide by optimizing future health professionals' ability to effectively collaborate with a trained interpreter.

BAMSI: Weekly Zoom education support to rural Eastern Cape clinicians

D Stead,^{1,2} J Nash,³ H Gathercole,⁴ M Muller,^{5,6} S Aslam,⁷ A Parrish^{2,4}

¹Department of Internal medicine, Frere Hospital, South Africa

²Walter Sisulu University, Mthatha, South Africa

³District Clinical Specialist Team, Eastern Cape Health Department, Amathole District, South Africa

⁴Department of Internal Medicine, Cecilia Makiwane hospital, Mdantsane, South Africa

⁵Department of Family Medicine, Cecilia Makiwane Hospital, Mdantsane, South Africa

⁶Walter Sisulu University, Mthatha, South Africa

⁷Department of Infectious Diseases, Northwick Park Hospital, London, United Kingdom

Background. The Eastern Cape is a predominantly rural province, with the greatest health inequities in rural areas. In 2019 it recorded 46% compliance to the National Core Standards of care. The Buffalo City and Amathole District Medical support initiative (BAMSI) was launched in 2019 by consultants in East London's referral hospitals. The aim was to improve quality of care and support district clinicians through weekly interactive Zoom teaching sessions. We report the update and lessons learned during 2022.

Methods. The curriculum was formulated through focus-group review of a 50-topic core medicine syllabus with input from district clinicians. The teaching content is regularly reviewed for relevance to local disease burden and resource constrained health environment. Weekly topics and Zoom links are shared via district WhatsApp groups. Attendance is recorded and captured for CPD points. Video recordings of Zoom sessions can be accessed on a BAMSI website. Thirteen cellular data routers were distributed in May 2022 to district hospitals in Amathole and Buffalo city districts to enhance access. Sessions have also included topics from psychiatry, ENT and ophthalmology departments.

Results. Twenty-five BAMSI Zoom sessions were hosted from February to November 2022. A total of 1166 attendances were recorded from 25 health facilities (21 hospitals, and 4 Community health centres) and 9 from private practice (an average of 42 per session). Amathole district had the greatest attendance at 740 (77%), followed by BCM 138 (14%), Oliver Tambo 29 (3%), Joe Gqabi 27 (3%) and Chris Hani 15 (2%). Ninety two percent of attendances were by doctors, and 8% by clinical associates.

Conclusion. The consultant-led BAMSI weekly interactive video teaching sessions during 2022 have reached doctors and clinical associates at 25 rural health facilities across 5 districts of the Eastern Cape, and models a sustainable and scalable platform for district clinician education and mentorship.

The relationship between anxiety and performance in prehospital emergency care simulation assessments

C Stein

University of Johannesburg, , South Africa

Introduction. Existing data suggests that anxiety experienced by students during simulation assessments may have a negative effect on performance. Simulation assessments are associated with unique stressors, mainly related to performance in real-time and to being observed by assessors which is a source of socioevaluative stress. Higher levels of stress arising from these factors may overcome the resources available to students and induce distress and anxiety. This study aimed to assess the relationship between anxiety experienced by emergency medical care students and performance in an authentic prehospital emergency care simulation assessment.

Methods. State anxiety was measured before and after during a simulation assessment with the State-Trait Anxiety Inventory (STAI) in a sample of 58 emergency care students in a four-year degree program in prehospital emergency care. State anxiety scores were plotted together with marks

calculated using a standardised assessment tool. A curve estimation procedure was used to determine the best fitting curve describing the relationship between anxiety scores and marks.

Results. Mean pre-assessment STAI scores were lower than mean post-assessment scores (48.74 v. 57.74) but mean scores from both groups were greater than normal mean scores for college students. The relationship of both pre- and post-assessment STAI scores with assessment marks was best described by a positive quadratic curve suggesting that performance was better at both the lower and higher ends of the range of state anxiety scores compared to the middle.

Conclusions. The often-cited negative quadratic relationship between anxiety and performance, with degrading performance at higher levels of anxiety, was not observed in this study. These results suggest that some students may have developed the ability to respond positively to the highest levels of anxiety during simulation assessments and display good performance under these conditions.

Using conversations with community service physiotherapists to evaluate graduate competencies and readiness for practice

H Talberg, J Van Wyk

University of Cape Town, South Africa

Introduction. For Physiotherapy graduates, community service (CS) marks the entry into clinical practice, requiring them to draw on a variety of competencies to succeed in relatively unfamiliar settings. It is hoped that their university-based, undergraduate (UG) training would have prepared them to transition successfully. However, not much is known about how well graduates are prepared for the challenges of entry level practice in the South African Healthcare context.

This study explored the experiences of entry-level Physiotherapy graduates to understand whether their training equipped them for the practice settings.

Methods. This qualitative study was conducted with 10 recent graduates from the Division of Physiotherapy (UCT), in their final months their CS year. Ethical Approval was obtained (HREC 527/2022) and participants were recruited electronically. The representative sample was obtained, and interviews were conducted over MS Teams, transcribed and member checked. During in-depth interviews, participants were asked to describe the roles expected from them and their confidence in these, during the CS placement. Additional information on how specific aspects of their UG training had helped their transition or had possibly been deficient was explored. Data was analysed thematically and compared to the stated graduate course outcomes.

Findings. Participants reported easily on roles aligned to clinician, collaborator, and administrator. Opportunities for leadership and advocacy were not always overtly described, yet they could discuss opportunities that arose in these domains. All students felt that their training and particularly their clinical block structure had helped to prepare them for the expectations of CS, although gaps existed around aspects of health system operations and navigating workplace relationships

Conclusions. Overall participants viewed CS as a positive/growth experience. They were confident that their UG training and curriculum had prepared them well. The details of their experiences and recommendations are valuable for educators involved in UG training.

Driving knowledge through using augmented and virtual reality: Developing sustainable spaces for interprofessional education

S Titus

University of the Western Cape, Bellville, South Africa

Introduction. The Fourth Industrial Revolution is characterized by a combination of technologies which merges the physical, digital, and biological spheres. In this revolution, like those that have gone before, there is potential to improve the quality of life across the globe. To do this, health professions education will play a critical role in educating students to be active and engaged citizens in this space. Virtual Reality (VR) and Augmented Reality (AR) is regarded as a promising vehicle to facilitate students' active participation and engaged learning in core health sciences modules such as anatomy and physiology.

Aim. To explore first year students' perceptions about the use of virtual and augmented reality to learn anatomy and physiology

Methods. Quantitative data was collected from 234 (N=234) first year health science students using a cross sectional survey. Participant were sampled from Nursing, Dietetics, Physiotherapy, Sport Science, Social Work and Occupational Therapy departments. Data was analysed descriptively using SPSS v25.

Results. This study found that the majority of participants had not tried AR or VR before in any capacity (77.8%) and even less had used it for educational purpose (17.1%). This study found that the majority of students (n=156) think that AR/VR can improve their learning experience. Despite 80% of students having never used AR/VR for anatomy and physiology, 84% thought that it was a useful way to teach the subjects. The participants were of the opinion that anatomy dissection would be one application which could be used in AR/VR in health professions education.

Conclusion. If used correctly, students perceive that AR/VR has the potential to improve learning experiences in learning and teaching.

Proactively enhancing undergraduate Health Sciences academic student support through co-teaching

N Tlalajoe-Mokhatla, P Shangase, N Tlalajoe-Mokhatla

University of the Free State, Bloemfontein, South Africa

Introduction. Co-teaching is regarded as a supportive pedagogic model in Health Sciences Education (HSE). It entails the ability to enhance the scholarship of learning and teaching (L&T) and is regarded as a rationale to better meet the students' learning needs. While most studies locate co-teaching within the social constructivist learning theories, however there are no clear guidelines on the effective practices of engaging in coteaching in HSE and student academic support.

Aim. To gain an in-depth understanding on how co-teaching practices are proactively used in HSE among undergraduate students in enhancing their learning and academic support.

Methods. An in-depth literature review of existing body of knowledge on co-teaching and academic support was applied. On the EBSCOHost platform, database searches using Boolean phrases (co-teach* OR coteach*) AND health scienc* AND undergrad* AND academic support were carried out on Medline, Academic Search Ultimate, CINAHL, ERIC, Education Source and Health Source: Nursing, within the last five years (2018 - 2022).

Findings. Upon analysing the hit count, thirty-two articles were obtained; however, twenty-five of the studies met the inclusion criteria. The reviewed articles highlighted both the advantages as well the disadvantages of co-teaching within HSE. The key advantage of co-teaching during student support is to allow students to be exposed to multiple perspectives on the same topic, after all as it is said “repetition enhances learning”. The other benefit of co-teaching which directly impacts the module experts is that it translates into co-researching which adds value into curriculum renewal and improves the learning and teaching scholarship. The most prominent disadvantage noted is that there are no clear guidelines on co-teaching resulting in poor planning and coordination.

Conclusion. Evidence from reviewed literature clearly indicated the benefits of co-teaching outweighing the disadvantages thereof. Clear guidelines and theoretical underpinnings would enhance co-teaching as a supportive pedagogy.

Cosmetic advertisements in women’s magazines: An innovative way to teach undergraduate research methodology

I Truter, R Naidoo

Nelson Mandela University, Gqeberha, South Africa

Introduction. Final-year Pharmacy students are required to complete an 18-credit research module, in which all phases of the research process are covered. A Cosmetic Science elective was offered in 2022 to 12 students. The aim was to provide students with a deeper knowledge of cosmeceuticals and to conduct a practical research project to teach research methodology.

Methods. Content analysis was used to analyse cosmetic advertisements in 12 printed women’s magazines published in 2022. Each student was requested to complete the data collection tool in Excel® for all the cosmetic advertisements in a randomly allocated magazine. Thereafter the magazine was given to another student to follow the same process. The supervisors collated and combined the responses for further analysis. Semiotic analysis was conducted where appropriate.

Results. A total of 133 advertisements were analysed. Three themes were identified: moisturiser, anti-aging and hyperpigmentation products. Most magazines contained advertisements for moisturisers. Anti-ageing advertisements often used a “before and after” picture to give a visual presentation of what consumers could expect when using the product. Six magazines contained advertisements for hyperpigmentation products (with active ingredients such as retinol, hyaluronic acid, alpha-hydroxy acids-glycolic acid and aloe vera). These ingredients are all known to be effective for the treatment of hyperpigmentation. In general, many advertisements referred to the natural properties of products (using words such as “natural”, “cruelty-free” and “organic”). Advertisements often contained emotive language. Ample use was made of pictures and symbolism.

Conclusion. The theory of the elective was covered in the weekly contact sessions supplemented by the findings of the research project. All the steps of the research process was successfully followed in an applied manner, linked to the manufacturing of the products, as well as the science behind marketing. Content analysis can successfully be used to teach research methodology to small groups of students.

Innovative HIV service delivery approaches among female sex workers during the COVID-19 pandemic in Zimbabwe

L Tshivhase,¹ I Moyo^{2,3}

¹*Sefako Makgatho Health Sciences University, Pretoria, South Africa*

²*University of South Africa, Pretoria, South Africa*

³*Population solutions for Health, Harare, Zimbabwe*

Background. Before the emergence of the coronavirus disease in 2019(COVID-19), sex workers in Zimbabwe were already experiencing challenges associated with accessing HIV services. The COVID-19 pandemic and the related lockdown restrictive measures further worsened the situation. In the given context, it was critical to come out with innovative approaches to support female sex workers in accessing HIV treatment. To contribute to the HIV epidemic control, such approaches are necessary to prevent treatment interruption.

Objectives. To explore and describe innovative approaches to enhance HIV service delivery among female sex workers during the COVID-19 pandemic in Zimbabwe.

Methods. A qualitative, descriptive phenomenological design was used to explore and describe the innovative approaches to support female sex workers in accessing HIV treatment during the COVID-19 pandemic in Bulawayo, Zimbabwe. Ten purposefully sampled participants were interviewed one-on-one following a semi-structured interview guide that was followed-up with probes that emanated from what participants voiced out during interviews. Data were analysed through the seven steps of Colaizzi.

Results. The study findings yielded the following emergent themes: differentiated HIV care service delivery through the use community based outreach and multi-month dispensing of ARVs, provision of virtual psychosocial interventions and support systems through peers, family, and institutions.

Conclusions. The innovative approaches that were employed during the COVID-19 pandemic enhanced use of the differentiated person-centred care and ultimately treatment continuity for female sex workers. The community workers from the key sex worker community played an important role in supporting their peers to continue taking their treatment. The lessons drawn from this study are critical and can be utilised in different settings.

Remediation in Medical Education- Exploring students’ and clinical educators’ perceptions and experiences

A E Ugwuanyi, P Sodo, S Pillay, R Cooke

University of Witwatersrand, Johannesburg, South Africa

Introduction. Providing interventional opportunities for struggling medical students to achieve 21st century skills, is an area that needs to be developed within health professions education. It is imperative to institutionalize the culture of remediation in the education of future healthcare providers. Within the framework of programmatic assessment, remediation is a multi-layered educator-student interface that aims to support learners in achieving competence and confidence in areas of identified gaps.

Aim. To explore the perceptions and experience of educators and students regarding academic remediation within the Nelson Mandela Fidel Castro final year integration programme at the University of the Witwatersrand.

Methods. Following ethics approval, two focus group discussions were conducted among Clinical educators involved in academic remediation, as well as one-on-one interviews with 10 students within the NMFC (Nelson Mandela Fidel Castro) programme of the University of Witwatersrand.

Results. Thematic analysis of data from both groups revealed a need to deconstruct the meaning and application of remediation. The need for wholistic support taking into consideration the multi-dimensional reasons for poor academic performance and therefore multi-layered scaffolding approach needed for remediation to succeed. The psychological capital of remediation and the measurable improvement in outcome when successfully executed, were some of the broad emergent themes.

Conclusion. Early identification and remediation of students with identified gaps is crucial in health professions education, to achieve the outcome of clinically competent health providers. This involves a comprehensive, multi-layered approach addressing the factors that impact academic performance.

Students reflections on online learning during COVID-19

A E Ugwuanyi

University of Witwatersrand, Johannesburg, South Africa

The Nelson Mandela Fidel Castro Collaboration programme is an 18-month integration programme for final year Cuban-trained South African students.

The transition from a Spanish-taught, primary-health focused curriculum to an English taught, quadruple-disease-burdened medical curricular environment with a blended learning pedagogy presents itself as a challenge, appreciable through the student's perspective.

The NMFC programme is positioned on the Wits extended academic platform with students on five geographically dispersed Academic Health Complexes with a common curriculum and involved in face-to-face workplace-based learning. Clinical educators play a centralizing role through remote-online and in-person bedside teaching to support students learning in the core disciplines across sites.

Curating a student-centered, reflective account from students' records of their experience of the online component of their blended learning, is the aim of this seaside story.

From the first COVID lockdown in 2020, the NMFC programme, in line with university wide instructions shifted to online learning, and eventually with return-to-campus of final year medical campus adopted a blended-learning pedagogy. A portfolio of online learning was developed for the students to record their participatory and self-directed e-tivities with a section for students to reflect on their experience of the component of online learning in 50-words.

Various themes emerged from review of students' reflections. Factors such as online facilitation skills of the educators; their role modelling interactions within the online learning sessions; Learner empowerment, access to diversity of experiences, access to educators beyond geographic distance, opportunity to develop a voice, and the strengthening of a community of learning was observed.

In conclusion, appreciating the opportunities and challenges around the complexities of digitalizing learning from a student perspective adds wholeness when considering framework for digitalization of health professions education.

A journey of Health Systems: from programme to centre. A reflection from the team

R Cooke, J Van As, S Pentz, C Burns, C Makunga, K Pather, S Makanya

University of the Witwatersrand, Johannesburg, South Africa

According to the American Medical Association, Health Systems Science is a key pillar of medical education. Yet the discipline is mostly neglected in Health professions education, or falls inadvertently in the hidden curricula. In South Africa, health systems challenges are many and complex. Improvements require dedicated professionals with the appropriate 'health systems-thinking' competencies. The Faculty of Health Science at Wits has produced graduates in the newly developed BHSc Health Systems Science track, and recently launched the BHSc Honours in Health Systems Science. The latter has four streams; Health Analytics, Health Administration; Health Entrepreneurship and Health Systems Research. Through our journey of development, faculty recognised the urgent need for change agency and advocacy in our graduates, and for research to be more interdisciplinary. Through this the concept of the Hadede Centre for Health Systems Science and Advocacy was born. This session explores the reflections of the team from 'curriculum to Centre' and explores examples of lessons learned: learning excellence, deep and meaningful learning, and the need for the many lenses to view health systems to include one of medical and health humanities, especially in the South African context.

Building a learning community through Faculty Cluedo and Dress-making

J Van As, R Cooke

University of the Witwatersrand, Johannesburg, South Africa

"Whodunit" murder mysteries and making outfits out of newspaper are not typically included in health science students' orientation to a new programme. However, innovative and explicit attempts to building a culture and community of learning, can build trust, connection and cohesion amongst faculty and students. Students can gain confidence to share their perspectives, to work together and to support one another through the learning process. For the newly launched BHSc Honours in Health Systems Science at the University of the Witwatersrand Faculty Health Sciences, the in-person orientation programme included a Faculty Cluedo designed to introduce and orientate students to faculty, each other and the programme. This session demonstrates this and other fun exercises during the orientation, a critical time in which first impressions matter and that sets the scene that can instill the appropriate culture and practice of sharing, caring and collaboration. This session is a show and tell to show what was done and how this can be used for fun team building.

Beyond textbook learning: patients as teachers for South African undergraduate radiography students

R van de Venter,¹ S Robins,² T Joubert¹

¹*Nelson Mandela University, Gqeberha, South Africa*

²*Bird Communications, Vancouver, Canada*

Introduction. The use of patient partnerships is one strategy that can be employed to foster person-centered care (PCC) practices and cultures in healthcare settings. However, this is not commonplace in HPE. Limited literature exists on the use of patient partnerships in radiography.

Aim. To share experiences from a lecturer, patient partner, and student

perspective on the use of a patient partner in the co-development and teaching of a learning activity on active listening in the clinical setting in a diagnostic radiography context.

Impact of the experience. This experience impacted the patient partner, student, and lecturer differently. For the patient partner receiving feedback was important since this demonstrates the impact the lesson had on the students. The positive attitude and behaviour change in clinical practice related to patient care were the highlights for the student. The lecturer's worldview has been influenced and this will inform their future thinking and teaching about PCC.

Considerations for practice. We share some considerations based on our experience regarding the importance of engaging patient partners effectively and how to possibly approach the co-construction of a learning activity alongside patient partners.

The EEC framework: supporting radiography students to cope with death and dying patient experiences

R van de Venter, P Engel-Hills

¹Nelson Mandela University, Gqeberha, South Africa

²Cape Peninsula University of Technology, Cape Town, South Africa

Introduction. About half of all deaths are encountered in healthcare establishments and just over 50% of these are encountered during students' undergraduate studies. Literature underscores that people evaluate these experiences differently. Death and dying are often neglected areas in the theory and workplace learning curriculum of radiography programs. The aim of this study was to identify support strategies to assist students to cope better with death and dying patient experiences during clinical placements.

Method. A qualitative, exploratory-descriptive, contextual research approach was used. Sixteen undergraduate diagnostic radiography students were purposively sampled at one university in South Africa. Data was generated through reflective journaling and individual, face-to-face, semi-structured interviews using an adapted version of the Mmogo-method™. An inductive, thematic analysis was utilised for data analysis. The development of the education and empowerment for coping (EEC) support strategies framework was informed by the findings, literature, and conceptual framework of Dickoff, James and Wiedenbach.

Findings. The EEC support strategies framework comprises two main support strategies. The main support strategies have five and four functional strategies, respectively. The first main strategy comprises educational strategies that can be used to facilitate undergraduate diagnostic radiography students' understanding of death, dying, grief, and effective coping and appropriate patient care and management. The second main strategy outlines empowerment strategies that can be used to foster a support culture for undergraduate diagnostic radiography students to facilitate their coping with death and dying patients in the workplace.

Conclusion. The proposed EEC framework has the potential to inform the interventions required at universities and clinical training sites to enable effective coping among undergraduate diagnostic radiography students pertaining to death and dying patient experiences.

The use of learning portfolios as a tool to encourage reflection on practice and context

J van der Linde, E Du Plooy

University of the Witwatersrand, Johannesburg, South Africa

Introduction. During Covid-19 students had to engage in online activities for the third-year module on learning disabilities in occupational therapy instead of regular face-to-face activities. A learning portfolio was used as a formative assessment following this online module to encourage students to reflect not only on their learning but also on their context during this period that influenced the learning.

Aim. To encourage occupational therapy students to reflect on the challenges they faced during online learning, the difficulties they experienced in reaching their learning objectives and the learning activities that helped them to learn the best.

Methods. A retrospective record review was done of 170 learning portfolios completed between 2020 – 2022 by third-year occupational therapy students. A qualitative content analysis was done using MaxQda to determine themes.

Results. Provisional findings indicate that students experienced challenges with managing their time while at home. Another theme that emerged was the influence of being at home and having to share resources and devices with other family members. Students also found the reading of resources challenging and preferred voiced over PowerPoint rather than online lessons.

Conclusion. The ability to manage their time to complete online activities was quite problematic for students and they indicated that it took them more time to engage in activities than to just listen to a PowerPoint. Students found it hard to work independently rather than in a group as they were used to. The findings give valuable information on how online teaching can be structured to encourage not only reflection but also contextual issues that can influence participation in online learning.

Graduate attribute development in healthcare students: Diversity and inclusion as the drivers

A Van Der Merwe, C J van Vuuren

University of the Free State, Bloemfontein, South Africa

Introduction. Graduate attribute (GA) development is essential within health professions education, however practice-based research guiding the integration thereof in healthcare programmes remains limited. Healthcare students continue to find the transition to clinical training challenging, which may be attributed to the mostly theoretical nature of pre-clinical training, including GA training. A curricular space, driven by diversity and inclusion, was created in the School of Health and Rehabilitation Sciences (SoHRS) to develop healthcare students' GAs during pre-clinical training. All students in the SoHRS participated in dedicated activities presented through varied instructional methods within an interprofessional and community-based space. This study aimed to describe the impact of the created curricular space on the development of GAs.

Methods. A descriptive study utilising quantitative and qualitative data sets was performed. The annual institutional module evaluation survey was distributed electronically at the end of the academic year to all first-year students in the SoHRS participating in the new curricular space ($n=135$).

Results and discussion. Forty-one (30.3%) students participated in the survey. Quantitative data indicated most participants reported a positive learning experience (87%) and expressed that engagement was encouraged (83%) within a space of mutual respect (83%). As stated by one participant, the "...module taught important aspects that I will need as a healthcare professional".

By creating such a diverse and inclusive curricular space through multimodal and interprofessional training, GA training was transformed to be more practical and future-focused, creating a positive learning experience. Participants

especially valued the GA training aimed at future practice. Although academic support was felt lacking (61%), it did not influence the development of GAs directly.

Conclusion. Although early positive signs on the development of GAs were found, future research should focus on the longer-term impact of this practical, pre-clinical GA development during the transitioning of these students into the clinical training space.

OSCE electronic marking using a PowerApp

L Van Der Walt, E Bronwen

Stellenbosch University, Cape Town, South Africa

Introduction. At Stellenbosch University (SU) MBChB program, Objective Structured Clinical Examinations (OSCEs) are conducted in different years within the Simulation and Clinical Skills Unit (SCSU). Due to resource-intensity and the potential for human error in manual marking and counting, we explored the possibility of using an e-marking system.

Context. As a cost reductive exercise and to enhance the speed and reliability of grading of the OSCE, we explored the possibility of developing an e-marking system. This built on the initial exploration of using the Learner Management System for similar purpose in 2015. Commercial systems are tremendously expensive, so we, together with the Business Management team, developed an e-marking system using Microsoft Power Apps. An iterative process of designing rubrics and testing them was carried out on android devices, followed by an initial successful pilot study with a cohort of 6 students and 5 OSCE stations. Examiners were trained on the device and on the new format of the rubrics. In a summative high stakes OSCE, approximately 300 MBChB III students were examined by 20 examiners on one day using the devices.

Key message. Initial examiner feedback was positive, however the challenges became apparent e.g. incorrect submission of student data lead to the information not being captured; dropped connectivity and the app freezing at times. Voice note feedback \ did not link to the student number and was unable to be utilized.

Impact. Although tested on a small group of students; running the application in a large scale, summative high-stakes examination was not desirable.

We do feel that this may be worth pursuing but will require extensive testing and re-innovating. When financial costs and the reliability required in a high-stakes examination are taken into account, the commercial, tested, product becomes a feasible option.

Curriculum renewal towards critically conscious graduates: implications for faculty development

S van Schalkwyk, J Blitz

Stellenbosch University, Cape Town, South Africa

Introduction. Global calls for health professions (HP) curricula to enable new ways of knowing and for graduates to become more responsive to the communities they serve, have catalysed important debates about curricula needing to move beyond a biomedical focus to include issues such as social accountability, social justice and health equity. This raises questions about how best to support HP educators who will need to change their practice if they are to embrace these more complex, social constructs.

Methods. The research question for this qualitative study was: What

implications are there for faculty development which can support HP educators as they are expected to incorporate the principles of critical consciousness and social accountability into their teaching as part of a curriculum renewal process. Data from 11 focus group discussions and 11 individual interviews with HP educators from two undergraduate programmes was thematically analysed. Transformative learning theory and models of change provided a sensitising framework.

Results. Our findings pointed to an expanded role for HP teachers and for those responsible for faculty development. Three main ideas regarding change were highlighted namely that the sort of change being called for was necessary; that it was not easy to implement, characterised by uncertainty and complexity; and that change needs to be enabled and supported.

Conclusions. Curriculum renewal implies change. That change will always hold implications for the educators responsible for its implementation, irrespective of whether or not they were involved in its conceptualization, often extending their roles and responsibilities. Supporting HP educators to embrace this expanded remit, suggests an equally expanded remit for faculty developers – one that calls for initiatives that enable critical, dialogic encounters that might foster critical consciousness, leading to change in HP education, while at the same time challenging us to turn the mirror on ourselves as faculty developers.

Self-regulated learning: A key to success for health professions students

A Vaughans

American University of Antigua College of Medicine, Coolidge, Antigua and Barbuda

In health professions education, effective remediation programs are crucial to ensure that students receive the knowledge and skills necessary to provide quality healthcare. One strategy to enhance student success and improve health outcomes is self-regulated learning (SRL). This abstract details a collaborative program designed for medical students repeating the third semester, featuring SRL principles, student-led groups, and faculty advising/mentoring.

During the 14-week compulsory program, remedial medical students were organized into groups of 10 - 15 and supervised by a physician faculty member. The program aimed to identify individual learning techniques, improve knowledge organization, time management, and knowledge retrieval, with an emphasis on common pathologies. Furthermore, the program required students to create comprehensive summaries of gross histopathology images, covering topics such as identification, morphology, diagnosis, etiology, pathogen mechanism, signs and symptoms, investigations, treatment, and course and complications. Faculty advisors provided personalized SRL-aligned advice to each student during individual meetings.

To evaluate the program's effectiveness, students' scores from their previous attempt at the third semester were compared with their scores upon completion of the program. Recent results showed up to a 31.8% increase in scores upon completion of the program, with 84% of students demonstrating an increase in performance. The program underwent nine cycles and has been refined to better integrate remediation into students' schedules, reduce cognitive load, and avoid burnout.

This presentation will highlight the program's design, implementation, and strategies used to overcome challenges. The integration of remediation and SRL models focuses on practical and effective strategies that can improve student outcomes in health professions education. The program fosters

inclusive and successful learning environments, resulting in more confident students and future healthcare providers. The presentation will share valuable insights from our experiences and lessons learned, which can inform future initiatives in other health professions education programs.

The effectiveness of emergency remote teaching of anatomy to medical students' during the COVID-19 pandemic

A Simelane, E Venter, A Ottele

Sefako Makgatho Health Sciences University, Pretoria, South Africa

Anatomy education has relied on traditional teaching and learning modalities in most South African universities through contact lectures, cadaver dissections, wet specimens (prosections), and plastinated specimens. However, the unprecedented COVID 19 pandemic caught South African universities off guard. Universities had to migrate learning programmes to online to ensure the progression of the academic program despite unreadiness in some universities. In exploring the effectiveness of teaching and learning of Anatomy online, the study explored the effectiveness of online teaching and learning (OTL) as an alternative approach to teaching Anatomy in one of the comprehensive South African universities. The study followed a sequential explanatory mixed-methods research approach where a survey questionnaire and semi-structured interviews were used to obtain data from second year medical students studying towards the MBChB degree as well as their lecturers and the programme coordinator. Student records/marksheets were analysed. The questionnaire focused on demographic data and challenges students faced with OTL, and interviews gathered students' experiences with OTL in Anatomy. Quantitative data were analyzed using descriptive statistics and a thematic framework. The results of the quantitative study informed the themes for the interview questions. The study found that the migration of material to online did come with challenges for students and lecturers. It also found mixed perceptions of students concerning traditional and online modalities. Other findings revealed contrasting views between students and staff regarding online assessments: Lecturers felt the integrity of assessments was compromised while students felt satisfied with online assessments. Most students experienced challenges ranging from internet connectivity, electronic devices, and iii utilization of technology during the OTL implementation that are suitable for online learning. These findings were consistent with findings observed by several studies. The study revealed a contrast in views of students and lecturers regarding the learning platform effectiveness in teaching and learning of Anatomy.

Becoming a reflective practitioner: Healing the healer

M Visser, R Holdman

University of Cape Town, South Africa

Introduction. The field of Health Professions Education must expand its role. Health is a key to life, yet the well-being of South African healthcare workers is poor. Universities are called to take responsibility for nurturing graduates' development through internship and community service. Researchers advocate for structured support, psychoeducation, and resiliency-building.

Context. Our goal for the 2022 UCT Educational Leadership fellowship was to develop a course for personal and professional well-being by promoting

mentorship and reflective practice. Reflection is a metacognitive process, and so we derive the curriculum through ongoing reflection. To align teaching with the needs of the health system, students, educators, and recent graduates contribute. We modelled it after reflective and well-being programmes described in the literature and applied an evidence-based Family Medicine approach to the mutual problem of occupational burnout. We mapped reflections against 2014 HPSCSA graduate outcomes containing the words "reflect" and "develop", and three central themes emerge which we use as pedagogy: effective teamwork, commitment to individual and community wellbeing, and individual paths to resiliency.

Impact. Becoming a Reflective Practitioner is a story of transformation, a story of healthcare practitioners, educators, and students collaborating to impart lessons of change agency in education. It is about transmuting adverse experiences through meaning-making and catharsis. Becoming a Reflective Practitioner is an integrated, longitudinal course developed to empower healthcare worker well-being through awareness, altruism, change agency, and support.

Key message. The striking impact is the positive effect the development process has on its collaborators: validation. Feedback affirms the therapeutic nature of a supportive community of practice and the power of reflective narrative for healing. Facilitated dialogue allows for the inclusion of diverse perspectives and vulnerable stories of moral injury and stigmatization emerge. Being heard and belonging to the change relieves our sorrow. We realise resiliency through healing the healer.

Coaching future clinical leaders: a revised approach to delivering a leadership module in family medicine

K Von Pressentin,¹ A de Sá,^{1,2} P Pampallis,² T Ras¹

¹ *University of Cape Town, South Africa*

² *The Coaching Centre, Cape Town, South Africa*

Introduction. Family physicians are seen as leaders of interventions aimed at strengthening the health service within their sphere of influence by working within clinical teams. Interviews with district managers highlighted the need for family physicians to develop their leadership qualities, build resilience and become change agents able to shape their context. The updated programmatic learning outcomes for the training of South African family physicians were published in 2021 and provided an opportunity for curriculum renewal at the University of Cape Town's Division of Family Medicine. A review of the leadership and governance module in the third year of registrar training showed that the sessions were content-heavy with insufficient opportunities for reflection.

The module convenors plan to evaluate a revised module implemented in 2022 that aims to support registrars in their emerging understanding of their roles as leaders tasked with strengthening primary care teams and services.

Methods. The module convenors collaborated in the design and delivery of a revised module blueprint on the updated national learning outcomes. The module is presented over a longer period and incorporates a group coaching style to increase self-awareness among registrars on how best to manage themselves and their team. Through this process of co-designing and collaboration, we aim to provide a transformative learning experience centred on reflection on how the theory relates to practice, professional identity formation and building resilience.

Results. This presentation will share preliminary insights from the revised module in its developmental phase, to inform an ongoing iterative evaluation process.

Conclusion. Family physicians should add value through their leadership ability across all their roles. Efforts should focus on how best to create formal and informal learning opportunities aimed at facilitating their growth as leaders and helping them to meet the health needs of communities served by an evolving healthcare system.

Two approaches to developing scholarly and clinician leaders for the evolving South African healthcare landscape

K Von Pressentin,¹ H Matisonn,¹ A de Sá,¹ N Munro²

¹ University of Cape Town, South Africa

² University of KwaZulu-Natal, Durban, South Africa

Introduction. Emerging leaders are dealing with multiple complex challenges. This is especially true in South Africa, where teams navigate issues of redress and recovery following the COVID-19 pandemic, which has uncovered the systemic challenges underpinning both educational and healthcare systems. Two approaches to developing leadership skills include coaching and mentoring. Unpacking local experiences, one which prioritised mentoring and the other coaching, will help programme developers gain clarity on how best to capacitate emerging healthcare leaders.

Methods. The panellists will present lessons learned from two initiatives at two higher education institutions, the UKZN Developing Research Innovation, Localisation and Leadership in South Africa (DRILL) and a leadership module in the UCT postgraduate family medicine programme. The DRILL programme included three cohorts of fellows (n = 25; 2015 – 2022) and was envisioned to have fellows participate in triadic mentoring and supervision relationships, along with workshops. The UCT leadership module employed a group coaching approach to unpacking theory to practice.

Results. The DRILL programme findings suggest how, rather than relying only on formally assigned mentors and supervisors, the fellows chose to establish a mentoring community. This community included a network of mentoring relationships, establishing professional networks and cooperation, and creating a reciprocal psychosocial support community.

The UCT postgraduate module in leadership adopted a coaching style in 2022. Reflections from the first cohort of family medicine and primary care trainees confirmed the value of a group coaching approach to developing leadership skills such as self-awareness on how best to manage themselves and their teams, as it allows for open dialogue within a safe space. The use of the integral coaching theory allowed introspection and a broadened understanding of engaging with the other.

Conclusion. This panel discussion aims to engage the delegates by showcasing the lessons learnt from these two approaches to leadership development.

Considerations for student-led telepractice in the speech-language therapy profession

J Watermeyer, A Kanji, J Beukes, D Hurwitz, K-A Kater, G Khumalo, S Madonsela, R Natrass, M Scott

University of the Witwatersrand, Johannesburg, South Africa

Introduction. COVID-19 necessitated a swift move of speech-language pathology clinical practicals to online platforms, without much preparation.

Given that telepractice is likely here to stay, it is important to understand the challenges and special considerations required for telepractice sessions so that students can be adequately prepared in future.

Methods. Across a series of studies, we have used qualitative and observational methods with reflexive thematic analysis to understand challenges and facilitators in telepractice. Participants included caregivers, paediatric clients, students and clinical educators. We analysed video recordings and observation notes of student-led speech-language pathology telepractice sessions with paediatric clients at a South African university clinic. Other methods included a qualitative survey with clinical educators and students and interviews with caregivers of children receiving telepractice at the university clinic.

Results. In this paper, we will present a synthesis of themes identified across the studies conducted. Findings highlight several challenges experienced when engaging in telepractice, including allocating clients for telepractice, preparing for telepractice sessions, managing caregiver involvement in telepractice, promoting connection with clients online, and adapting supervision style for telepractice. Additional preparation is required, with greater management of technology and adaptation of tasks especially during connectivity challenges. Telepractice relies heavily on caregiver input and collaboration, which can be empowering for caregivers but students need to navigate this relationship carefully. Promoting engagement, holding a client's attention, building rapport and offering reinforcement are critical and require a different approach online.

Conclusion. Telepractice requires a significant amount of preparation, flexibility and problem-solving by students to promote client engagement and motivation. Our research holds implications for other professions engaging in student-led telepractice. We discuss several considerations for student-led telepractice sessions going forward.

Developing an educational mobile app: reflections on the journey and lessons learnt

R Weiss,^{1,2} E Allwright²

¹ University of Cape Town, South Africa

² MySkills Consortium, South Africa

Introduction. While clinician-teachers have for years discussed the need for and merits of a shared procedural skills curriculum for South African medical graduates, the Covid pandemic and its impact on traditional face-to-face pedagogy provided both the momentum for inter-institutional collaboration, and the necessary funding for a shared dissemination platform.

Context. Most new medical graduates enter clinical practice in hospitals and clinics far away from their alma mater. From day one, they are expected to perform a range of bedside procedures, from venesection to lumbar puncture, often with limited supervision. Undergraduate procedural skills training has traditionally been an 'internal' affair, with scant evidence of standardising protocols across settings and limited learning resources available at the bedside, not only for students but also for graduates leaving their familiar environments and foreign-trained graduates. Creating a shared, open-access procedural skills mobile application required reaching clinician consensus on draft protocols, collaborating with students to understand the preferences and habits of the target audience, reviewing content in iterative cycles by drawing on clinicians in academic, public

and private settings across the country, and partnering with external stakeholders for ongoing financial and networking support.

Key message. Collaboration towards creating shared educational resources is messy, laborious, time-consuming and richly rewarding, and valuable lessons have been learnt about designing and disseminating knowledge while managing traditional institutional hegemonies.

Impact. Not only did the MySkills Medic app log more than a 1000 downloads within the first month of its release; it also served as a vehicle for learning how to work together to realise a shared passion: ensuring open, equitable access to learning resources specifically produced for the South African healthcare setting.

‘What do I need?’ – Support for vocational paramedics entering postgraduate studies via RPL

D Winstanley,^{1,2} C Cunningham²

¹*Boston City Campus, Johannesburg, South Africa*

²*University of Cape Town, South Africa*

Introduction. With emergency medicine education rapidly evolving in South Africa, opportunities for vocationally trained paramedics to advance in higher education are required. Considering over 50 000 emergency care providers qualified through the short course route in South Africa, the field of pre-hospital emergency medicine requires drastic educational intervention. This research aims to identify the support requirements of vocational paramedics entering postgraduate studies using recognition of prior learning pathways for successful transition.

Currently, all South African undergraduate emergency care qualifications require full-time university attendance placing immense strain on the full-time employed vocationally trained paramedic to advance further. Fulfilling an essential role in the emergency medical system, paramedics are often the only providers in rural and marginalised communities.

In 2021, the University of Cape Town (UCT) presented an NQF level 8, Post Graduate Diploma in Emergency Care. This new programme’s primary purpose was to equip doctors, nurses and paramedics with theoretical, clinical, research and management skills that promote the development of evidence-based emergency care across the African continent. As an online offering, the challenge of traditional classroom-based education was overcome. Together with a recognition of prior learning (RPL) process, UCT opened the doors to postgraduate access for the vocationally trained paramedic for the first time.

Methods. The leap from short course to postgraduate level is demanding and coupled with the dynamic of online learning, challenges were expected. To gain insight into these, and identify the support requirements of this unique cohort of students, semi-structured one-on-one interviews with the students enrolled in 2021 were conducted.

Results and conclusion. The students highlighted the need for institutional and technological support; orientation to university systems was a new obstacle for students who had never been exposed to an interdepartmental organisation. Through these interviews, the actual academic potential of vocational paramedics is realised.

The contribution of inter-professional education in developing competent undergraduate nursing students: Integrative literature review

N Zenani

North West University, Mahikeng, South Africa

Aim. To survey and summarise global literature to synthesise the contribution of inter-professional education in nursing education in developing competent undergraduate nursing students.

Methods. Design. An integrative literature review approach was adopted for the review Data Source. Three databases were used to search for the articles namely: CINAHL, Scopus, and Science Direct. Articles published between 2018-2022 were retrieved using search terms such as “Competence”, “Contribution”, “Development”, “Inter-professional education” and “Undergraduate nursing students”. Review Method. Five steps of integrative literature review as described by Whittemore and Knafl were used. The steps are Problem identification, literature search, data evaluation, data analysis, and the last step was data presentation.

Results. Three themes emerged from the review namely, promotion patient safety in nursing practice, socialise nursing students in inter-professional collaboration and promote the development of professional identity.

Conclusion. This study is the first step in determining the contributions of early inter-professional education to nursing education. Thus, it set the stage for further studies that look at strategies that can be adopted into the undergraduate nursing curriculum to develop sound inter-professional competencies that promote patient safety and quality healthcare by nursing students.

Impact. The results can be used by the developers of nursing curriculum and nursing educators in developing a curriculum that includes inter-professional education with the aim of improving the quality of teaching and learning that advances competent and safe nursing students.

WORKSHOPS

Entrustable Professional Activities (EPA) as a framework for postgraduate medical education

S Adam,¹ V Singaram,² D Nel,³ T Harris,³ L Jenkins,³ T Ras,³ V Burch⁴

¹*University of Pretoria, South Africa*

²*University of KwaZulu-Natal, Durban, South Africa*

³*University of Cape Town, South Africa,*

⁴*Colleges of Medicine of South Africa, Cape Town, South Africa*

Introduction. Competency-based medical education has gained popularity. With that change in conceptual models the number of tools for workplace-based assessment (WBA) in under- and postgraduate health professions education have steadily increased and evolved. Entrustable professional activities (EPAs) are an emerging concept used in the implementation of competency-based medical education. An EPA is a unit of professional practice that can be entrusted to a sufficiently competent trainee. An EPA requires proficiency in multiple competencies simultaneously, and is a more suitable focus for assessment than separate competencies.

Methods. Workshop facilitators will use their practical and scientific experience with developing EPA to guide workshop participants on how

to develop appropriate EPAs for their authentic teaching and learning environment.

The interactive workshop will build on the participants' experiences with and knowledge of WBA and EPAs in postgraduate training. After a brief plenary introduction by the facilitators, small group break-away discussions will be used to discuss aspects of EPAs and workplace learning. After about 30 minutes of group work, a plenary discussion will allow group to report back what they learned.

Results and conclusion. By the end of the workshop participants will be able to develop and implement EPAs as part of WBA in their postgraduate modules.

Learners' and facilitators' perceptions and experiences of learning in a health professions context

E Archer,¹ R Meyer,¹ M S Schmutz,¹ M Marshall,² A Lupton-Smith¹

¹ Stellenbosch University, Cape Town, South Africa

² University of Sheffield, United Kingdom

Introduction. Health professions education is in a state of constant change in response to changing health care needs and with a focus on nurturing highly adaptable graduates. The need for adaptability stems from the recognition that healthcare professionals need to be competent within a diversity of healthcare settings. The learning environment is a space where students can develop essential competencies to function as healthcare professionals. Students are expected to be actively engaged in their learning. Studies suggest that students' understanding of learning influences the way they approach learning. Given that a partnership between educators and students forms a strong basis for learning, it is equally important to explore the understanding of educators about learning and their role in learning within the classroom and clinical environments. Gaining a deeper understanding of how students and educators understand learning can assist future attempts to improve support for students. It is also important to explore how learning may be differently understood in different healthcare professions. This symposium will explore how students and educators understand learning and how they see their role in the learning experience.

The presenters are from South Africa and the United Kingdom, and from three different health professions.

1. Elize Archer (moderator) Introduction to the learning environment. 15 min
2. Rhoda Meyer Research findings of undergraduate Nursing students and their educators of how they understand their roles and responsibilities in learning. 15 min
3. San Schmutz The differences and similarities of how undergraduate Physiotherapy students and educators understand their roles and responsibilities in learning. 15 min
4. Michelle Marshall The view of a group of Medical students' and educators' understanding of their roles and responsibilities in learning. 15 min
5. Alison Lupton-Smith General conclusions from the data and then allow for a group discussion. 20 min
6. Closure Elize Archer 10 min

Getting published: Taking intentional steps towards success A SAAHE HPER SIG workshop

S van Schalkwyk,¹ F Cilliers,² R Maart,³ A George⁴

¹ Stellenbosch University, South Africa

² University of Cape Town, South Africa

³ University of the Western Cape, Bellville, South Africa

⁴ University of Witwatersrand, Johannesburg, South Africa

Exposing ones work to public scrutiny is central to the role of an academic and scholar, and critical for taking the relevant field of research forward. For those who identify as HPE researchers, therefore, publishing our work becomes key. However, the journey towards publication success is not an easy one. This workshop will seek to assist you along the way as you work towards achieving your publication goals. It will commence with an overview of current trends in the field and the nature of academic publishing. This will be followed by opportunities to highlight challenges, barriers, but also enablers to successful publishing. The approach will be to offer a mix of interactive inputs and engagements. Participants will be encouraged to consider where they are 'in the game' and what is missing in their 'toolkit'. Specific strategies, including long-term planning, will be explored and participants will be guided in developing their own actions plan and embracing sound writing habits. The focus will be on encouraging active participation through group activities and open Q&A.

By the end of this workshop participants will:

- have been exposed to some of the current trends, expectations and processes related to academic publishing in the field of HPE
- have critically reflected on their personal research objectives and how these might be linked to publication
- have commenced the development of a personal strategy towards intentionally ensuring that their research is disseminated through publication
- As the HPE research community in our region grows and matures, it is incumbent on us to represent our ideas and innovations in the HPE literature. Getting published is both an art and a skill. The workshop will address a key challenge experienced by many (both experienced researchers and novices) seeking entry into this field.

Doctorateness and the doctoral journey in HPE: Tips and tricks

V S Singaram¹, F Cilliers²

¹ University of Kwazulu-Natal, Durban, South Africa

² University of Cape Town, South Africa

A direct result of the significant growth in the field of health professions education (HPE) over the past two decades has been the professionalization of the educator role. This has seen an increase in the uptake informal and formal qualifications with many colleagues opting to complete either a PG Dip or Masters in HPE. A logical next step is the doctorate, but for many this will mean navigating uncharted waters.

This workshop will introduce participants to doctoral studies. It will explore the value of a doctorate and the journey that starting and doing a doctorate entails. Drawing on each one's individual context we will explore the nature of this 'complex investment'. Participants will hear from other doctoral candidates who are on their own doctoral journey and from those who have recently completed it. By the end of this workshop, participants should have a good idea what undertaking a doctorate in HPE entails and how this may help them on their professional journey.

Outcomes:

By the end of this workshop, participants will:

1. have grappled with the concept of doctorateness and explored their motivation for and the value of undertaking a doctorate
2. have made a start on plotting their own doctoral journey and growth as scholars in HPE

3. be able to make an informed choice about the different options on how to structure a doctoral thesis.

Guideline

- Icebreaker (10mins)
- Doctoral expectations (an overview of the landscape) (20mins)
- My doctoral journey (issues of identity) (20mins)
- Insights from those in the trenches/just out of the trenches (Experience and reflections from one current and one recent graduate) (20mins)
- Choosing the mode of transport (PhD by publication versus the thesis/dissertation) (20mins)
- Packing my suitcase (getting started, building my portfolio, finding a community) (20mins)
- Closing Reflections (10mins)

“Things change when you Belong’ – Exploring ‘(un)Belonging’ in Health Professional Education.

K Naidoo¹, B Ige², RSithaldeen³, M Donda⁴, D De Klerk⁵

¹ University of KwaZulu-Natal, Durban, South Africa

² University of Cape Town, South Africa

³ University of Cape Town, South Africa

⁴ University of KwaZulu-Natal, Durban, South Africa

⁵ University of the Witwatersrand, Johannesburg, South Africa

Three expected workshop outcomes:

To explore and share perspectives of belonging in health professional education across SA HEL.

- To identify gaps amongst health professional faculty in embracing an engagement with belonging.
- To create a framework to include the concept of belonging so that it can be used in HPE curriculum with specific focus on student and staff development

A recent special edition of the South African Journal of Higher Education focused on (un) belonging in higher education. Various enablers to ensure belonging in programmes and policies were highlighted. Student retention, career satisfaction and improved throughput are documented as tangible outputs when students and staff have a sense of belonging. This sense of belonging be it individual or group advocacy targets inequality and exclusive cultural and systemic practices. The relevance to entrenched hierarchical and paternalistic paradigms within many health professions is obvious. There seems to be lack of institutional buy-in and strategic prioritisation to ensuring both staff and students find a sense of belonging within health professions. Further curricula, academic and living spaces, assessment practices, and teaching and learning strategies may not be enabling marginalised groups from being seen as ‘part of the team’. This workshop aims to explore the (un) belonging as a construct specifically within health professional education (HPE). The workshop will involve sharing stories, debating the merits and sharing insights on (un) belonging with a HPE lens.

The facilitators hope that by sharing experiences across health sciences disciplines and geographies we can document wide ranging experiences/perspectives on this topic. The creation of an appropriate framework where HPE can use the construct of (un) belonging in development of policies, curricula, programmes is anticipated. This will serve as the first phase of a developing a manuscript on Belonging as a priority principle in Health Professional Education.

Resources in the digital space

L Crous, C Hartmann

Elsevier Ltd., London, United Kingdom

Motivation: Knowledge generation in health care and the health sciences has reached unprecedented levels. Navigating the maze of information to find quality, learning resources is challenging for students and educators alike. Complexity is added when deciding how to incorporate these resources into a variety of learning experiences, which might take place in different learning environments or aim to facilitate different types and levels of learning, without increasing extraneous cognitive load.

Educators need to be confident in making decisions and competently using these resources within their teaching practice to facilitate not only students’ knowledge construction but also development of their digital and information literacy skills.

Using learning resources from Elsevier Clinical Key platform as examples, this workshop will help attendees to think through what must be considered within the South African context when selecting and incorporating a resource into a variety of learning experiences aimed at facilitating different types of learning in different learning environments.

Outline. 2 hrs

Ice-braker activity/ Quiz – Testing digital skills – identifying pre-conceived ideas about concepts related to learning resources, technology and learning design (20 min)

Interactive presentation. Introduction and overview of the principles and criteria for decision making about learning resources (30 min)

Showcase. Tour the Elsevier resources: CK Student, Osmosis (10 min)

Practical and group work. Applying principles and criteria to Elsevier resources and use one resource to create two learning activities suitable for different learning environments/ types of learning/ levels of learning. (30 min)

Presentations. Showcase and feedback (30 min)

Outcomes:

- Understand your responsibilities as they relate to learning resource selection for course design
- Explore criteria and principles that impact choice of learning resource
- Conduct a practice search of the Elsevier Resource Collection
- Design a variety of different learning events, using resources from the Elsevier Resource Collection

Engaged scholarship: An Ubuntu approach

N S Mashau, R T Lebesa

University of Venda, Thohoyandou, South Africa

Aim. To share how five universities collaborated in transdisciplinary research and community engagement using the Ubuntu approach. The workshop will be beneficial to researchers, educators, postgraduate students, community engagement scholars, and leaders who want to find ways of how to remove barriers that deter the success of engaged scholarship and community engagement in the higher education sphere.

Description. Societies including South Africa are expected to achieve sustainable development goals by the year 2030. Unfortunately, there is moral decay which is characterised by high levels of crime, GBVE, teenage pregnancy, and societal upheaval to name a few. People need to develop a positive moral compass to direct their everyday activities which will

positively contribute to the achievement of SDGs. The University of Pretoria, University of Venda, University of Johannesburg, University of Northwest, and the University of Limpopo are involved in a collaborative partnership using the philosophy as a foundation to guide the project. The application of the ubuntu philosophy which emphasises collectivism and participatory decision-making enables universities to engage with communities to devise mechanisms that can address obstacles to achieving SDGs. The workshop will be conducted in the form of a panel discussion. The Ubuntu project has five different sub-units which are interdisciplinary and inter-university. Each group will present and engage with the participants through a question-and-answer session. The tools that will be needed will include paper and pen, PowerPoint presentation tools with audio, and a video player.

Outcome:

- Ways of enhancing collaboration between institutions of higher learning and communities
- Application of engaged research in sharing information with communities
- Understand what Ubuntu is.

Current perspectives on core issues related to selection into health professions education programmes

J Blitz,¹ J Cleland,^{1,3} L van der Merwe,²

¹ Stellenbosch University, Cape Town, South Africa

² University of the Free State, Bloemfontein, South Africa

³ Lee Kong Chian School of Medicine, Singapore

Outline:

1. Brief (10 minute) presentations:
2. Lynette van der Merwe – Current selection criteria at South African medical schools
3. Jen Cleland – Issues of purpose, robustness, defensibility, and fairness in selection
4. Julia Blitz – Use of a Situational Judgment Test at Stellenbosch University
5. Small group activity (20 mins)
6. Identify core issues related to selection - goals, practicalities, non-cognitive traits, etc
7. Report back to plenary (20 mins)
8. Small group activity around addressing each theme (20 mins)
9. Report back to plenary (20 mins)
10. Wrap up (10 mins)

Outcomes:

By the end of the workshop, the participants will have:

- considered issues pertinent to selection of students into health professions programmes;
- explored a number of methods of selection;
- Identified issues their institution may want to consider when thinking about selection.

Suggested speakers:

Lynette van der Merwe

Jen Cleland

Julia Blitz

Relevance and novelty of the workshop

In 2016, van der Merwe et al published “South African medical schools: Current state of selection criteria and medical students’ demographic profile”. This survey is currently being repeated, so it may be opportune to

consider current thinking on selection criteria and procedures that can be used.

There are calls internationally for faculties to consider how to select students that will make “the best” health care professionals, acknowledging that this may include components beyond prior academic attainment. Motivations for this may be throughput rate (subsidy), social justice (access into the profession) and/or workforce distribution (rural and underserved communities).

We intend to explore how the variety of available tools that explore considerations in addition to the cognitive might be used in Southern Africa.

Online Structured Oral Examinations (SOEs) for postgraduate assessment

V Burch,¹ L Green-Thompson²

¹ Colleges Of Medicine Of South Africa, Cape Town, South Africa

² University of Cape Town, South Africa

Introduction. Prior to the Covid-19 pandemic the Colleges of Medicine of South Africa (CMSA) conducted in-person, patient-based oral examinations as part of the specialist certification process. The pandemic necessitated a transition to Structured Oral Examinations (SOEs) hosted on Zoom.

Outcomes. Participants will gain an understanding of the features of a trustworthy oral assessment process. They will design a SOE suitable for postgraduate assessment in clinical and laboratory-based disciplines. The workshop includes the use of a novel scoring rubric for SOEs.

Motivation. Digitalization of in-person oral examinations is attractive since it obviates the need for in-person assessment which is expensive to host and attend. Standardising oral examination processes, including the use of scoring rubrics, holds the possibility of improving their trustworthiness.

Outline of programme:

- Introduction: 10 minutes
- Participants share personal oral examination experiences (nominal group technique)
- Structured input: 15 minutes
- Features of trustworthy assessment events
- Structured input: 5 minutes
- Historical perspective of CMSA transition to Structured Oral Examinations
- Structured input: 5 minutes
- Assessment domains of a Structured Oral Examination
- Structured input: 15 minutes
- Basic design of a Structured Oral Examination case-based discussion using examples
- Comfort break: 15 minutes
- Small group activity: 30 minutes
- Design a Structured Oral examination case-based discussion and prepare PowerPoint slide to share in the large group session. Ideally 3-5 participants per group (max. 6 groups)
- Large group activity: 20 minutes
- Each group shares their case-based discussion using 1-2 PowerPoint slides (max. 6 groups)
- Structured input: 15 minutes
- Designing a scoring rubric for a Structured Oral Examination case-based discussion

- Small group activity: 20 minutes
- Adapt the suggested scoring rubric for the Structured Oral Examination case-based discussion designed earlier in the workshop
- Large group activity: 10 minutes
- Discussion about the utility of the suggested scoring rubric
- Wrap up of workshop: 10 minutes
- Answer remaining questions and feedback from participants

Advocating for recognition for healthcare professions

J Cleland

LKCmedicine, Nanyang Technological University Singapore

Scholarship is an integral aspect of academia. It shapes the practice of individuals and the field and is often used to inform career progression decisions and policies. This makes it high stakes. Yet it is complex, and ambiguous to navigate.

After introducing a recent definition of scholarship (Cleland et al. AMEE Guide to Scholarship. Medical Teacher 2021) I will draw on Boyer's seminal work and engage participants in discussion as to how his typology of scholarship applies to health professions education (HPE). We will then consider different types of engagement with scholarship in HPE, including scope of contribution and influence. Using cases and examples, we will discuss ways to assess "quality" of scholarship. Finally, we will generate practical advice for health professions' educators seeking academic advancement.

The outcomes of this workshop are to

- provide guidance to support colleagues in their career development as professional educators,
- to challenge biases and assumptions about scholarship which may still exist in educational systems and structures, and
- advance the stature/standing of scholarship in the field.

This workshop is relevant to all those working in HPE who wish to engage with scholarship as part of their personal and professional development.

Learning design for diversity and inclusion

L Crous, C Hartmann, S Moch, S Pattinson

University of the Witwatersrand, Johannesburg, South Africa

Student centred learning requires educators to rethink their teaching practices and approaches to designing learning experiences. Universal Design for Learning (UDL) offers principles for redesigning courses, learning events and environments to be more accessible and inclusive. The Arena Blended Connected (ABC) learning design framework presents the opportunity to explore types of student learning in different learning environments and how these impact on student engagement. These learning design frameworks assist us as we conceptualise different types of learning that can be used to facilitate accessible, inclusive learning experiences for diverse student groups.

In this workshop, attendees will have the opportunity to explore these two complementary learning design frameworks, evaluate their learning activities and adapt them to optimise inclusivity and student engagement.

Outline:

Time: +/- 2 hours

Ice-breaker activity. Watching a video – link "road sign" to areas for change (20 min)

Interactive presentation. Introduction and overview of the Universal Design for Learning (UDL) and the Arena Blended Connected (ABC) Learning design frameworks (30 min)

Brainstorming and group discussion. Linking learning outcomes to types of learning and what evidence students need to provide (20 min)

Practical. Applying the UDL and ABC frameworks to a learning event (30 min)

Presentations. Showcase and feedback (20 min)

Outcomes:

- Identify types of learning to increase student engagement, address diversity and create an inclusive learning experience.
- Link learning outcomes to types of learning to ensure inclusive and diverse learning experiences.
- Use ABC learning design and UDL frameworks to reconceptualize learning experiences.

Growing your digital garden for Interprofessional Education and Collaborative Practice

A Dreyer,¹ S Titus²

¹ *University of Witwatersrand, Johannesburg, South Africa*

² *University of Western Cape, Bellville, South Africa*

Three expected workshop outcomes

1. To share resources and practical technologies that can be used in interprofessional education and training.
2. To raise awareness of the technology-enhanced tools for educators to support collaborative practice.
3. To support 21st Century learning design by engaging health professions educators in digital literacy, creativity and innovation for teaching.
4. The workshop will require participants to prepare 1 slide illustrating the technology they used in the learning environment and submit prior to the session. This is prompted by:

- What do I use in my classroom and how does it meet the learning objective for my students/faculty? (Using the garden metaphor)
- What did I 'plant' in my classroom this year?
- What seeds did I use?
- How were the seedlings plants?
- What fruits could I harvest for teaching, research and collaborative practice?

Two presentations will then provide some background and rationale, to be followed by an interactive facilitated discussion on how we can harvest the tools for future practice. The workshop will conclude with key 'take-home' tools to inform future practice in integrating technologies into interprofessional education and practice in participants' work and study settings.

Participants will be encouraged to sign up for the Special Interest Groups.

Professional identity formation for life: vernacular expressions and global impacts

L Green-Thompson, M Mokhachane, A George, A Kuper, T Wyatt

University of Cape Town, South Africa

Professional identity formation (PIF) is a process of socialisation in which an individual gradually learns to 'think, act and feel like a doctor' (or health professional). This process occurs on two levels: the individual, cognitive level and the collective level whereby the student is invited to participate in the activities of physicians (health care professionals).

While the process of creating a professional identity is almost universally accepted, there has been a growing reflection in the global north around racially minoritised individuals' experiences and how the dominant tropes of concepts like professionalism limit their expressions and conduct. Wyatt (2020, 2021) argues that given these individuals' unique sociocultural contexts, researchers and educators need to reconfigure their perspectives on what PIF looks like for these groups, and their approaches in supporting their professional identity.

This workshop will draw on the recently published work by Mokhachane et al (2022), which uses South African vernacular languages to express the professional identity formation of a group of student leaders from the #FeesMustFall movement of the last decade. These activist experiences are located in an Ubuntu framing of the conversation. Green-Thompson et al (2017) have posited that this ubuntu framing is an essential part of understanding the education of health professionals as a relationship of social accountability with and amongst communities. The essential part of this formation lies in the interdependence of partners within a social compact.

This interactive workshop will allow delegates to explore a vernacular expression of professional identity formation. The outcome of this workshop will be written or graphic representations of these expressions. These representations may lead toward a context-based statement of the requirements for professional identity formation.

The workshop structure will have an introduction (15 minutes), the global north experience (15), the local experience (15), group work/discussion (45) and concluding synthesis (30).

Critical consciousness in responsive health professions education: perspectives from four South African institutions

A Hansen,¹ L Hudson,² L Crafford,³ R Cooke⁴

¹ Stellenbosch University, Cape Town, South Africa

² Cape Peninsula University of Technology, Cape Town, South Africa

³ Sefako Makgatho Health Sciences University, Pretoria, South Africa

⁴ University of Witwatersrand, Johannesburg, South Africa

Overview of the symposium theme. Health Professions Education literature argues that there is a need to prepare health professionals who are both clinically competent and critically conscious of the social contexts in which they serve. Implementing curricula that foster critically conscious graduates has implications for pedagogical approaches and the educators. This symposium explores perspectives on responsive curricula for health professionals across four South African institutions and five health professions. The symposium will offer key insights for the design and implementation of responsive health professions education curricula. It will highlight the implications of transformative curriculum renewal for the range of role players who engage in and are influenced by curriculum renewal.

Presenter 1:

- Mrs Anthea Hansen (Stellenbosch University, Centre for Health

Professions Education)

- Presentation title: Pedagogical considerations when implementing responsive curricula

Presenter 2:

- Dr Lizel Hudson (Cape Peninsula University of Technology)
- Presentation title: Curriculum and Critical Consciousness

Presenter 3:

- Mrs Lucille Crafford (Sefako Makgatho Health Sciences University)
- Presentation title: Emergent juncture-factor framework to anchor curricula in social responsiveness

Presenter 4

- Professor Richard Cooke (University of Witwatersrand)
- Presentation title: Curricula for socially responsive clinical associate students: the intersection of self, social and professional awareness

What participants will gain: There will be an opportunity for participants to raise issues from their own environments and pose questions to the panel. The interconnected factors that foster critical consciousness and affect the implementation of responsive curricula will be highlighted providing participants with insights that will influence their thinking about curricula at their home institution.

Who should participate: All health professions educators and students who have an interest in equipping health professionals to respond to health inequity within the local health contexts.

AI squared: Artificial intelligence and academic integrity in health sciences education

C Hartmann, J Van As, S Pattinson, S Moch, L Crous

University of the Witwatersrand, Johannesburg, South Africa

Artificial intelligence is changing the roles of health care professionals, with significant implications for the content of health professions curricula. Artificial intelligence also has the potential to change how students engage with knowledge and demonstrate learning, impacting on teaching, learning and assessment practices. Key questions about artificial intelligence in education relate to assessment of learning and student academic integrity. Educators need to consider how they can teach students to use artificial intelligence in a responsible way while developing professional practice and a culture of academic integrity. Rather than vilifying artificial intelligence in education, or students for using artificial intelligence in learning, we need to reimagine our learning, teaching and assessment practices to promote the values of honesty, responsibility, trust, fairness and respect.

The workshop aims to provide practical insights into potential challenges of artificial intelligence for teaching, learning and assessments and explore ways in which artificial intelligence can be leveraged to support students' learning and academic integrity.

Outcomes:

Attendees will be

1. Able to identify ways to develop a culture of academic integrity and opportunities for authentic assessment practices.
2. Aware of how artificial intelligence could impact on HSE.
3. Able to explore how artificial intelligence can be leveraged to facilitate student learning and support student academic integrity in HSE.

Outline:

- Introduction (5 min)

- Presentation on academic integrity (5min)
- Discussion on academic integrity and challenges faced (10min)
- Report back and consensus of key points (30min)
- Demonstration of artificial intelligence capabilities related to education and examples of how it is/ could be used to facilitate learning (15min)
- Discussion on the impact of artificial intelligence on HSE (15min)
- Report back and summary of key points: How can we leverage AI in facilitating students' learning and development of academic integrity (30min)
- Summary and closing (5min)

Sustaining health professions education through scholarship of teaching and learning: an approach to ethical mindedness

Y Heymans, J Pool

North-west University, Klerksdorp, South Africa

Motivation and relevancy: The work of a health professional involves being a teacher and a researcher. Both teaching and research are equally important and interdependent, and need to be developed, valued, rewarded and incentivised. Literature suggests a lack of ethical mindedness amongst SoTL researchers regarding ethical guidelines that apply to scholarly research. It is expected that SoTL research adheres to the same ethical and scientific criteria as all disciplinary research. In addition, there is also a lack of understanding of the context and approach of SoTL research by non-educational research ethics committees (REC's). This dilemma is confirmed by Pool and Reitsma (2017) stating 'Despite expanding engagement in SoTL, clear guidelines for ethical criteria for SoTL, and the implementation thereof remain limited'. The presenters argue that providing practical principles and guidelines for ethics in SoTL research may address the misconceptions and confusion about ethics in SoTL and may contribute to sustainable health professions education.

Outcomes:

- focus on the ethical issues related to researching teaching practices involving university students and lecturers,
- ethical implications for each step of the SoTL research process will be discussed in detail,
- share practical examples and guidelines,

Interactive workshop outline:

Welcome, context and key issues.

Introduction: Principles to enhance ethical mindedness when doing SoTL research in Health Professions Education

Principle 1: Power relationship

Principle 2: Decision to participate (or not)

Principle 3: Students are fully informed.

Principle 4: Autonomy to choose freely & privately to participate or not.

Principle 5: Be inclusive, fair, and equitable when selecting participants.

Principle 6: Benefits and risks for participating.

Principle 7: Disseminating the results.

Principle 8: Protecting participants' information and the integrity of the research project.

Principle 9: Safeguard & security measures to protect participant information and data.

Participant 10: Approval for the use of secondary data

Wrap-up

Developing a faculty development engagement session

R Meyer¹, J Van Wyk², L van der Merwe³

¹ Stellenbosch University CHPE, Cape Town, South Africa

² University of Cape Town, South Africa

³ University of Free State, Bloemfontein, South Africa

Faculty Development activities are mandated for staff involved in health professions education. Academics who offer training to others often still have other responsibilities and must collaborate and coordinate training offerings that include various people and their diverse skills. Faculty developers have started to question the efficacy of isolated workshop sessions and are moving towards more coherent faculty development programmes. The busy clinician often needs quick updates that include either online and/or face-to-face sessions, a niche that remains to be filled by workshops. There is not much context-appropriate literature on designing workshops for the ever-increasing lists of local Sub-Saharan African challenges.

This workshop will adhere to socio-constructivist principles. It aims to include practical guidelines for designing faculty development initiatives/workshops. By discussing the various components and theoretical underpinnings of such a strategy, participants will understand the value of various approaches to facilitate learning amongst a diverse cohort of health professions educators. The session will conclude with practical applications, with the opportunity to plan/design a faculty workshop in small groups.

Outcomes:

Increase awareness of the importance of designing appropriate faculty development initiatives to improve teaching effectiveness based on sound educational theory.

Highlight the value of using various strategies (mainly workshops) as a faculty development strategy.

Establish a community of support for new and established educators.

Relevance and novelty:

Health professions educators need adaptability and agility in a constantly changing educational environment, expertise in applying learning theories, and using technology in learning and teaching. Workshops offer effective ways of actively engaging adult learners and fostering deep learning, particularly in contexts where resources and time are limited. Educators responsible for faculty development need knowledge about the pedagogical principles and skills to effectively implement workshops as interactive learning experiences.

Hearing the learner voice

M Marshall¹, D Murdoch Eaton¹, J Blitz²

¹ University of Sheffield, United Kingdom

² Stellenbosch University, Cape Town, South Africa

Workshop outcomes

Participants will have an in-depth understanding of a range of approaches to gaining feedback about the learner experience through collaborative discussion.

Participants will be introduced to the facilitation skills for the 'appreciative enquiry' approach to evaluating the learner experience.

Participants will reflect on how 'appreciative enquiry' might be a useful approach within their curricula.

Methods.

Short presentation introducing key concepts

Facilitated task-orientated small group discussions and skill-development

exercises to engage staff and learners in developmental and responsive educational evaluation in the changing landscape of health professions education.

Good quality education requires thoughtful and purposeful evaluation, and is more than just a “ritualistic” completion of a feedback form after a single learning encounter or a longer placement.

Feedback methodologies range from questionnaires (immediate or delayed, purposeful or generic) through to collation of student views by nominated representatives. A brave teacher may ask learners directly for their views after a session, and even braver learners may respond in front of their peers. “Staff-Student conversations “ are an alternative approach, utilising an ‘appreciative inquiry’ framework.^[1] This model has been an innovative and dynamic intervention, allowing learners to collaboratively identify effective educational experiences, and to positively influence curricula change.

1. Sandars J, Murdoch-Eaton D. Appreciative inquiry. AMEE Guide. Medical Teacher 2017 39 (2) 123-127 <http://dx.doi.org/10.1080/0142159X.2017.1245852>