



09:00 Prompt			Welcome: Prof Gary Velan, Associate Dean (Education)
Session 1: Digital uplift for enhanced clinical learning			
1	09:05 10 min	Adaptive Tutorials versus Web-Based Resources in Radiology: A Mixed Methods Analysis of Efficacy and Engagement in Senior Medical Students	<u>Stuart Wade</u> ¹ , Michelle Moscova ² et al. ¹ Prince of Wales Hospital, ² School of Medical Sciences
2	09:15 10 min	Exploring Immersive Learning Through the Classie (Clinically Applicable Student Studies in Ethics) Project: Challenging Students to Incorporate Emotion and Experience into Learning	<u>Adrienne Torda</u> . Prince of Wales Clinical School
09:25 Q&A			
3	09:30 5 min	An Investigator-Blinded Randomised Controlled Trial for a Highly Immersive Serious Game in Paediatric Medical Education: PlayMed	Penny Uther, <u>Janaya Perron</u> et al. School of Women's and Children's Health.
4	09:35 5 min	A Virtual Reality Simulation Teaching Paediatric Cardiopulmonary Resuscitation to Medical Students: Virtual Doc	<u>Janaya Perron</u> ¹ , Michael Coffey ² et al. ¹ School of Women's and Children's Health, ² Sydney Children's Hospital Network Randwick
09:40 Q&A			
5	09:45 5 min	Update on the Clinical Workplace Assessment App (CWAapp)	<u>Silas Taylor</u> . Office of Medical Education
6	09:50 10 min	Teaching Ophthalmology in Medicine with Empathy and Immersion	<u>Jenny Hepschke</u> ¹ , <u>Naila Even</u> ² and Luis Dominguez ² . ¹ Prince of Wales Hospital, ² Office of the Pro Vice-Chancellor (Education)
10:00 Q&A			
Session 2: Curricular design for improved learning			
7	10:05 10 min	Investigating the Qualities for Globally Relevant Health Service Managers	<u>Reema Harrison</u> , Lois Meyer, Ashfaq Chauhan. School of Public Health & Community Medicine
8	10:15 10 min	Learning and Teaching Health Data Science Using Real-World Data Science Tools	<u>Sanja Lujic</u> and <u>Oscar Perez Concha</u> (on behalf of the postgraduate programs in Health Data Science teaching team). Centre for Big Data Research in Health (CBDRH)
9	10:25 10 min	Breaking New Ground: The Bachelor of International Public Health	<u>Lois Meyer</u> . School of Public Health & Community Medicine
10:35 Q&A			
10	10:40 10 min	Implementing Team-Based Learning to Improve Student Engagement in Anatomy	<u>Michelle Moscova</u> . Anatomy Dept., School of Medical Sciences
11	10:50 5 min	Design, Development and Implementation of a Successful Pathology Course for Students from Diverse Programs	<u>Nicodemus Tedla</u> and Gary Velan. Pathology Dept., School of Medical Sciences
12	10:55 10 min	Knowledge Maps: A Novel Online Tool for Learning and Assessment	Veronica Costin, <u>Gary Velan</u> . Pathology Dept., School of Medical Sciences
11:05 Q&A			
11:10 - 11:30 Morning Coffee			

Sessions after Morning Coffee		
Session 3: Understanding Professional Learning for Practice		
13	11:30 10 min	The ABC of Effective Learning <u>Chinthaka Balasooriya</u> * ¹ , <u>Adrienne Torda</u> ² and <u>Barbara-Ann Adelstein</u> ² . ¹ <i>School of Public Health and Community Medicine</i> , ² <i>Prince of Wales Clinical School</i>
14	11:40 10 min	Presentations of the Shanghai Executive Education Delegation Group <u>Executive education team and SJTU delegation representatives.</u>
15	11:50 3 min	Development of a Tool for Assessing Pharmacists' Professional Behaviour <u>Huda Dubai.</u> <i>Office of Medical Education</i>
	11:55	Q&A
Session 4: Technology Enhanced Curriculum Design		
16	12:00 10 min	MEDU - Finding Solutions + Building Partnerships <u>Andrew Lovell-Simons and MEDU staff.</u> <i>Medicine Education Development Unit</i>
17	12:10 7 min	Designing Effective Guides for Online Teaching <u>William Armour.</u> <i>Medicine Education Development Unit</i>
18	12:17 7 min	H5P - Bringing Content Alive with an Open-source Toolkit for Interactive Learning <u>Robert Parker.</u> <i>Medicine Education Development Unit</i>
	12:25	Q&A
19	12:30 5 min	Using Augmented Reality to Improve Visitor Experience in a Museum Setting <u>Dean Lovett.</u> <i>Museum of Human Disease</i>
20	12:35 10 min	Authentic Learning in Virtual Contexts <u>Husna Raze</u> ¹ , <u>Albie Sharpe</u> ¹ and <u>Xanthe Lawson</u> ² . ¹ <i>School of Public Health and Community Medicine</i> , ² <i>Office of the Pro Vice-Chancellor (Education)</i>
	12:45	Q&A
13:00 – 13:20 UNSW Medicine Research & Teaching Excellence Awards 2018		
Following the awards ceremony, a buffet lunch will be served – All welcome		

Please RSVP to the forum and/or lunch at:

<https://staff.med.unsw.edu.au/alt-forum>

Adaptive Tutorials versus Web-Based Resources in Radiology: A Mixed Methods Analysis of Efficacy and Engagement in Senior Medical Students

Stuart W.T. Wade^{1,2}, Michelle Moscova², Nicodemus Tedla², Daniel A. Moses^{1,3}, Noel Young⁴, Merribel Kyaw⁵, Gary M. Velan²

¹ Prince of Wales Hospital, ² School of Medical Sciences, ³ Prince of Wales Clinical School, ⁴ Westmead Hospital, ⁵ Royal Prince Alfred Hospital.

Background: Radiology is under-represented in many medical curricula. Adaptive tutorials, a form of e-learning, have the potential to enhance radiology education for medical students.

Methods: A randomised mixed methods crossover trial assessed the effectiveness of adaptive tutorials on knowledge of appropriate use and interpretation of head and chest CT scans compared with peer reviewed web-based resources. 81 volunteer year 5 and 6 students enrolled in the UNSW Medicine program were randomly allocated into two groups. In the first phase, Group A received a head CT adaptive tutorial, while Group B received the web-based resources. Both groups then completed an online assessment. Following cross over, chest CT was studied with Group B receiving the adaptive tutorial and Group A receiving web-based resources. Both groups completed another assessment then a questionnaire evaluating perceived engagement and efficacy of each resource.

Results/Discussion: Groups receiving adaptive tutorials achieved higher mean assessment scores in both phases of the study, statistically significant in the first phase only. Both groups reported higher engagement and overall perceived value of the adaptive tutorials. Our findings suggest interactivity aids student engagement, retention and application of knowledge.

Conclusions: Adaptive tutorials may potentially bridge the current gap in radiology education within medical curricula.



Exploring Immersive Learning Through the Classie (Clinically Applicable Student Studies in Ethics) Project – Challenging Students to Incorporate Emotion and Experience into Learning

Adrienne Torda

Prince of Wales Clinical School

Background: The CLASSIE project is an innovative project designed to develop educational modules for teaching 'Ethics in clinical decision making' to senior medical students that incorporates emotion, experience and reflection into their learning process. This project involved the development of a series of clinical scenarios presented to the students as an immersive experience via VR technology. Each VR scenario triggered interactive online learning activities based on the ethical dilemma in the clinical scenario.

Method: Student feedback was sought on 3 things – engagement, user experience and learning gains.

Results: Student ratings on engagement was very high. Most students commented that the scenarios were realistic and engaging. Approximately 40% said that these modules exposed them to scenarios that they hadn't come across clinically. User experience was mixed. Self-perception of knowledge gains was high amongst most students. Knowledge gains as measured by before and after quizzes were not as high. Reflections on these scenarios showed a good appreciation of the relevance of this material relative to real clinical practice and decision making.

Conclusion: Incorporating immersive 3D experiences into learning, appears to be beneficial in terms of student engagement and learning. Students however expect seamless delivery and some are still outcome rather than experience focused.



An Investigator-Blinded Randomised Controlled Trial for a Highly Immersive Serious Game in Paediatric Medical Education: PlayMed

P. Uther^{1, 2}, J. E. Perron¹, M. J. Coffey^{1, 2}, A. Lovell-Simons¹, A. Bartlett^{1, 2, 3}, A. M. McKay^{1, 2, 4}, S. Taylor⁵, M. Garg¹, S. Lucas^{1, 2}, J. Cichero², S. Kennedy^{1, 2, 4} and C.Y. Ooi^{1, 2, 6}.

¹ School of Women's and Children's Health, ² Sydney Children's Hospital Network Randwick, ³ The Kirby Institute, ⁴ Department of Nephrology, Sydney Children's Hospital Randwick, ⁵ Office of Medical Education, ⁶ Department of Gastroenterology, Sydney Children's Hospital Randwick.

Background: We developed PlayMed, a highly immersive serious game, and evaluated the educational efficacy of PlayMed (PM) against two controls, (i) SmartSparrow, an online learning module (SS) or (ii) paper-based clinical guidelines (GL).

Methods: We performed an investigator-blinded randomised controlled trial on senior University of New South Wales medical students at Sydney Children's Hospital, Australia. Participants were block randomised and given 8 weeks access to one educational intervention teaching asthma and seizure management (PM, SS or GL). Clinical performance was evaluated through two objective structured clinical examinations (OSCE) (15 marks each). Participants also completed a Likert-style questionnaire. A p-value <0.05 was statistically significant.

Results: Ninety-six students were assessed (36 PM, 31 SS and 29 GL) and demographics were similar between groups (median (IQR) age 23 years (22-24), 45% male). The mean (SD) OSCE scores for PM, SS and GL were 20.8 (3.3), 19.8 (3.5) and 18.7 (3.8), with PM significantly higher than GL (p=0.02). Participants 'strongly agreed' that PM, SS and GL prepares them for real-life clinical scenarios (38.9%, 16.7% and 3.5%, respectively), with PM significantly higher than GL (p=0.0002).

Conclusion: Our findings demonstrate a positive attitude towards PlayMed and provide high-quality evidence of educational validity.



A Virtual Reality Simulation Teaching Paediatric Cardiopulmonary Resuscitation to Medical Students: Virtual Doc

J. E. Perron¹, M. J. Coffey^{1, 2}, A. Lovell-Simons¹, Z. Li³, S. Takeda³, L. Dominguez³, and C.Y. Ooi^{1, 2, 4}

¹ School of Women's and Children's Health, ² Sydney Children's Hospital Network Randwick, ³ Immersive Technologies, Education Delivery Services, Office of the Pro Vice-Chancellor (Education), ⁴ Department of Gastroenterology, Sydney Children's Hospital Randwick.

Background: We developed a virtual reality simulation, Virtual Doc (VD), teaching paediatric cardiopulmonary resuscitation skills. This study evaluates the usability and perceived educational value of VD.

Methods: We recruited University of New South Wales medical students through voluntary convenience sampling. Participants attempted at least one full VD case and completed two mixed-methods questionnaires. Survey 1 assessed game components using 3-point Likert-scale questions. Survey 2 evaluated educational validity using 7-point Likert-scale and yes/no/not sure questions. The responses were analyzed using descriptive statistics.

Results: Twenty-six students were recruited and completed Survey 1 (n=24) and/or 2 (n=23). VD was seen as 'very', 'moderately' or 'not' consistent with real-world clinical experiences by 25.0%, 58.3% and 16.7% of respondents, respectively. 58.3%, 37.5% and 4.2% of participants were 'completely engrossed', 'mildly involved' or 'not involved' in the VD environment, respectively. In terms of gameplay, 69.6% and 73.9% of participants agreed with 'understanding how to play the game' and 'found the gameplay elements useful in understanding cardiopulmonary resuscitation', respectively. 69.6% of participants agreed that VD improved their understanding of cardiopulmonary resuscitation. VD was enjoyed by 91.3% of participants.

Conclusion: Our findings demonstrate a positive response to VD. We plan to further investigate with a randomized controlled trial.



Update on the Clinical Workplace Assessment App (CWAapp)

Silas Taylor

Office of Medical Education, UNSW Medicine

Abstract:

The Clinical Workplace-based Assessment application (CWAapp) has been extensively used in Phase 1 for communication skills (SOCA) tasks and recently successfully employed for miniCEX tasks in the Clinical Transition Course. Dr Silas Taylor, who led the project which introduced the app, will reflect on successes and challenges to date and discuss plans for use throughout Phase 2 in 2019.



Teaching Ophthalmology in Medicine with Empathy and Immersion

Jenny L Hepschke¹, Naila Even² and Luis Dominguez³

¹ Department of Ophthalmology POWH, Conjoint Lecturer, ² Education Delivery Services, Office of the Pro Vice-Chancellor (Education), ³ Immersive Technologies lead, Office of the Pro Vice-Chancellor (Education)

Abstract:

As part of an Inspired Learning Initiative project in Adult health 2 (Phase2 medicine) a big scale Virtual Reality immersive Ophthalmology tutorial was developed. This innovative teaching method, using *eXtended Reality Learning Object* (XR-LO) was developed thanks to a collaboration between Ophthalmologists from the Department of Ophthalmology POW Hospital as well as educational & Immersive Technologies developers from PVCE.

The aim was to improve ophthalmology teaching, an important subspecialty for the general doctor, that has faced decreasing teaching allocation over the last decade with resulting lack of confidence reported by Senior Medical students and Junior doctors.

This 90- minute tutorial, which runs once a term for ~40 students, uses self-experience to enable empathy-based learning via the virtual reality experiences of patients suffering from different eye diseases. During the first part of the class students are guided through the patient experience of the most common eye diseases using progressive severity scales and interactive discussion relating symptomatology to pathophysiology and management. During the second part the students are encouraged to self-explore the different symptoms.

The pedagogical application of this new way of teaching was carefully designed using evidenced-based data and clinical ophthalmological expertise and was one of the first examples of VR immersion with specific learning outcomes used for large-scale teaching in Australia.

We will present some preliminary outcomes and student feedback based on the internal PULTS survey and a virtual presence questionnaire (Witmer et al 2005) that were used to improve and update the tutorial. In 2019 we are hoping to formally study learning outcomes, virtual presence as well as the experimental set up and digital analytics to evaluate and publish the learning outcomes of the tool.



Investigating the qualities for globally relevant health service managers

Reema Harrison, Lois Meyer and Ashfaq Chauhan

School of Public Health and Community Medicine

Abstract:

Health systems are complex and continually changing across a variety of contexts and health service levels. The capacities needed by health managers to respond to current and emerging health issues across different health care organisations are not yet well understood. Studies to date have been country-specific and have not integrated different international and multi-level insights.

Aim: To capture the priority areas for health service management globally and the capabilities required of the health management workforce to address these and explore the implications for our postgraduate provision.

Method: In Phase 1 of the project a rapid review of evidence was undertaken examining the current challenges and priorities for health leadership and workforce management using an international perspective. In Phase 2 of the project fifteen semi-structured interviews were conducted with recent graduates to senior health managers and executives from seven different countries.

Results: Phase 1 identified a set of consistent challenges and emerging trends within healthcare sectors internationally for health leadership and management represented at system, organisational and individual levels. Phase 2 revealed four emerging themes that reflect competencies required of healthcare managers across countries: 1) Learning leaders 2) Innovative change agents 3) Collaborative stewards and 4) Evidence-informed practitioners.

Conclusion: Our findings suggest highly dynamic and challenging expectations for health service managers within and across health systems globally, that highlight and affirm, the need for our health management provision to foster resilience, professional identity formation and lifelong learning.



Learning and teaching health data science using real-world data science tools

Sanja Lujic and Oscar Perez Concha

Centre for Big Data Research in Health (CBDRH) (on behalf of the postgraduate programs in Health Data Science teaching team)

Abstract:

Health data science (HDS) is an interdisciplinary field lying at the nexus of health, epidemiology, statistics and computer science. Postgraduate HDS programs combine multifaceted areas of healthcare systems, research design, theoretical statistical models, computer programming skills and machine-learning methods in order to manipulate and analyse high-volume, unstructured and complex datasets. To meet the challenge of enabling HDS learners with the necessary content and analytical expertise, the interdisciplinary CBDRH teaching team have developed an integrated learning and teaching environment utilising real-world data science tools as a platform for both blended and fully online streams. The environment combines the leading open-source data analytics platforms (R and Python) and state-of-the art interactive teaching resources (learnr and Jupyter Notebooks) supported by industry-standard version control software (Git, GitHub Classroom and Google Colaboratory). At the heart of the environment are interactive tutorials which weave together narrative text, instructional videos, quizzes and hands-on computer programming exercises in a single easy-to-use interface, run on students' own laptops and deployable in online environments. These are all the same tools used every day by research and industry health data scientists. Demonstration of the integrated environment will be showcased, and its benefits to both students and teaching faculty discussed.



Breaking New Ground: The Bachelor of International Public Health

Lois Meyer

School of Public Health and Community Medicine

Abstract:

This year the Bachelor of International Public Health (BIPH) was offered as the first PLuS Alliance program at UNSW. In keeping with the intent of the Alliance, the BIPH aims to address global public health challenges through bringing together the expertise of academics across the PLuS partners and using innovative technology and pedagogical approaches for expansive student access and transformative learning. This presentation outlines the conceptual approach taken to designing and developing the first PLuS program at the university to meet the needs of an anticipated new and fully online undergraduate student cohort. It outlines some of the challenges, benefits and lessons learnt in seeking to break new ground in offering cross institutional online learning provision both at a program and course level. This will be highlighted through insights from the recently delivered International Indigenous Health course, the first to be designed, developed and delivered in the BIPH at UNSW.



Implementing Team-Based Learning to Improve Student Engagement in Anatomy

Michelle Moscova

Department of Anatomy, School of Medical Sciences.

Abstract

Team-based learning (TBL) is an innovative teaching method that follows a structured process to collaboratively involve students in learning and application of class material to real problems. Originally developed by Larry Michaelsen, the method has been successfully used in a wide variety of disciplines in undergraduate and postgraduate settings.

In 2018 Functional Anatomy for Health and Exercise was re-developed to be taught in TBL format with the aim to increase student engagement. The modifications were focused on problem solving and application of anatomy content to human movement. Teams were selected based on previous performance in anatomy and level of interest in the course content. All teams stayed together for the duration of the course. Readiness assurance process was used to encourage student accountability individually and to their teams.

Two team assessments promoted both application of content and team development. Frequent and immediate feedback on individual and team performance was provided. Both student grades and feedback suggested improvements in the 2018 course structure. The percent of students failing the course decreased from 10% to 5% and student satisfaction with the course increased from 73.3% to 95.5%. Student comments suggested that teamwork was one of the most valued components of the course.



Design, Development and Implementation of a Successful Pathology Course for Students from Diverse Programs

Nicodemus Tedla and Gary Velan

Pathology Dept., School of Medical Sciences

Abstract:

Learning the basic science aspects of disease processes without focusing on their relevance in the real world can be difficult, uninspiring, and de-motivating for students, irrespective of the quality of face-to-face teaching. These problems were particularly noticeable in those students enrolled in a Stage 3 Pathology course (PATH3207-Musculoskeletal Diseases) from diverse programs including Medical Science, Science, Advanced Science, Biomedical Engineering and Exercise Physiology. A sound knowledge of the fundamental concepts of disease processes is key for these students' future careers in biomedical research, biomedical and tissue engineering, biotechnology and allied health. In that context, PATH3207 was designed with the intention of providing practical experiences that motivate students and enhance learning. The course is unique in that it incorporates a series of highly relevant lectures by invited experts. These are reinforced by weekly team-based learning and integrated practical classes that utilise highly innovative on-line teaching resources. The course is further enhanced by assessments that engender learning. These include: (i) strategically timed online formative assessments that provide students with timely feedback and (ii) evidence-based symposia. The latter are designed to encourage collaborative work, communication and peer review, which are key capabilities for future clinicians and researchers. This innovative approach made PATH3207 one of the top-rated courses in the University for the last 12 years.

Knowledge Maps: A novel online tool for learning and assessment

Veronica Costin and Gary Velan

School of Medical Sciences, UNSW Medicine

Abstract:

Background: Concept and knowledge maps have the potential to improve student learning and understanding by promoting meaningful learning and critical thinking. However, providing manual feedback on students' maps is not feasible for large classes. Accordingly, a user-friendly, valid and reliable, automated online tool for assessment and feedback of students' maps might have significant benefits for learning.

Method: Knowledge Maps is an online mapping tool, which provides automated feedback on students' attempts. Three studies were performed: A) Group 1 completed a mapping activity on Ischaemic Heart Disease (IHD) and was given a link to existing resources on Deep Venous Thrombosis (DVT), while Group 2 received a map on DVT and was given a link to existing resources for IHD. Groups were assessed using a quiz including questions on both topics, then completed a usability questionnaire. B) Participants completed maps on cranial nerves, with a pre-test prior to the mapping activity and post-test following the activity. C) The potential utility of Knowledge Maps for assessment was investigated by comparing scores generated by the software with manual grading of a modified essay question (MEQ) on the same topic. A questionnaire was used to gather students' perceptions of the tool.

Results: A) A higher perception of learning was reported after using Knowledge Maps, but no difference between groups in quiz scores. Most participants agreed that they found the activity helpful to their learning and would recommend it to others. B) There was a significant improvement between pre-test and post-test quiz scores. C) Regression analysis showed a significant correlation between map scores and MEQ scores, and questionnaire responses were overwhelmingly positive.

Discussion: These preliminary studies show that Knowledge Maps software is readily accepted by both students and educators. Results from Study C suggest mapping provided a similar indication of students' understanding of a topic as a modified essay question, with the advantage of instant, consistent computer grading.

Conclusions: Knowledge Maps is a web-based system integrated with Moodle that can be used to create, edit and share maps, as well as providing automate feedback on students' inputs. This tool has potential benefits for learning in a variety of disciplines and might be a useful addition to the digital assessment repertoire in higher education.



The ABC of Effective Executive Education

Chinthaka Balasooriya¹, Adrienne Torda² and Barbara-Ann Adelstein²

¹ School of Public Health and Community Medicine, ² Prince of Wales Clinical School

Abstract:

Authenticity, balance and customisation are key ingredients effective educational design. These ingredients are of even greater importance in the design of executive education programs, as participants are often senior practitioners with a wide and diverse range of experiences.

We drew on these principles to design an Executive Education program in Medical Education. Authenticity was ensured by grounding the program in sound educational theory that was illustrated through practical examples. A judicious balance between presentation-based and experiential activities was achieved, allowing learners to observe theory in practice. Time for reflection and self-directed group discussion was scheduled into the program. Most significantly, a range of strategies were used to customise the program to suit the various needs of the participants, including seeking participant input into the design and incorporating a range of elective options.

In this presentation, we will discuss the details of the above strategies and the impact that the program had on participants. In addition, we will briefly discuss the strong and highly effective collaboration that we have developed between UNSW and the Shanghai Jiao Tong University (SJTU). Through the above, we will provide the audience an opportunity to consider determinants of success related to the development of effective educational programs and effective international collaborations.



Development of a tool for assessing pharmacists' professional behaviour

Hudda Dubai

Doctoral Candidate, Office of Medical Education, UNSW Medicine

Supervisors: Professor Boaz Shulruf, Dr Barbara-Ann Adelstein, Dr Silas Taylor (all at the Office of Medical Education)

Abstract:

Objectives: To develop and test a tool to measure professional behavioural aspects of practising pharmacists at a workplace.

An instrument was constructed to represent six dimensions of behavioural Professionalism. Experts reviewed the instrument included supervisors and community Pharmacists — the newly developed instrument conducted among community pharmacies in Sydney city during autumn 2017.

A revised instrument was administered to 272 junior pharmacists were invited to complete the questionnaire, and 163(63%) questionnaires were returned. Three hundred twenty-one supervisors participated, response rate = 203 (68%). Exploratory Factor Analysis (EFA) resulted in a reduction item from 61 to 23. The items' reliability within the factors for self- report questionnaire were acceptable (Interaction: 0.677; Content of communication: 0.781; establishing professional statuses: 0.712; and Process of communication: 0.766).

Further descriptive analysis will contribute to the final conclusions.



MEDU - Finding solutions + building partnerships

Andrew Lovell-Simons and MEDU staff

Medicine Education Development Unit

Abstract:

The Medicine Education Unit (MEDU) was set up to assist in improving learning and teaching within the faculty through innovative pedagogy, the adroit choice and use of technology and the building of partnerships. This talk will demonstrate some of projects MEDU has and is working on and the collaborations that have developed. It will also demonstrate that sometimes simple, creative solutions can be the most effective, scalable and economical. The MEDU team will discuss: an animated eBook for future surgeons; a virtual walk through of the Operating Suite; an online hospital orientation resource; a new online Resuscitation course; resource demonstrating the examination of the Female Reproductive System; an immersive emergency response program. These projects will show the scope, creativity and versatility of MEDU and our desire to work with and support academics, practitioners and specialists.



Designing Effective Guides for Online Teaching

William Armour

Medicine Education Development Unit, UNSW

Abstract:

Creating effective online teaching guides was identified as a need to assist the development of staff digital literacy as current guides were mostly focused on the options of a tool rather than achieving a certain teaching task. Using a constructivist approach to learning, a format for guides was created using a standard layout that established key knowledge with minimal jargon and structured learning using icons to prompt users to reflect on the applications of the skills used during a task. With a focus on enabling course convenors to achieve online teaching tasks this new format was trialled through a weekly email distributed to the course convenors within the School of Public Health and Community Medicine. The guides included in each email were selected to present tasks that were relevant to the time of the teaching period and build on the knowledge and skills used previously. Feedback from course convenors on the usefulness of the guides was generally positive and enabled a number of course convenors to achieve the desired teaching tasks. The guide format created is being expanded to cover more teaching tasks and will be distributed to a greater audience for the next teaching period.



H5P - Bringing Content Alive with an Open-Source Toolkit for Interactive Learning.

Robert Parker

Medicine Educational Development Unit

Keywords: interactive, microlearning, flexible, nimble, just-in-time

Abstract:

Normally a student encounters websites, videos, screencasts, pictures, diagrams, PDF lecture notes and guides that are relatively static learning objects online; but with H5P you can create an interactive layer without coding that is nimble and flexible and just-in-time. This agile development allows you to design microlearning on the fly, respond to changes in content and systems of delivery. But more importantly, it helps you think like a designer. A designer of the learning pathways and modes of experiencing knowledge.



Using Augmented Reality to Improve Visitor Experience in a Museum Setting

Dean Lovett

Manager, Museum of Human Disease, MEDU, UNSW Medicine

Abstract:

The Museum's collection is comprehensive and diverse but to really engage with it our visitors need an understanding of anatomy and pathology. Yet, many of the Museum's visitors are high school students. So, the Museum is teaming up with the Lab for Innovation in Technology in Education (LiteRoom) to design an augmented reality self-guided tour of our diverse collection. The web-based application will highlight key areas of interest in our specimens. This will allow our visitors an unparalleled experience, by ensuring they can valuably engage with our great collection.



Authentic Learning in Virtual Contexts

Husna Razeem¹, Albie Sharpe¹ and Xanthe Lawson²

¹ School of Public Health and Community Medicine, ² Office of the Pro Vice-Chancellor (Education)

Abstract:

PHCM2003: Health Promotion is a newly developed, fully online course that will be delivered next year as part of the Bachelor of International Public Health. One of the goals of the course is to get students to develop their higher order thinking and reflection skills by making their learning authentic and meaningful. With this goal in mind the team developed an extended case study centred on the fictitious island nation of Pambani. Using photomontage and Prezi students zoom in to the town of Akiyakanda and visit various families, a health clinic, a garment factory and the local school. Through observation and listening to members of the town talk, they are asked to identify the health issues people are experiencing and possible solutions and barriers to affecting change. While the island is fictitious the case study is based on real data gathered in Sri Lanka as part of Dr Albie Sharpe's PhD thesis. In this way the students are presented with authentic real-life scenarios that give them an opportunity to apply the concepts they are learning about from the perspective of a public health practitioner. These skills can then be applied to other real-life scenarios helping them develop their higher order thinking and reflection skills.