



Dunedin School of Medicine
Te Kura Whaiora o Ōtepoti

Proceedings of the Health Profession Education Research Symposium 2017

*Sharing good teaching practice and promoting
research excellence in health profession education*



Wednesday 6 December 2017

8:30am to 5:10pm

Octagonal Room, 1st Floor Dunedin Hospital (morning sessions)
& Hunter Centre Annex G05 (afternoon sessions)

Supported by the University of Otago Continuing Education Fund

Proudly in association with Southern District Health Board

This symposium was the first of its kind at the Dunedin School of Medicine. It was intended to provide a welcoming and supportive environment. To promote research and scholarship into health professional education at the Dunedin School of Medicine, we encouraged authors to write abstracts that focus on research or practice.

Many participants were new to presenting educational research and discussing their teaching practice so peer-reviewers of the abstracts were encouraged to be gentle and constructive in their approach to reviewing. All abstracts were reviewed by two reviewers. Suggestions were collated and passed back to the authors. The revised abstracts are found in this proceedings.

I would like to thank the following reviewers who provided time to provide peer-review feedback to the authors of the submitted abstracts:

Kim Brown, PhD student, College of Education, University of Otago

Associate Professor Clinton Golding, Higher Education Development Centre, University of Otago

Rafaela Costa Camoes Rabello, PhD student, College of Education, University of Otago

Dr Caitriona Dennis, Educational Staff Development Manager, Leeds Institute of Teaching Excellence Project Leader, Leeds Institute of Medical Education (LIME), University of Leeds

Sylvia Robertson, PhD student, College of Education, University of Otago

Lara Sanderson, PhD student, College of Education, University of Otago

Dr Kelby Smith-Han, Medical Education Research Academic Lead, Otago Medical School, University of Otago

Professor Rachel Spronken-Smith, Dean, Graduate Research School, University of Otago

Professor Tim Wilkinson, Director MB ChB programme, Otago Medical School, University of Otago Christchurch

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DSM Health Professional Education Research Symposium

Morning Sessions | Octagonal Room

8:30 - 9:00	<i>Registration / Morning presenters please load your presentations</i>	
9:00 - 9:10	Guest speaker <i>Office of Maori Development</i>	<i>Mihi Whakatau/ Welcome</i>
9:10 - 9:30	Layla Hehir <i>Department of Surgical Sciences Dunedin School of Medicine</i>	<i>Pop up simulation</i>
9:30 - 9:50	Lis Latta <i>Department of Medicine Dunedin School of Medicine</i>	<i>Preparing for Palliative Care</i>
9:50 - 10:10	Jessica Young <i>Department of General Practice & Rural Health Dunedin School of Medicine</i>	<i>Students' learning experiences in the Safe and Effective Clinical Outcomes clinic and its role in the transition to clinical practice.</i>
10:10 - 10:30	Simon Stebbings <i>Department of Medicine Dunedin School of Medicine</i>	<i>Developing leadership and support for teaching in the Department of Medicine</i>
10:30 - 11:00	<i>Morning tea</i>	
11:00 - 11:20	Jane Millichamp <i>Medical Education Unit Dunedin School of Medicine</i>	<i>Evaluation of a novel approach for teaching advanced communication skills</i>
11:20 - 11:40	Ralph Pinnock <i>Medical Education Unit Dunedin School of Medicine</i>	<i>Clinical reasoning at Dunedin School of Medicine</i>
11:40 - 12:00	Arlene McDowell <i>School of Pharmacy University of Otago</i>	<i>Does active learning enhance understanding in a pharmaceutical science lab class?</i>
12:00 - 12:20	Richard German <i>Health Sciences Library University of Otago</i>	<i>Researching smarter: five years of online information skills learning</i>
12:20 - 12:40	Julie Timmermans <i>Higher Education Development Centre University of Otago</i>	<i>Exploring threshold concepts in the health professions</i>
12:40 - 1:20	<i>Complimentary lunch</i>	

DSM Health Professional Education Research Symposium

Afternoon sessions | GO5 Hunter Centre Annex

1:20 - 1:40	Cat Ronayne <i>Department of Pathology Dunedin School of Medicine</i>	<i>If you can't beat them, spam them! Using Facebook to increase student engagement</i>
1:40 - 2:00	Joy Rudland <i>Education Unit University of Otago, Wellington</i>	<i>What stops students from seeking feedback?</i>
2:00 - 2:20	Yoram Barak <i>Department of Psychological Medicine Dunedin School of Medicine</i>	<i>Creating a MCQs "bank" for Psychological Medicine</i>
2:20 - 2:40	Emma Merry <i>Education Unit University of Otago, Wellington</i>	<i>Motivation in clinical teachers in intensive care</i>
2:40 - 3:00	Stephen Duffull <i>School of Pharmacy University of Otago</i>	<i>A philosophical framework for pharmacy practice sets the need for education in clinical decision making.</i>
3:00 - 3:30	<i>Afternoon tea</i>	
3:30 - 3:50	Joy Rudland <i>Education Unit University of Otago, Wellington</i>	<i>Tracking Dunedin students as they progress in their medical careers</i>
3:50 - 4:10	Lisa Gallagher <i>Department of Pathology Dunedin School of Medicine</i>	<i>Taking the microscope out of the laboratory</i>
4:10 - 4:30	Mike Tweed <i>Department of Surgical Sciences Dunedin School of Medicine</i>	<i>Can we improve MCQs response and scoring systems?</i>
4:30 - 4:50	Stephen J Gallagher <i>Medical Education Unit Dunedin School of Medicine</i>	<i>Online resources to equalise learning opportunities</i>
4:50 - 5:10	Ralph Pinnock <i>Medical Education Unit Dunedin School of Medicine</i> Tim Wilkinson <i>Education Unit University of Otago, Christchurch</i>	<i>Closing thoughts from discussants</i>
5:10pm	<i>End</i>	

In situ multidisciplinary simulation (Pop up simulation)

Authors

Layla Hehir, Ohad Dar, Shona Willers, Kate Frame, & Stephanie Vos

Department of Surgical Sciences, Dunedin School of Medicine, University of Otago

Background

Simulation is ‘an educational environment where students from two or more professions learn about, from, and with each other to enable effective collaboration and improve health outcomes’. (1) In situ simulation refers to scenarios that take place in the actual patient care setting/environment in an effort to achieve a high level of fidelity and realism. (2). It is being increasingly used to teach clinical and non clinical skills. It is also a tool that can be used to test equipment and protocols.

Description

We piloted three in situ multidisciplinary simulations. Our aim was to find out if it would be feasible to run an in situ simulation programme in Dunedin Public Hospital. These simulations were based around scenarios suggested by ward staff to their clinical nurse specialist; a fall, hypoglycaemia and chest pain. These were attended by medical, nursing and allied health staff during working hours. Two took place on the ward and one took place in the rehab gym. After each simulation, we filled out a warrant of fitness where we highlighted any issues encountered. Each simulation took 45 minutes and provided between 7 and 8 education hours total. (10-11 participants) Attendance was optional and the simulation was advertised via email beforehand.

Evaluation

Participants of the 3rd simulation completed a post simulation questionnaire. (10 participants) This was a Likert-style questionnaire. 100% felt the scenarios related to their clinical practice. 100% felt that scenario training is useful teaching to recognise and manage a deteriorating patient. 100% felt that scenario teaching improved their familiarity with equipment and the clinical environment. 90% would be interested in participating in simulation again. The one who was not interested was a medical student who we asked to take part in place of a house surgeon. The scenario was too advanced and we had not anticipated this.

Discussion

The pilot was well received with minimal disruption to ward. There was a mix of attendees and two nurses took place in more than one simulation. It proved challenging to get medical staff to engage which we felt was vital to make it interdisciplinary teaching. Putting medical students in place of house officers showed us the importance of pitching the simulation to the appropriate skill level. Some concerns about in situ simulation include the risk of disruption to ward work, patient and family perceptions. This did not seem to be a big issue for us as we ran the simulations during handover time when there were more nursing staff. We spoke to patients and families in the clinical area prior to commencing the simulation and explained that we would be running a simulated emergency for learning purposes and they were very receptive to this.

Next Steps

We hope to implement this as hospital wide. We currently have a survey ‘Your Voice in Your Training’ on pulse to guide this which allows staff to request simulations they would be interested in. We have formed a Simulation Working Group and have written scenarios, warrant of fitness templates and feedback forms. We will be logging any adverse events on safety 1st as near misses so that any issues can be addressed. We have won the staff priority award in the southern DHB innovation challenge for this project for which we have been funded 10,000 dollars to buy the necessary electronic equipment.

References

- WHO Study Group on Interprofessional Education and Collaborative Practice. World Health Organization, Geneva. (http://www.who.int/hrh/resources/framework_action/en/index.html. Accessed 8 October 2017)
- Kyle, R., & Murray, W. B. (2010). Clinical simulation. Cambridge, MA: Academic Press.

Preparing for Palliative Care: Undergraduate healthcare education in palliative and end of life care in New Zealand

Author

Lis Latta

Department of Medicine, Dunedin School of Medicine, University of Otago

Background

This presentation outlines the background, aims and methods of a mixed methods research project that is being undertaken towards the requirements of a PhD in Health Sciences with a special focus on undergraduate education in palliative care.

Aim and Methods

This study aims to determine the current state of undergraduate medical and nursing education in palliative care in New Zealand, and explore graduates' self-efficacy and attitudes towards caring for people at the end of life, including factors (barriers and enablers) that influence this process. The research will be carried out in three phases. Phase one involves a national survey of undergraduate training programmes. Phase two evaluates graduates' self-efficacy and attitudes using surveys and interviews, and phase three explores the factors that influence teaching and learning about palliative and end of life care in the clinical setting using focus groups with clinical staff.

Discussion

This research will identify ways in which undergraduate training can be further developed to maximise learning about palliative and end of life care and build self-efficacy so graduates are a): prepared for the clinical reality of caring for people who are dying and b): equipped with the knowledge, skills and attitudes required to provide optimal palliative and end of life care.

Students' learning experiences in the Safe and Effective Clinical Outcomes clinic and its role in the transition to clinical practice

Authors

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¹Department of General Practice and Rural Health, Dunedin School of Medicine, University of Otago

²Higher Education Development Centre, University of Otago

Background

The Safe and Effective Clinical Outcomes (SECO) clinic simulation was designed to allow medical students to learn from adopting the doctor role in a high fidelity environment. We aimed to look for evidence of students using their learning from the SECO clinics in their trainee intern (TI) clinical practice.

Methods

25 of 50 eligible students consented to participate in one of six focus groups. After general discussion about what helped prepare them for TI year, students answered two written questions (unprompted recall) and then discussed: Are there any things that you learned from the clinics that have made a difference in practice as a TI? Can you recall any of the cases from your SECO clinics that you saw?

Results

From SECO, students learned about: asking for help when uncertain, doing the whole consultation, learning from mistakes, safety netting, and red flags. Their comments suggest a longer-term impact of SECO on their clinical practice.

Discussion

There is diversity in what individuals learn from the 'same' cases. Students valued patients' outcome related feedback on performance. How can we assess the influence of learning on practice? How justified are we in making assumptions about learning from SECO?

Conclusion

The SECO clinic assisted with their transition from medical student to practising as safe and effective TIs.

Developing leadership and support for teaching in the Department of Medicine: How do we discover the needs and priorities of our teachers?

Authors

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²Medical Education Unit, Dunedin School of Medicine, University of Otago

Background

In 2017, the Department of Medicine established a new teaching committee to develop and foster teaching in the department.

Description

The committee began with a chair, no other members, no terms of reference, and no resources - just a grand idea.

Discussion

This talk will chart the first year of the committee; who we co-opted to be members and how we began the process of identifying and addressing priorities to support and develop teaching in the department.

Evaluation of a novel approach for teaching advanced communication skills: what do medical students want and do they get what they want?

Author

Jane Millichamp

Medical Education Unit, Dunedin School of Medicine, University of Otago

Background

The field of communication skills training for medical students has advanced considerably in recent years (Hannah et al., 2004; Keifenheim et al., 2015; Silverman et al., 2013) with a particular emphasis on teaching the basic skills when students are at a junior level. However, questions remain about what medical students need to know about more complex and challenging communication situations that arise as they progress through their training and take on more responsibility for direct patient care. The aim of this study was to investigate the learning needs and priorities of a class of medical students in their first clinical year and to determine how well these needs were met by the current communication skills training course.

Methods

Fourth year medical students (n=73) were surveyed at the beginning and the end of their first clinical year to investigate their views in relation to communication skills training. Initially, students were asked to identify areas of communication which they would like to improve on and the best ways for their tutor to assist their learning. At year's end, after completing the "Communicating in Challenging Situations Module", students were asked to complete a course evaluation questionnaire on what they found to be most valuable and what topics, patient presentations and clinical situations should be included in their future communication skills training. The overall response rate was 94.5% for the initial questionnaire and 100% for the second questionnaire.

Results

Four communication skills areas were identified as important for learning: 1) increasing confidence, 2) expressing empathy with patients, 3) emotion-handling skills and 4) managing sensitive conversations. Students noted the importance of "safe" learning environments, multiple opportunities for practice with "real" people, the provision of individualised feedback and opportunities to observe positive role models. Most students (90%) rated the Communicating in Challenging Situations course as very valuable and indicated that they had learned a great deal from the course.

Discussion/Conclusion

Overall, the fourth year medical students rated their communication skills training very highly. They raised several areas of communication (e.g., managing patient emotions, breaking bad news, having difficult/awkward conversations) as priorities for learning. Implications for training in this field include increasing opportunities for skills-based practice, access to realistic patient scenarios and 1:1 teaching in a safe, confidential learning environment.

References

- Silverman, J., Kurtz, S.M., Draper, J. (2013). *Skills for communicating with patients*. (3rd ed.). New York, NY: Radcliffe.
- Keifenheim, K. E., Teufel, M., Ip, J., Speiser, N., Leehr, E. J., Zipfel, S., & Herrmann-Werner, A. (2015). Teaching history taking to medical students: a systematic review. *BMC Medical Education*, 15(1), 159.
- Hannah, A., Millichamp, C. J., & Ayers, K. M. (2004). A communication skills course for undergraduate dental students. *Journal of Dental Education*, 68(9), 970-977.

Does active learning enhance understanding in a pharmaceutical science lab class?

Authors

Megan Anakin¹ & Arlene McDowell²

¹Medical Education Unit, Dunedin School of Medicine, University of Otago

²School of Pharmacy, University of Otago

Background

Traditionally, students are taught pharmaceuticals in laboratory classes that are prescriptive. An active learning approach where students design, plan and perform their own experiment can facilitate students to become more engaged with the content. The aim of this study was to investigate if active learning enhances students' experimental pharmaceuticals knowledge in a Bachelor of Pharmacy degree.

Methods

Active learning was introduced into a third-year pharmaceutical science class ($n = 133$). Students were surveyed pre- and post- the lab class with 6 questions to explore their understanding of the topic of the lab material. The survey was repeated in the subsequent lab class to explore if one experience of active learning had an impact on students' experimental knowledge. Analysis involved scoring student's responses using pre-defined criteria and were analysed statistically.

Results

Criteria were developed from student responses and higher response scores were obtained in post-lab compared to pre-lab surveys.

Discussion

Active learning increased students' pharmaceutical science knowledge obtained in post-lab surveys. Students felt this approach was more engaging than traditional lab classes and it made them think for themselves.

Conclusion

Active learning can be applied to a pharmaceutical science curriculum and is appreciated by students. Further, learning of experimental knowledge is enhanced with this approach compared to the tradition lab class.

Researching smarter: five years of online information skills learning

Authors

Richard German & Christy Ballard

Health Sciences Library, University of Otago

Background

ResearchSmart is a modular, self-directed online course originally designed for second year medical students. Its objective is to assist students attain the University's Graduate Attributes for Information Literacy.

Description

The course replaced in-class information skills tutorials and was piloted in 2012. The content comprises a series of topics, tasks and quizzes delivered within Moodle. There are four 'core' modules, but academic conveners are able to select other topics that meet their students' needs which are built as required (e.g. EndNote for reference management).

Evaluation

Each year the modules are evaluated through analysis of a questionnaire built into the course.

Discussion

Five years' quantitative and qualitative data, including what the students believed were the most valuable and least valuable aspects of the course inform this presentation. The majority of students who completed the course reported an increase in knowledge, and understanding, about the topics covered and positively evaluated the value of the programme. ResearchSmart has been demonstrated to be an effective way of delivering information skills training to medical and other students.

Next steps

ResearchSmart is embedded in all health science professional programmes and a number of non-professional undergraduate papers. Its expansion path is into postgraduate and distance courses.

Exploring threshold concepts in the health professions

Authors

Julie Timmermans¹ & Ralph Pinnock²

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²Medical Education Unit & Department of Women's and Children's Health, Dunedin School of Medicine, University of Otago

Background

Disciplines abound with knowledge, skills, and values, yet determining which ones to focus on when designing papers and programs can be challenging. For educators, the idea of ‘threshold concepts’ (TCs) (Meyer & Land, 2003) may offer a lens through which to conceptualize teaching and curriculum design.

Description and Discussion

A threshold concept may be ‘considered as akin to a portal, opening up a new and previously inaccessible way of thinking about something. It represents a transformed way of understanding, or interpreting, or viewing something’ (Meyer & Land, 2003, p. 412). TCs transform learners’ understandings and shape their identities as disciplinary members.

The session will involve research and practice components. We will introduce the research on TCs. One author will share experiences of TCs in his own learning and development as a physician, as well as TCs observed in his students’ learning. Using the features of TCs as discussed in the literature (e.g., Meyer & Land, 2003, 2005) as a framework for discussion, we will invite session participants to share examples of potential TCs from their disciplines.

Next Steps

We hope that this session will begin an ongoing discussion regarding transformative ideas and experiences for learners in the health professions and how these may form the basis of teaching and curriculum (re)design.

References

- Meyer, J. H. F., & Land, R. (2003). Threshold concepts and troublesome knowledge: Linkages to ways of thinking and practising within the disciplines. In C. Rust (Ed.), *Improving student learning: Improving student learning theory and practice – 10 years on* (pp. 412-424). Oxford, UK: Oxford Centre for Staff and Learning Development.
- Meyer, J. H. F., & Land, R. (2005). Threshold concepts and troublesome knowledge (2): Epistemological considerations and a conceptual framework for teaching and learning. *Higher Education*, 49, 373-388. doi:10.1007/s10734-004-6779-5

Using Facebook to increase student engagement

Authors

Cat Ronayne

Department of Pathology, Dunedin School of Medicine, University of Otago

Background

Can Facebook effectively engage student learning?

Description

A closed group was created on Facebook for the 3rd year haematology course in the Bachelor of Medical Laboratory Science programme. Students were invited to join and told the goal was an informal means to facilitate discussion about all things related to the haematology. They were also informed of the Social Media Guidelines from the NZ Medical Sciences Council.

Evaluation

Evaluation was based on student uptake and interaction. 93% of the class joined within a month with posts including articles, discussion of tutorial cases, photos from lab sessions and science memes. In HEDC course evaluations, 74% of students said it was very effective at encouraging engagement.

Discussion

Facebook appears to be a useful adjunct to teaching and increases student engagement outside the traditional classroom setting.

Next Steps

Next year, Facebook pages will be introduced for the 2nd and 3rd years of the medical laboratory science programme as a means to facilitate discussion. Pages may be set up differently to enable monitoring of usage statistics.

Tracking Dunedin students as they progress in their medical careers

Authors

Joy Rudland¹ & Fiona Hyland²

¹Education Unit, University of Otago Wellington

²Centre for Early Learning in Medicine, University of Otago

Background

Longitudinal tracking projects, where individual medical students are followed through an extended period of time, are both valuable but difficult to achieve in medicine.

Description

Otago Medical School is involved in a Medical Schools Outcome Database tracking project. Data have been collected on a variety of parameters including: demographic data, career preferences, desired location of work, and reason for career preference. The data have been collected on entry to medical school, exit from medical school, and in PGY1, PGY3 and PGY5. Entry data were collected in 2007 and subsequent years. In addition, medical school data are attached to each student in respect to the module title, duration and location, rural, urban etc.

Evaluation

Several data sets are available for analysis. An opportunity exists to scrutinize the data to determine the impact the MB ChB programme has on the career of medical students and also produce a critique of work force requirements and examine career expectations.

Discussion

The type of data collected will be presented including several important perspectives and the opportunity for DSM involvement.

Next Steps

What research projects would DSM staff like to develop either in respect to scrutinizing the current data and or generating further projects?

Creating a MCQs “Bank” for Psychological Medicine

Authors

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Background

Reflective writing is a popular tool in higher education. This has led to assumptions that reflective writing can also serve for student assessment. However, evidence to support its’ reliability and validity is lacking (1). In addition, there is a lack of relationship between reflective writing and MCQs as measures of performance. Engaging students in co-creating assessments is of emerging importance. We are there for designing a MCQs bank that will incorporate students input.

Description

We are in the process of creating a MCQs bank to be used in conjunction with a case-based reflective question to alter the assessment of 4th year students’ psychological medicine attachment evaluation.

Evaluation

The team’s teaching fellow and convenor reviewed published and online sources of MCQs. Questions that were found to be relevant – based on the attachment’s objectives were reviewed by two of the department’s psychiatrists.

Discussion: This is the first year in which the attachment’s written evaluation is based largely on MCQs. The marking of examinations is faster and inter-rater variability is minimized.

There are currently no progress tests that have been created in cooperation with students. A recent study demonstrated that student-generated MCQs were of high quality with regard to test statistic criteria and content (2).

Next Steps

Finalize the MCQs bank and attempt to reach agreement with the Wellington and Christchurch campuses. Adding students’ generated MCQs to the evolving MCQs bank will be the next step.

References:

1. Moniz, T et al. (2015). Considerations in the use of reflective writing for student assessment: issues of reliability and validity. *Medical Education*, 49(9), 901-908.
2. Wagener, S et al. (2015). Development of a competency-based formative progress test with student-generated MCQs: Results from a multi-centre pilot study. *GMS Zeitschrift für Medizinische Ausbildung*, 32 (4): Document 46.

Motivation in clinical teachers in intensive care

Author

Emma Merry

Education Unit, University of Otago Wellington

Background

Clinical teachers in Intensive Care Units (ICUs) must teach in a constantly changing environment with critically ill patients, multiple competing demands and learners with varying skill sets.

The factors enabling or inhibiting teaching in such an environment are unknown. Studies offer a variety of motivational reasons in other teaching environments, for example, secondary and tertiary education; in other countries; and in the non-clinical workplace. There are no studies examining the effects of these barriers and enablers on clinical teachers' motivation and teaching practice in this unique context.

The study explored factors influencing motivation to teach amongst Senior Medical Officers (SMOs) in New Zealand ICUs.

Method

This study used a case study methodology based on semi-structured interviews with 20 clinician teachers practising as SMOs in ICUs around New Zealand. A content analysis method was used for the coded data from the interviews to shed light on this complex area.

Results

Common themes and challenges were identified across all participants.

Discussion and conclusion

Ideas to reduce barriers, enhance opportunities, and ways to identify and support new clinician teachers were developed. These include addressing resourcing, training and organisational culture change issues.

A philosophical framework for pharmacy based on bioethical principles sets the need for education in clinical decision making

Authors

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²Medical Education Unit, Dunedin School of Medicine, University of Otago

Background

Pharmacy has a long history of providing products and services for healthcare. In the last century, these roles have taken a strong focus on clinical care with the provision of medicines review, medicines optimisation, and prescribing services at the forefront. The profession, however, is diverse and pharmacists operate across a wide range of historic and contemporary healthcare roles simultaneously.

Aim

The aim of this work is to provide an overarching philosophical framework for pharmacy that encompasses roles that the modern pharmacist may assume.

Methods

The roles of pharmacists were mapped against the standard pillars of bioethics (particularly non-maleficence and beneficence). Patient-facing roles of pharmacists include those that are predominantly non-maleficent (e.g. prescription checking), or person-centred that align with secondary beneficence (e.g. helping other healthcare professionals to optimise care) or co-beneficence (e.g. working together with healthcare professionals to optimise care). Models of clinical decision making for each of the three bioethical principles highlighted the divergence of knowledge and skills related to each practice setting.

Implications

We anticipate that since each role requires a different clinical decision making process that no single educational model will suffice. Current models based on other disciplines in healthcare are likely to be suboptimal for pharmacy.

What stops students from seeking feedback?

Author

Joy Rudland

Education Unit, University of Otago Wellington

Background:

Students need to take more responsibility in the feedback process. This presentation reports the barriers for medical students taking responsibility for gaining feedback and makes suggestions on how these barriers may be reduced.

Aim

The purpose of the study was to determine who students felt had responsibility for ensuring feedback and to articulate the barriers for not seeking feedback.

Methods

Data was collected from medical students, using an electronic survey, on who was responsible for ensuring feedback is given and what hindered the student from taking this responsibility. Students were separated into those who took responsibility for seeking feedback and those that did not. Qualitative reasons given for seeking or not seeking feedback were coded and compared.

Results

There were a number of reasons students failed to ask for feedback. These fell into personal and system reasons. For example under personal factors fear of a negative response from teachers or negative feedback were cited. Those who did seek feedback sometimes contradicted some of the concern expressed for not seeking feedback.

Discussion

A number of factors need to be attended to facilitate students ask for feedback. Variations in some of the reporting between those seek and those not seeking feedback indicate a lack of clarity in educational expectation and variation in how requests regarding feedback are received.

Conclusions:

Encouraging students to take responsibility for seeking feedback may benefit from some active management to counter some misconceptions and to clarify educational expectation.

Taking the microscope out of the laboratory

Author

Lisa Gallagher

Department of Pathology, Dunedin School of Medicine, University of Otago

Background

Cytology is the microscopic study of cells from the body to detect and differentiate benign, pre-malignant and malignant disease. When cytology experience is limited, sitting at the microscope looking at cells is not necessarily the best way to learn the basics. Is there a more engaging way to teach diagnostic cytology microscopy to Medical Laboratory Science students? Can we utilize available technology to enhance the learning experience?

Description

Utilizing existing technology, previously screened cytology slides were digitally scanned. In place of traditional microscopy sessions, where students would sit at the microscope to carry out cytological evaluation of cells, digital microscopy sessions were conducted. Students were divided into groups of 3 each with an iPad. Each session included an introduction and guidelines for each session, where applicable relevant patient information and a worksheet to complete during the session.

Evaluation

Evaluation was based on academic staff and student feedback.

Discussion

The use of digital microscopy greatly enhanced student to student, and student to tutor engagement and collaboration. It facilitated discussion and interaction about the slides being viewed. Instant feedback and guidance from the tutor was also possible. The use of digital microscopy was embraced by the academic staff and students involved, and overcame a number of issues that had been previously identified as barriers to effective cytology teaching.

Future work

Overcoming existing limitations and accessibility issues that have been identified as part of this trial. Expand the availability of digital microscopy material across the BMLSc curriculum where applicable.

Can we improve MCQs response and scoring systems?

Author

Mike Tweed

Department of Medicine, University of Otago Wellington

Background

MCQs are used in healthcare professional assessments. A common response system is choosing one from a list of n options. Common scoring systems have +1 for a correct response with incorrect responses scoring 0 or $-1/n-1$. Although easy to implement and understand, these systems are limited especially when extrapolating to healthcare practice. Issues include: partial knowledge; misinformation; constrained responses; differential incorrect responses; clinical uncertainty; scope of practice; self-monitoring.

Description

A review of the literature and practice of MCQ delivery, response and scoring systems has revealed that there are many other systems that have been described including: script concordance; subset selection; certainty in responses; weighted response and weighted scoring; respond until correct; ranking responses; and safeness of responses. Personal experience is that several of these systems have been useful in module and OMS level MCQ assessments over several years. Evaluation has demonstrated that given computer based delivery and scoring many of these systems are easy to implement.

Discussion

Healthcare programmes should not be constrained to select response with number correct or formula scoring systems. There are many systems, which align better to healthcare practice, which can be used.

Next Steps

The purpose of this presentation is to share awareness of these systems, and promote discussion of their possible utility within the OMS.

Development and Evaluation of Online Resources and Question Banks to Equalise Opportunities to Learn in a Multi-Campus Medical School

Authors

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⁴Education Unit, University of Otago Christchurch

⁵Department of Obstetrics and Gynaecology, University of Otago Wellington

Background

At Otago Medical School, Obstetrics and Gynaecology have more structured teaching time at two campuses compared to the third, which has greater opportunities to engage in primary care settings and less structured teaching time. The differential exposure to formal teaching could lead to some topics receiving less coverage, and this could create inequalities for students. To address this, a common curriculum was agreed and a suite of online learning resources and question banks were developed for all students to support the curriculum.

Methods

We evaluated the usage and perceived value of the learning resources in three ways; first, we conducted an analysis of usage logs in Moodle for the three campuses, second, we conducted an evaluation of student opinions using an online survey, and third, we undertook focus groups at one campus.

Results

Analysis of Moodle logs from 2015 revealed high levels of usage, with different patterns of usage observed at Dunedin compared with Christchurch and Wellington. The online survey of 5th year students (RR=70%) showed high levels of satisfaction and perceived value. This was supported through analysis of focus group data.

Conclusions

Different patterns of usage reflect strategic approaches to the use of learning resources. Aligning these resources with curriculum outcomes and assessment influenced motivation to use these resources.

Otago Medical School Medical Education Research Symposium

What? A focus on medical education research conducted by staff and students of Otago Medical School (OMS).

When? Wednesday, June 6th, 2018

Where? Hunter Centre, Dunedin

Enquiries to:

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OTAGO MEDICAL SCHOOL
Te Kura Hauora o Ōtākou



Dunedin School of Medicine

The Dunedin School of Medicine Health Professional Education Research Symposium

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