

Articles you may enjoy (abstracts and links) September 2015

[Links are included for both UVIC and UBC library websites. Links for the articles are at the bottom of the abstract. When you click on a link, you will first be directed to either the UVIC or UBC library website; in both cases, your ID and password are identical to the one you use to access your email.]

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1. **Feedback providers' credibility impacts students' satisfaction with feedback and delayed performance**

J.M. Monica van de Ridder, Francisca C.J. Berk, Karel M. Stokking & Olle Th.J. ten Cate
Medical Teacher vol 37 (8) 767-774 August 2015

Abstract

Purpose: Medical students receive feedback during clerkships from many different sources: attendings, residents, paramedics, other clerks and even patients. Not all feedback providers have similar impact on learning. One characteristic that is believed to have impact is their credibility to the recipient. This study investigates the effects of feedback provider credibility on medical student satisfaction, self-efficacy and performance with a trained skill.

Methods: A single-blind randomized controlled between-subjects design was used, with feedback provider credibility (high–low) as independent variable and examination of hearing abilities as the task. First year medical students' ($n = 68$) satisfaction, self-efficacy and performance were the dependent variables and were measured both directly after the intervention and after a three-week delay.

Results: Credibility did not significantly affect immediate or delayed self-efficacy. Students receiving feedback from a high-credibility source were more satisfied with the feedback. They did not perform significantly better immediately after the feedback intervention, but did so three weeks after the intervention. High credibility was associated with a perception of a negative feedback message and an unsocial feedback provider.

Conclusions: Feedback provider credibility impacts satisfaction with feedback and delayed performance. If feedback is not effective in clinical settings, feedback providers may reconsider their credibility.

To read more:

<http://www-tandfonline-com.ezproxy.library.uvic.ca/doi/full/10.3109/0142159X.2014.970617#abstract>

<http://www-tandfonline-com.ezproxy.library.ubc.ca/doi/full/10.3109/0142159X.2014.970617#abstract>

2. Combining bimodal presentation schemes and buzz groups improves clinical reasoning and learning at morning report

Thomas Balslev^{*}, Astrid Bruun Rasmussen, Torjus Skajaa, Jens Peter Nielsen, Arno Muijtjens, Willem De Grave & Jeroen Van Merriënboer

Medical Teacher vol 37 (8) 767-774 August 2015

Abstract

Morning reports offer opportunities for intensive work-based learning. In this controlled study, we measured learning processes and outcomes with the report of paediatric emergency room patients. Twelve specialists and 12 residents were randomised into four groups and discussed the same two paediatric cases. The groups differed in their presentation modality (verbal only vs. verbal + text) and the use of buzz groups (with vs. without). The verbal interactions were analysed for clinical reasoning processes. Perceptions of learning and judgment of learning were reported in a questionnaire. Diagnostic accuracy was assessed by a 20-item multiple-choice test. Combined bimodal presentation and buzz groups increased the odds ratio of clinical reasoning to occur in the discussion of cases by a factor of 1.90 ($p = 0.013$), indicating superior reasoning for buzz groups working with bimodal materials. For specialists, a positive effect of bimodal presentation was found on perceptions of learning ($p < 0.05$), and for residents, a positive effect of buzz groups was found on judgment of learning ($p < 0.005$). A positive effect of bimodal presentation on diagnostic accuracy was noted in the specialists ($p < 0.05$). Combined bimodal presentation and buzz group discussion of emergency cases improves clinicians' clinical reasoning and learning.

To read more:

<http://www-tandfonline-com.ezproxy.library.uvic.ca/doi/full/10.3109/0142159X.2014.986445#abstract>

<http://www-tandfonline-com.ezproxy.library.ubc.ca/doi/full/10.3109/0142159X.2014.986445#abstract>

3. Educational interventions for international medical graduates: a review and agenda

Matthew Lineberry, Amanda Osta, Michelle Barnes, Vildan Tas, Koffitse Atchon, and Alan Schwartz

Medical Education September 2015 volume 49, (9) 863-879

Suggest you read the commentary first (see below): to my mind, more interesting than the actual article

Abstract

Context

International medical graduates (IMGs) play key roles in the health systems of their host countries, but face unique challenges, which makes the provision of effective, tailored support for IMGs essential.

Objectives

Research on the effectiveness of educational interventions for IMGs was reviewed to characterise current knowledge and guide future research and education.

Methods

PubMed, Web of Science and EMBASE were searched for relevant articles published to October 2014, describing a systematic evaluation of educational interventions designed for IMGs that included at least one post-intervention outcome. Articles were coded independently by two or more researchers for content and methodology, and discussed to reach consensus.

Results

Twenty-two articles were identified, describing a wide variety of interventions, content and durations of intervention. Clinical topics and general principles of cross-cultural competency were the most common content areas included in curricula (13 and 12 articles, respectively). All studies deemed the interventions evaluated to be successful. However, only one study drew from theory on cross-cultural differences to guide either the curriculum or evaluation. Additionally, study designs were generally weak; no studies featured random assignment to treatment versus control groups, most studies did not use control groups at all, and no studies compared the effectiveness of different interventions.

Conclusions

Research into education for IMGs is critically important but currently underdeveloped. An abundance of justification studies and lack of clarification studies parallel other areas of medical education. Academic fields outside medical education, such as those of cross-cultural psychology and expatriate management, are highly relevant; researchers from these areas should be sought for collaboration. Future research should employ conceptual frameworks in order to facilitate a broader, more nuanced consideration of the diversity of individual IMGs, educational and medical contexts, interventions and outcomes. Rigorous comparative effectiveness research is lacking, but represents a promising avenue for future scholarship.

To read more:

<http://onlinelibrary.wiley.com.ezproxy.library.uvic.ca/doi/10.1111/medu.12766/full>

<http://onlinelibrary.wiley.com.ezproxy.library.ubc.ca/doi/10.1111/medu.12766/full>

3 a) And the commentary: (no abstract):

International medical graduates: acculturation, repatriation and the third-culture kids of medicine

Mercedes Chan

Medical Education September 2015 volume 49, (9) 850-851

<http://onlinelibrary.wiley.com.ezproxy.library.uvic.ca/doi/10.1111/medu.12802/full>

<http://onlinelibrary.wiley.com.ezproxy.library.ubc.ca/doi/10.1111/medu.12802/full>

4. Considerations in the use of reflective writing for student assessment: issues of reliability and validity

Tracy Moniz, Shannon Arntfield, Kristina Miller, Lorelei Lingard, Chris Watling, and Glenn Regehr

Medical Education September 2015 volume 49, (9) 901-908

Context

Reflective writing is a popular tool to support the growth of reflective capacity in undergraduate medical learners. Its popularity stems from research suggesting that reflective capacity may lead to improvements in skills such as empathy, communication, collaboration and professionalism. This has led to assumptions that reflective writing can also serve as a tool for student assessment. However, evidence to support the reliability and validity of reflective writing as a meaningful assessment strategy is lacking.

Methods

Using a published instrument for measuring 'reflective capacity' (the Reflection Evaluation for Learners' Enhanced Competencies Tool [REFLECT]), four trained raters independently scored four samples of writing from each of 107 undergraduate medical students to determine the reliability of reflective writing scores. REFLECT scores were then correlated with scores on a Year 4 objective structured clinical examination (OSCE) and Year 2 multiple-choice question (MCQ) examinations to examine, respectively, convergent and divergent validity.

Results

Across four writing samples, four-rater Cronbach's α -values ranged from 0.72 to 0.82, demonstrating reasonable inter-rater reliability with four raters using the REFLECT rubric. However, inter-sample reliability was fairly low (four-sample Cronbach's $\alpha = 0.54$, single-sample intraclass correlation coefficient: 0.23), which suggests that performance on one reflective writing sample was not strongly indicative of performance on the next. Approximately 14 writing samples are required to achieve reasonable inter-sample reliability. The study found weak, non-significant correlations between reflective writing scores and both OSCE global scores ($r = 0.13$) and MCQ examination scores ($r = 0.10$), demonstrating a lack of relationship between reflective writing and these measures of performance.

Conclusions

Our findings suggest that to draw meaningful conclusions about reflective capacity as a stable construct in individuals requires 14 writing samples per student, each assessed by four or five raters. This calls into question the feasibility and utility of using reflective writing rigorously as an assessment tool in undergraduate medical education.

To read more:

<http://onlinelibrary.wiley.com.ezproxy.library.uvic.ca/doi/10.1111/medu.12771/full>

<http://onlinelibrary.wiley.com.ezproxy.library.ubc.ca/doi/10.1111/medu.12771/full>

5. Clinical efficiency and resident education: a fine balance

Victoria Leung et al

Postgrad Med J2015;91:475-476

Editorial (no abstract)

<http://pmj.bmj.com.ezproxy.library.uvic.ca/content/91/1079/475.long>

<http://pmj.bmj.com.ezproxy.library.ubc.ca/content/91/1079/475.long>

6. “How to do things with words” in health professions education (UBC study with UBC students)

Claudia W. Ruitenberg, _Angela Towle

Advances in Health Sciences Education October 2015 vol 20, (4), pp.857-872

Abstract

This paper reports on a qualitative study of journal entries written by students in six health professions participating in the Interprofessional Health Mentors program at the University of British Columbia, Canada. The study examined (1) what health professions students learn about professional language and communication when given the opportunity, in an interprofessional group with a patient or client, to explore the uses, meanings, and effects of common health care terms, and (2) how health professional students write about their experience of discussing common health care terms, and what this reveals about how students see their development of professional discourse and participation in a professional discourse community. Using qualitative thematic analysis to address the first question, the study found that discussion of these health care terms provoked learning and reflection on how words commonly used in one health profession can be understood quite differently in other health professions, as well as on how health professionals’ language choices may be perceived by patients and clients. Using discourse analysis to address the second question, the study further found that many of the students emphasized accuracy and certainty in language through clear definitions and intersubjective agreement. However, when prompted by the discussion they were willing to consider other functions and effects of language.

<http://link.springer.com.ezproxy.library.uvic.ca/article/10.1007/s10459-014-9568-7/fulltext.html>

<http://link.springer.com.ezproxy.library.ubc.ca/article/10.1007/s10459-014-9568-7/fulltext.html>

7. Teaching Distinction Track for Future Medical Educators

Thomas J. Schmidt, Kristi J. Ferguson, Hugh B. Hansen, Jeffrey E. Pettit

Medical Science Educator September 2015, Volume 25, Issue 3, pp 303-306

Abstract

Requirements for the Teaching Distinction Track at the Carver College of Medicine are a minimum of 60 h of relevant teaching experience including tutoring and didactic teaching, creating new educational materials, serving as a small-group facilitator, and participation on medical education committees. Each student is required to select a faculty member who is willing to serve as their mentor. Students are also required to develop a teaching portfolio and to successfully complete a 4-week teaching elective. Since it was developed in 2010, 53 students, or 7.5 % of all graduates, have graduated with a teaching distinction.

To read more:

<http://link.springer.com.ezproxy.library.uvic.ca/article/10.1007/s40670-015-0148-0/fulltext.html>

<http://link.springer.com.ezproxy.library.ubc.ca/article/10.1007/s40670-015-0148-0/fulltext.html>

8. Part versus whole: a randomized trial of central venous catheterization education

(Study done at UBC with UBC first year internal medicine residents as study subjects)

Angela Chan and 6 others

Advances in Health Sciences Education October 2015 vol 20, (4), pp.1061-1071

Abstract

Central venous catheterization (CVC) is a complex but commonly performed procedure. How best to teach this complex skill has not been clearly delineated. We conducted a randomized trial of the effects of two types of teaching of CVC on skill acquisition and retention. We randomly assigned novice internal medicine residents to learning CVC in-part or in-whole. The part-group was taught the first part of the procedure, followed by practice, followed by being taught the second and final portion of the procedure, and followed by practice. The whole-group was taught the procedure in its entirety, followed by practice. Teaching and practice time for both groups was otherwise held constant. Performances were assessed at baseline, post-training, and at 1 month. The primary outcome was skill retention at 1-month, rated by using a global rating scale and a 22-item checklist, and defined as the score increase between 1-month and baseline. Skill acquisition is defined as the score increase post-training and baseline. Raters were blinded to the participants' identity, group assignment, and time point. Participants in the part-task group outperformed the whole-task group in skill acquisition (2.2 ± 0.8 vs 1.3 ± 1.0 ; $g = 1.01$; $p = 0.04$) and in skill retention (1.5 ± 0.7 vs 0.5 ± 0.8 ; $g = 1.39$; $p = 0.006$) using the global rating scale. Scores rated by the checklist were not significantly different (52.0 ± 25.3 vs 43.5 ± 23.4 ; $g = 0.33$; $p = 0.47$ for skill acquisition; and 48.5 ± 34.9 vs 41.1 ± 20.4 ; $g = 0.35$; $p = 0.44$ for skill retention). For teaching ultrasound-guided CVC to novice learners, teaching in part is preferable than teaching in whole.

To read more:

<http://link.springer.com.ezproxy.library.uvic.ca/article/10.1007/s10459-015-9586-0/fulltext.html>

<http://link.springer.com.ezproxy.library.ubc.ca/article/10.1007/s10459-015-9586-0/fulltext.html>

9. Relational Reasoning in Medical Education: Patterns in Discourse and Diagnosis

Denis Dumas and 4 others

Journal of Educational Psychology November 2014 106 (4) pp. 1021-1035

Abstract

Relational reasoning, which has been defined as the ability to discern meaningful patterns within any informational stream, is a foundational cognitive ability associated with education, including in scientific domains. This study entailed the analysis of instructional conversations in which an attending clinical neurologist and his team of residents made diagnostic and therapeutic decisions about actual patients in a hospital setting. The primary goal was to investigate the role of 4 manifestations of relational reasoning (i.e., analogy, anomaly, antinomy, and antithesis) in medical education and diagnostic and therapeutic decision making. Results indicated that the degree to which members of the medical team used the 4 forms of relational reasoning depended on their role and expertise, as well as the time point in the problem-solving process. Specific reasoning patterns that emerged in the discourse and a prototypical model of the reasoning process are described and implications for research and practice are considered.

To read more:

<http://web.b.ebscohost.com.ezproxy.library.uvic.ca/ehost/detail/detail?sid=2c18a146-dbb5-41e9-a1ad-cd37f575a1a9%40sessionmgr113&crlhashurl=login.aspx%253fdirect%253dtrue%2526scope%253dsite%2526db%253dpdh%2526AN%253d2014%25252D16297%25252D001%2526msid%253d-419400588&hid=125&vid=0&bdata=JnNpdGU9ZWZWhvc3QtbGl2ZSZyY29wZT1zaXRI#AN=2014-16297-001&db=pdh>

<http://web.b.ebscohost.com.ezproxy.library.ubc.ca/ehost/detail/detail?sid=2c18a146-dbb5-41e9-a1ad-cd37f575a1a9%40sessionmgr113&crlhashurl=login.aspx%253fdirect%253dtrue%2526scope%253dsite%2526db%253dpdh%2526AN%253d2014%25252D16297%25252D001%2526msid%253d-419400588&hid=125&vid=0&bdata=JnNpdGU9ZWZWhvc3QtbGl2ZSZyY29wZT1zaXRI#AN=2014-16297-001&db=pdh>

10. The Future of Postgraduate Medical Education in Canada

Nick Busing and 6 others

Academic Medicine September 2015 90(9): 1258-1263

Abstract

The Future of Medical Education in Canada Postgraduate (FMEC PG) Project was launched in 2010 by a consortium of four organizations: the Association of Faculties of Medicine of Canada, the Collège des Médecins du Québec, the College of Family Physicians of Canada, and the Royal College of Physicians and Surgeons of Canada. The FMEC PG study set out to review the state of the Canadian postgraduate medical

education (PGME) system and make recommendations for improvements and changes. The extensive process included literature reviews, commissioned papers, stakeholder interviews, international consultations, and dialogue with the public and learners. The resulting key findings and 10 recommendations, published in a report in 2012, represent the collective vision of the consortium partner organizations for PGME in Canada. Implementation of the recommendations began in 2013 and will continue beyond 2016.

In this article, the authors describe the complex process of developing the recommendations, highlight several recommendations, consider implementation processes and issues, and share lessons learned to date. They reflect on the ways in which the transformation of a very complex and complicated PGME system has required many stakeholders to work together on multiple interventions simultaneously. Notwithstanding the challenges for the participating organizations, changes have been introduced and sustainability is being forged. Throughout this process, the consortium partners and other stakeholders have continued to address the social accountability role of all physicians with respect to the public they serve.

To read more:

http://ovidsp.tx.ovid.com.ezproxy.library.uvic.ca/sp-3.16.0b/ovidweb.cgi?&S=JLCBFPOBEODDFABKNCKKCOBEELFAA00&Link+Set=S.sh.22.23.26%7c26%7csl_10

http://ovidsp.tx.ovid.com.ezproxy.library.ubc.ca/sp-3.16.0b/ovidweb.cgi?&S=JLCBFPOBEODDFABKNCKKCOBEELFAA00&Link+Set=S.sh.22.23.26%7c26%7csl_10