December 2016 Articles you may enjoy (abstracts and links)

[Links are included for both UVIC and UBC library websites as I understand it is easier for some of you to access the UBC site. 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. For Academic Medicine, and Simulation in Healthcare (Ovid journals) you will need to log into the UVIC or UBC library website first. Please let me know if there are other issues.]

1. **Association Between Learning Environment Interventions and Medical Student Well-being: A Systematic Review**
2. **The Oral Case Presentation: A Key Tool for Assessment and Teaching in Competency-Based Education**
3. **Using consensus group methods such as Delphi and nominal Group in medical education research**
4. **Social Learning in a longitudinal integrated clinical placement**
5. **Parting the Clouds: Three Professionalism Frameworks in Medical Education**
6. **Introducing a model for optimal design of sequential OSCE's**
7. **Performance Assessment in Medical School Curricula: an Innovative Method of Evaluating Sonographic Skills Using Ultrasound Practical Examinations**
8. **The What or the How: A review of Teaching Tools and Methods in Medical Education**
9. **Learning the Hard Way; 10 Lessons for developing undergraduate curricula**
10. **The Cross-Canada Quintet presents variations on music: movements in the keys of H, P and E**

1.Association Between Learning Environment Interventions and Medical Student Well-being: A Systematic Review

Lauren T. Wasson, MD, MPH; Amberle Cusmano, MA; Laura Meli, MSEd; et al

Abstract:
Importance Concerns exist about the current quality of undergraduate medical education and its effect on students' well-being.
Objective To identify best practices for undergraduate medical education learning environment interventions that are associated with improved emotional well-being of students.
Data Sources Learning environment interventions were identified by searching the biomedical electronic databases Ovid MEDLINE, EMBASE, the Cochrane Library, and ERIC from database inception dates to October 2016. Studies examined any intervention designed to promote medical students' emotional well-being in the setting of a US academic medical school, with an outcome defined as students' reports of well-being as assessed by surveys, semistructured interviews, or other quantitative methods.
Data Extraction and Synthesis Two investigators independently reviewed abstracts and full-text articles. Data were extracted into tables to summarize results. Study quality was assessed by the Medical Education Research Study Quality Instrument (MERQSI), which has a possible range of 5 to 18; higher scores indicate higher design and methods quality and a score of 14 or higher indicates a high-quality study.

Findings Twenty-eight articles including at least 8224 participants met eligibility criteria. Study designs included single-group cross-sectional or posttest only (n = 10), single-group pretest/posttest (n = 2), nonrandomized 2-group (n = 13), and randomized clinical trial (n = 3); 89.2% were conducted at a single site, and the mean MERSQI score for all studies was 10.3 (SD, 2.11; range, 5-13). Studies encompassed a variety of interventions, including those focused on pass/fail grading systems (n = 3; mean MERSQI score, 12.0), mental health programs (n = 4; mean MERSQI score, 11.9), mind-body skills programs (n = 7; mean MERSQI score, 11.3), curriculum structure (n = 3; mean MERSQI score, 9.5), multicomponent program reform (n = 5; mean MERSQI score, 9.4), wellness programs (n = 4; mean MERSQI score, 9.0), and advising/mentoring programs (n = 3; mean MERSQI score, 8.2).

Conclusions and Relevance In this systematic review, limited evidence suggested that some specific learning environment interventions were associated with improved emotional well-being among medical students. However, the overall quality of the evidence was low, highlighting the need for high-quality medical education research.

To read more:

http://jamanetwork.com.ezproxy.library.uvic.ca/journals/jama/article-abstract/2589343

http://jamanetwork.com.ezproxy.library.ubc.ca/journals/jama/article-abstract/2589343

2.The Oral Case Presentation: A Key Tool for Assessment and Teaching in Competency-Based Education
Lindsay Melvin and Rodrigo Cavalcanti
JAMA. 2016;316(21):2187-2188

Abstract:

Oral case presentations by trainees to supervisors are core activities in academic hospitals across all disciplines and form a key milestone in US and Canadian educational frameworks. Yet despite their widespread use, there has been limited attention devoted to developing case presentations as tools for structured teaching and assessment. In this Viewpoint, we discuss the challenges in using oral case presentations in medical education, including lack of standardization, high cognitive demands, and the role of trust between supervisor and trainee. We also articulate how, by addressing these tensions, case presentations can play an important role in competency-based education, both for assessment of clinical competence and for teaching clinical reasoning.

To read more:

http://jamanetwork.com.ezproxy.library.uvic.ca/journals/jama/fullarticle/2589349

http://jamanetwork.com.ezproxy.library.ubc.ca/journals/jama/fullarticle/2589349

3. Using consensus group methods such as Delphi and nominal Group in medical education research

Susan Humphrey-Murto, Lara Varpio, Carol Gonsalves and Timothy Wood

Abstract: Consensus group methods are widely used in research to identify and measure areas where incomplete evidence exists for decision-making. Despite their widespread use, these methods are often inconsistently used and reported. Using examples from the three most commonly used methods, the Delphi, Nominal Group and RAND/UCLA; this paper and associated Guide aim to describe these methods and to highlight common weaknesses in methodology and reporting. The paper outlines a series of recommendations to assist researchers using consensus group methods in providing a comprehensive description and justification of the steps taken in their study.

To read more:

http://www-tandfonline-com.ezproxy.library.uvic.ca/doi/full/10.1080/0142159X.2017.1245856

http://www-tandfonline-com.ezproxy.library.ubc.ca/doi/full/10.1080/0142159X.2017.1245856

4. Social Learning in a longitudinal integrated clinical placement

Chris Roberts, Michele Daly, Fabian Held, and David Lyle

Abstract: Recent research has demonstrated that longitudinal integrated placements (LICs) are an alternative mode of clinical education to traditional placements. Extended student engagement in community settings provide the advantages of educational continuity as well as increased service provision in underserved areas. Developing and maintaining LICs require a differing approach to student learning than that for traditional placements. There has been little theoretically informed empirical research that has offered explanations of which are the important factors that promote student learning in LICs and the relationships between those factors. We explored the relationship between student learning, student perceptions of preparedness for practice and student engagement, in the context of a rural LIC. We used a sequential qualitative design employing thematic, comparative and relational analysis of data from student interviews (n = 18) to understand possible processes and mechanisms of student learning in the LIC. Through the theoretical lens of social learning systems, we identified two major themes; connectivity and preparedness for practice. Connectivity described engagement and relationship building by students, across formal and informal learning experiences, interprofessional interactions, social interactions with colleagues, interaction with patients outside of the clinical setting, and the extent of integration in the wider community. Preparedness for practice, reflected students' perceptions of having sufficient depth in clinical skills, personal and professional development, cultural awareness and understanding of the health system, to work in that system. A comparative analysis compared the nature and variation of learning across students. In a relational analysis, there was a positive association between connectivity and preparedness for practice.

Connectivity is a powerful enabler of students' agentic engagement, collaboration, and learning within an LIC. It is related to student perceptions of preparedness for practice. These findings provide insight for institutions wishing to develop similar programmes, by encouraging health professional educators to consider all of the potential elements of the placements, which most promote connectivity.

To read more:

http://link.springer.com.ezproxy.library.uvic.ca/article/10.1007/s10459-016-9740-3

http://link.springer.com.ezproxy.library.ubc.ca/article/10.1007/s10459-016-9740-3

5.Parting the Clouds: Three Professionalism Frameworks in Medical Education
   David Irby and Stanley Hamstra
   Academic Medicine Volume 91(12), December 2016, p 1606–1611

Abstract:

Current controversies in medical education associated with professionalism, including disagreements about curriculum, pedagogy, and assessment, are rooted in part in the differing frameworks that are used to address professionalism. Three dominant frameworks, which have evolved in the medical education community, are described. The oldest framework is virtue based and focuses on the inner habits of the heart, the development of moral character and reasoning, plus humanistic qualities of caring and compassion: The good physician is a person of character. The second framework is behavior based, which emphasizes milestones, competencies, and measurement of observable behaviors: The good physician is a person who consistently demonstrates competence in performing patient care tasks. The third framework is identity formation, with a focus on identity development and socialization into a community of practice: The good physician integrates into his or her identity a set of values and dispositions consonant with the physician community and aspires to a professional identity reflected in the very best physicians. Although each professionalism framework is useful and valid, the field of medical education is currently engaged in several different discourses resulting in misunderstanding and differing recommendations for strategies to facilitate professionalism. In this article, the assumptions and contributions of each framework are described to provide greater insight into the nature of professionalism. By examining each discourse in detail, underlying commonalities and differences can be highlighted to assist educators in more effectively creating professionalism curricula, pedagogy, and assessment.

To read more:

http://ovidsp.tx.ovid.com.ezproxy.library.uvic.ca/sp-3.23.1b/ovidweb.cgi?&S=OJEAFPEGOJDDOKKONCHKDBOBGMEJAA00&Link+Set=S.sh.39.40.43%7c14%7csl_10

http://ovidsp.tx.ovid.com.ezproxy.library.ubc.ca/sp-3.23.1b/ovidweb.cgi?&S=OJEAFPEGOJDDOKKONCHKDBOBGMEJAA00&Link+Set=S.sh.39.40.43%7c14%7csl_10

6. Introducing a model for optimal design of sequential OSCE's|

S.M. Hejri; K.Yazdani; A. Labaf ; John Norcini and M. Jalili

Abstract:

In a sequential OSCE which has been suggested to reduce testing costs, candidates take a short screening test and who fail the test, are asked to take the full OSCE. In order to introduce an effective and accurate sequential design, we developed a model for designing and evaluating screening OSCEs. Based on two datasets from a 10-station pre-internship OSCE and considering three factors, namely, the number of stations, the criteria for selecting the stations, and the cut-off score, several hypothetical tests were proposed. To investigate their accuracy, the positive predictive value (PPV), the pass rate, and the negative predictive value (NPV) were calculated. Also, a "desirable" composite outcome was defined as PPV = 100 %, pass rate ≥50 %, and NPV ≥25 %. Univariate and multiple logistic regression analyses were conducted to estimate the effects of independent factors on the occurrence of the desirable outcome. In half of the screening tests no false positive result was detected. Most of the screening OSCEs had acceptable levels of pass rate and NPV. Considering the desirable composite outcome 20 screening OSCEs could have successfully predicted the results of the corresponding full OSCE. The multiple regression analysis indicated significant contributions for the selection criteria (p values = 0.019) and the cut-off score (p values = 0.017). In order to have efficient screening OSCEs with the lowest probability of the error rate, careful selection of stations with high values of discrimination or item total correlation, and use of a relatively stringent cut-off score should be considered.

To read more:

http://link.springer.com.ezproxy.library.uvic.ca/article/10.1007/s10459-016-9673-x

http://link.springer.com.ezproxy.library.ubc.ca/article/10.1007/s10459-016-9673-x

7.Performance Assessment in Medical School Curricula: an Innovative Method of Evaluating Sonographic Skills Using Ultrasound Practical Examinations

J. Petty, p. Konsdrashov et al

Abstract:

Ultrasonography offers rapid, noninvasive imaging of internal anatomy for patient diagnosis, and future physicians should be competent in its use. Currently, there is no standard for assessing the sonographic skills of medical students. The purpose of the current study was to introduce ultrasound practical examinations as an innovative method of measuring the ultrasonography knowledge and proficiency of medical students. Student performance in the required ultrasound course for 3 consecutive classes of medical students was assessed by a practical examination graded by faculty and predoctoral fellows. Students were paired and instructed to find structures from a list of laboratory objectives chosen by an assigned grader. Collected data was evaluated retrospectively by analyzing grader performance and question difficulty. The class of 2018 was also given a survey to evaluate their perception of the practical examination. Overall, students performed well on the examination and liked the course and practical examination format. Significant differences were found among graders:

faculty gave lower grades than predoctoral fellows, suggesting a need for standardization. Additional analysis suggested the differences between graders could be due to the laboratory objective chosen by the different graders. To eliminate grader bias and improve interrater reliability, random selection of ultrasound practical examination objectives for each student will be implemented for the class of 2020. These changes in the existing ultrasonography curriculum should improve the evaluation of student performance and student satisfaction, while providing a model for other medical education institutions to incorporate a proven ultrasound assessment method into their curricula.

To read more:

http://link.springer.com.ezproxy.library.uvic.ca/article/10.1007/s40670-016-0281-4

http://link.springer.com.ezproxy.library.ubc.ca/article/10.1007/s40670-016-0281-4

8.The What or the How: A review of Teaching Tools and Methods in Medical Education
   A. Mourad, A. Jurjus and H. Hussein
   Medical Science Educator December 2016, Volume 26, Issue 4, pp 723-728

Abstract:

Medicine is a field that has evolved through the ages and continues to do so with the advancement of basic, clinical, and technological sciences. Accordingly, the roles and requirements of the medical doctor have also been subject to evolution. It is basically based on the need to develop effective and adaptable graduates that can tackle new problems as they arise in an ever-changing environment, which shifted the emphasis of medical education to the acquirement of generic skills, competency-based learning, and recognition for an increasing level of student autonomy. Medical education and its tools, the foundation upon which physicians base their competence in practice, have as a result, had to adapt to meet the ever growing demands of the profession. This review aims at (a) identifying teaching tools such as lecture-based learning, case-based learning, problem-based learning, team-based learning, flipped classrooms, and blended learning and (b) bringing to attention their development, purpose and how they compare in medical education in North America through time.

To read more:

http://link.springer.com.ezproxy.library.uvic.ca/article/10.1007/s40670-016-0323-y

http://link.springer.com.ezproxy.library.ubc.ca/article/10.1007/s40670-016-0323-y

9. Learning the Hard Way; 10 Lessons for developing undergraduate curricula
   Hannah Jacob and Carolyn Fertleman
   Medical Education vol 50 (12) December 2016; 1186-1188

Abstract:
The present study outlines key learning points derived from 2 years spent developing a national undergraduate curriculum for child health. Findings are sourced from analyses of a series of semi-

structured musings by beleaguered educationalists and may serve to reassure others engaged in developing undergraduate curricula that it is possible to survive the process and even to produce something quite good. The authors' best advice is to do it, but don't say we didn't warn you.

To read more:

http://onlinelibrary.wiley.com.ezproxy.library.uvic.ca/doi/10.1111/medu.13094/full

http://onlinelibrary.wiley.com.ezproxy.library.ubc.ca/doi/10.1111/medu.13094/full

10. The Cross-Canada Quintet presents variations on music: movements in the keys of H, P and E
Brett Schrewe, Joanna Bates, Christopher Watling, Rachel Ellaway and Dan Pratt
Medical Education vol 50 (12) December 2016; 1229-1232

Abstract

Whether it is rock playing in the background during a surgery, cool jazz that wafts from our office computer speakers as we write up our clinical notes, or the soaring of a symphony on the radio that inspires that perfect flourish to an article, music is woven throughout much of our clinical and academic lives. For the five of us, however, music alternates between the background and foreground in our lives as health professions educators. Music balances the working day, illuminates our research, and reconciles the utility of our training with the originality of our practice. We invite you to discover the interplays, dissonances and harmonies inspired by and reflected in this leitmotif. Pull up a chair, sit back, put on one of your own favourite pieces and explore these ideas as we riff and rhapsodise on variations on this theme.

To read more:

http://onlinelibrary.wiley.com.ezproxy.library.uvic.ca/doi/10.1111/medu.13093/full

http://onlinelibrary.wiley.com.ezproxy.library.ubc.ca/doi/10.1111/medu.13093/full