

## Articles you may enjoy (abstracts and links) March 2017

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### **1.Low performing students have insightfulness when they reflect-in-action**

Mike Tweed, Gordon Purdie and Tim Wilkinson

**Medical Education** vol 51 (3) p. 316-323 March 2017

#### **Abstract**

#### **Context**

Measuring appropriateness of certainty of responses in a progress test using descriptors authentic to practice as reflection-in-action builds on existing theories of self-monitoring. Clinicians making decisions require the ability to accurately self-monitor, including certainty of being correct. Inappropriate certainty could lead to medical error. Self-assessment and certainty of assessment performance have been measured in a variety of ways. Previous work has shown that those with less experience are less accurate in self-assessment, but such studies looked at self-assessment using methods less authentic to clinical practice. This study investigates how correctness varies with certainty, allowing for experience and performance.

## Methods

Students in Years 2–5 were certain of their responses to two iterations of a progress test during one calendar year. Analyses compared correctness for certainty of response, test number, student year cohort and performance level, defined by criterion scores.

## Results

The odds of a correct response increased with student certainty for all subsets allowing for year group and ability, including student subsets with less experience and subsets in lower-performance groups.

## Conclusion

Unlike previous work showing poorer accuracy of self-assessment for those with less experience or ability, we postulate that our finding of similar increases in correctness with increasing certainty even in the less experienced and lower performance groups, relates to certainty descriptors being worded in a way that is authentic to clinical practice, and in turn related to reflection-in-action.

## To read more:

<http://onlinelibrary.wiley.com.ezproxy.library.uvic.ca/doi/10.1111/medu.13206/full>

<http://onlinelibrary.wiley.com.ezproxy.library.ubc.ca/doi/10.1111/medu.13206/full>

## 2. Possibility and agency in Figured Worlds: becoming a ‘good doctor’

Deirdre Bennett, Yvette Solomon, Col, Bergin and Mary Horgan

*Medical Education* vol 51 (3) p. 248-257 March 2017

## Abstract

### Context

Figured Worlds is a socio-cultural theory drawing on Vygotskian and Bakhtinian traditions, which has been applied in research into the development of identities of both learners and teachers in the wider education literature. It is now being adopted in medical education.

### Objective

The objective of this paper is to show what Figured Worlds can offer in medical education. Having explained some of its central tenets, we apply it to an important tension in our field.

### Methods

The assumption that there is a uniform ‘good doctor’ identity, which must be inculcated into medical students, underlies much of what medical educators do, and what our regulators enforce. Although diversity is encouraged when students are selected for medical school, pressure to professionalise students creates a drive towards a standardised professional identity by graduation. Using excerpts from reflective pieces written by two junior medical students, we review the basic concepts of Figured Worlds and demonstrate how it can shed light on the implications of this tension. Taking a Bakhtinian approach to discourse, we show how Adam and Sarah develop their professional identities as they negotiate the multiple overlapping and competing ways of being a doctor that they encounter in the world of medical

practice. Each demonstrates agency by ‘authoring’ a unique identity in the cultural world of medicine, as they appropriate and re-voice the words of others.

## Discussion

Finally, we consider some important areas in medical education where Figured Worlds might prove to be a useful lens: the negotiation of discourses of gender, sexuality and social class, career choice as identification within specialty-specific cultural worlds, and the influence of hidden and informal curricula on doctor identity.

## To read more:

<http://onlinelibrary.wiley.com.ezproxy.library.uvic.ca/doi/10.1111/medu.13220/full>

<http://onlinelibrary.wiley.com.ezproxy.library.ubc.ca/doi/10.1111/medu.13220/full>

And the Commentary: **Moving beyond being a ‘good doctor’ to thinking about ‘good doctoring processes’** (short piece; no abstract)

<http://onlinelibrary.wiley.com.ezproxy.library.uvic.ca/doi/10.1111/medu.13245/full>

<http://onlinelibrary.wiley.com.ezproxy.library.ubc.ca/doi/10.1111/medu.13245/full>

### 3. What makes a ‘good group’? Exploring the characteristics and performance of undergraduate student groups

S.B. Channon, R.C. Davis, N.T. Goode, and S.A. May

**Advances in Health Sciences Education: Theory and Practice:** March 2017, Volume 22, Issue 1, pp 17–41

## Abstract

Group work forms the foundation for much of student learning within higher education, and has many educational, social and professional benefits. This study aimed to explore the determinants of success or failure for undergraduate student teams and to define a ‘good group’ through considering three aspects of group success: the task, the individuals, and the team. We employed a mixed methodology, combining demographic data with qualitative observations and task and peer evaluation scores. We determined associations between group dynamic and behaviour, demographic composition, member personalities and attitudes towards one another, and task success. We also employed a cluster analysis to create a model outlining the attributes of a good small group learning team in veterinary education. This model highlights that student groups differ in measures of their effectiveness as teams, independent of their task performance. On the basis of this, we suggest that groups who achieve high marks in tasks cannot be assumed to have acquired team working skills, and therefore if these are important as a learning outcome, they must be assessed directly alongside the task output.

**To read more:**

<https://link-springer-com.ezproxy.library.uvic.ca/article/10.1007/s10459-016-9680-y/fulltext.html>

<https://link-springer-com.ezproxy.library.ubc.ca/article/10.1007/s10459-016-9680-y/fulltext.html>

**4. Problematising the concept of the “borderline” group in performance assessments**

Matt Homer, Godfrey Pell, and Richard Fuller

**Medical Teacher** e-pub ahead of print Published on-line March 6, 2017

**Introduction:** Many standard setting procedures focus on the performance of the “borderline” group, defined through expert judgments by assessors. In performance assessments such as Objective Structured Clinical Examinations (OSCEs), these judgments usually apply at the station level.

**Methods and results:** Using largely descriptive approaches, we analyze the assessment profile of OSCE candidates at the end of a five year undergraduate medical degree program to investigate the consistency of the borderline group across stations. We look specifically at those candidates who are borderline in individual stations, and in the overall assessment. While the borderline group can be clearly defined at the individual station level, our key finding is that the membership of this group varies considerably across stations.

**Discussion and conclusions:** These findings pose challenges for some standard setting methods, particularly the borderline group and objective borderline methods. They also suggest that institutions should ensure appropriate conjunctive rules to limit compensation in performance between stations to maximize “diagnostic accuracy”. In addition, this work highlights a key benefit of sequential testing formats in OSCEs. In comparison with a traditional, single-test format, sequential models allow assessment of “borderline” candidates across a wider range of content areas with concomitant improvements in pass/fail decision-making.

**To read more:**

<http://www-tandfonline-com.ezproxy.library.uvic.ca/doi/full/10.1080/0142159X.2017.1296563?scroll=top&needAccess=true>

<http://www-tandfonline-com.ezproxy.library.ubc.ca/doi/full/10.1080/0142159X.2017.1296563?scroll=top&needAccess=true>

**5. Twelve tips for teaching about patients with cognitive impairment**

James Michael Fisher, Ellen Tullo, et al.

**Medical Teacher** e-pub ahead of print Published on-line March 1, 2017

**Abstract:**

The global population is ageing and consequently cognitive problems are increasingly prevalent. To ensure that the healthcare needs of this complex group are met, healthcare professionals must receive adequate training in this field. There are, however, a variety of reasons why this is not currently being achieved, including, but not limited to: ethical and logistical issues relating to the delivery of educational experiences involving cognitively impaired patients; a failure of curricula to keep pace with the changing

demographic; societal and institutional ageism; and the inherent complexity of the conditions. This article highlights challenges associated with the delivery of such training to medical undergraduates and presents strategies to tackle these. Drawing on current evidence where available, the 12 tips below offer educators practical advice on how to maximize the value of medical undergraduates' educational experiences with cognitively impaired patients.

**To read more:**

<http://www-tandfonline-com.ezproxy.library.uvic.ca/doi/full/10.1080/0142159X.2017.1288863>

<http://www-tandfonline-com.ezproxy.library.ubc.ca/doi/full/10.1080/0142159X.2017.1288863>

**6. Realist evaluation of faculty development for medical educators: What works for whom and why in the long-term**

Olanrewaju Serinola, Jill Thistlethwaite et al

**Medical Teacher** e-pub ahead of print Published on-line February 28, 2017

**Abstract:**

**Purpose:** Realism is a perspective in which entities exist independently of being perceived or independently of our theories about them. The realist framework with its principle of explanatory causation was used for an in-depth exploration of faculty development (FD) since, despite the widespread investment in FD, the evidence that it enhances the effectiveness of teaching in the long-term is still limited. The study aimed to develop realist theories that explain the connections between contexts (C), mechanisms (M) and outcomes (O) to find out what works for whom and why in FD.

**Methods:** Purposive sampling was used to select two medical schools from each of the four UK regions (total 8 of the 33 UK medical schools) for interview of a faculty development coordinator and a medical educator at each school. Sixteen interviews were carried out. Data were coded and summarized under contexts, mechanisms, and outcomes (CMO) to derive realist theories.

**Results:** We identified contexts that facilitated FD mechanisms of engagement, motivation, positive perception and professionalization, which led to educators' outcomes of improved confidence, competence, credibility and career progression.

**Conclusion:** Four realist theories, which support the effectiveness of FD in the long-term, were derived, enabling recommendations for FD stakeholders.

**To read more;**

<http://www-tandfonline-com.ezproxy.library.uvic.ca/doi/full/10.1080/0142159X.2017.1293238>

<http://www-tandfonline-com.ezproxy.library.ubc.ca/doi/full/10.1080/0142159X.2017.1293238>

## 7. Eye Tracking: A Novel Approach for Evaluating and Improving the Safety of Healthcare Processes in the Simulated Setting

Henneman, Elizabeth A, Marquard, Jenna L. ; Fisher, Donald L. et al

**Simulation in Healthcare: The Journal of the Society for Simulation in Healthcare**

February 2017, volume 12(1) , p. 1-56

### Abstract:

**Introduction:** Eye tracking, used to evaluate a clinician's eye movements, is an example of an existing technology being used in novel ways by patient safety researchers in the simulated setting. The use of eye-tracking technology has the potential to augment current teaching, evaluation, and research methods in simulated settings by using this quantitative, objective data to better understand why an individual performed as he or she did on a simulated or naturalistic task.

**Methods:** Selected literature was reviewed with the purpose of explicating how eye tracking can be used by researchers and educators to evaluate error-prone processes. The literature reviewed was obtained by querying the databases PubMed, CINAHL, and Google Scholar using the key words eye tracking, patient safety, and medical errors from 2005 through 2015.

**Results:** An introduction to the use of eye tracking, including both theoretical underpinnings and technological considerations, is presented. In addition, examples of how eye tracking has been used in research studies conducted in both simulated and naturalistic settings are provided.

**Conclusions:** The use of eye-tracking technology to capture the eye movements of novice and expert clinicians has provided new insight into behaviors associated with the identification of medical errors. The study of novices' and experts' eye movements provides data about clinician performance not possible with existing evaluation methods such as direct observation, verbal reports, and thinking out loud. The use of eye tracking to capture the behaviors of experts can lead to the development of training protocols to guide the education of students and novice practitioners. Eye-tracking technology clearly has the potential to transform the way clinical simulation is used to improve patient safety practices.

### To read more:

[http://ovidsp.tx.ovid.com.ezproxy.library.uvic.ca/sp-3.24.1b/ovidweb.cgi?&S=AJDPFPPENJDDODPGNCHKGBIBPADGAA00&Link+Set=S.sh.22.23.26%7c8%7csl\\_10](http://ovidsp.tx.ovid.com.ezproxy.library.uvic.ca/sp-3.24.1b/ovidweb.cgi?&S=AJDPFPPENJDDODPGNCHKGBIBPADGAA00&Link+Set=S.sh.22.23.26%7c8%7csl_10)

[http://ovidsp.tx.ovid.com.ezproxy.library.ubc.ca/sp-3.24.1b/ovidweb.cgi?&S=AJDPFPPENJDDODPGNCHKGBIBPADGAA00&Link+Set=S.sh.22.23.26%7c8%7csl\\_10](http://ovidsp.tx.ovid.com.ezproxy.library.ubc.ca/sp-3.24.1b/ovidweb.cgi?&S=AJDPFPPENJDDODPGNCHKGBIBPADGAA00&Link+Set=S.sh.22.23.26%7c8%7csl_10)

## **8. Team Oral Examinations in Anatomy Promote Broader Outcomes**

Kurt O Gilliland and Edward Kernick

**Medical Science Educator** March 2017, Volume 27, Issue 1, pp 5–8

### **Abstract:**

Traditional anatomy laboratory practical examinations, which are station-based and timed, test only the medical knowledge competency. Team oral examinations, an assessment innovation, provide feedback not only in medical knowledge but also in the competencies of communication skills and professionalism. These presentations at the cadaver promote more collaboration, integration, and comprehensiveness in the study process and allow faculty and students to determine progression through the softer competencies. Although team oral examinations may not work in all aspects of a course, they work especially well for the anatomy of the limbs and are a welcome addition once or twice in a course.

### **To read more:**

<https://link-springer-com.ezproxy.library.uvic.ca/article/10.1007/s40670-016-0350-8>

<https://link-springer-com.ezproxy.library.ubc.ca/article/10.1007/s40670-016-0350-8>

## **9. Commitment to Change and Challenges to Implementing Changes After Workplace-Based Assessment Rater Training**

Kogan, Jennifer R.; Conforti, Lisa N.; Yamazaki, Kenji; Iobst, William; Holmboe, Eric S.

**Academic Medicine** Volume 92(3), March 2017, p 394–402

### **Abstract:**

**Purpose:** Faculty development for clinical faculty who assess trainees is necessary to improve assessment quality and important for competency-based education. Little is known about what faculty plan to do differently after training. This study explored the changes faculty intended to make after workplace-based assessment rater training, their ability to implement change, predictors of change, and barriers encountered.

**Method:** In 2012, 45 outpatient internal medicine faculty preceptors (who supervised residents) from 26 institutions participated in rater training. They completed a commitment to change form listing up to five commitments and ranked (on a 1–5 scale) their motivation for and anticipated difficulty implementing each change. Three months later, participants were interviewed about their ability to implement change and barriers encountered. The authors used logistic regression to examine predictors of change.

**Results:** Of 191 total commitments, the most common commitments focused on what faculty would change about their own teaching (57%) and increasing direct observation (31%). Of the 183

commitments for which follow-up data were available, 39% were fully implemented, 40% were partially implemented, and 20% were not implemented. Lack of time/competing priorities was the most commonly cited barrier. Higher initial motivation (odds ratio [OR] 2.02; 95% confidence interval [CI] 1.14, 3.57) predicted change. As anticipated difficulty increased, implementation became less likely (OR 0.67; 95% CI 0.49, 0.93).

**Conclusions:** While higher baseline motivation predicted change, multiple system-level barriers undermined ability to implement change. Rater-training faculty development programs should address how faculty motivation and organizational barriers interact and influence ability to change.

**To read more:**

[http://ovidsp.tx.ovid.com.ezproxy.library.uvic.ca/sp-3.24.1b/ovidweb.cgi?&S=LGAMFPDENEDDODMMNCHKBEIBEOPAAA00&Link+Set=S.sh.22.23.26%7c37%7csl\\_10](http://ovidsp.tx.ovid.com.ezproxy.library.uvic.ca/sp-3.24.1b/ovidweb.cgi?&S=LGAMFPDENEDDODMMNCHKBEIBEOPAAA00&Link+Set=S.sh.22.23.26%7c37%7csl_10)

[http://ovidsp.tx.ovid.com.ezproxy.library.ubc.ca/sp-3.24.1b/ovidweb.cgi?&S=LGAMFPDENEDDODMMNCHKBEIBEOPAAA00&Link+Set=S.sh.22.23.26%7c37%7csl\\_10](http://ovidsp.tx.ovid.com.ezproxy.library.ubc.ca/sp-3.24.1b/ovidweb.cgi?&S=LGAMFPDENEDDODMMNCHKBEIBEOPAAA00&Link+Set=S.sh.22.23.26%7c37%7csl_10)

**10. Cutting Close to the Bone: Student Trauma, Free Speech, and Institutional Responsibility in Medical Education**

Kumagai, Arno K. MD; Jackson, Brittani MD; Razack, Saleem MD  
**Academic Medicine** Volume 92(3), March 2017, p 318–323

**Abstract:**

Learning the societal roles and responsibilities of the physician may involve difficult, contentious conversations about topics such as race, gender, sexual orientation, and class, as well as violence, inequities, sexual assault, and child abuse. If not done well, these discussions may be deeply traumatizing to learners for whom these subjects “cut close to the bone.” Equally traumatizing is exposure to injustice and mistreatment, as well as to the sights, sounds, and smells of suffering and pain in the clinical years. This potential for iatrogenic educational trauma remains unaddressed, and medical educators must take responsibility for attending to it. Possible solutions include trigger warnings or statements given to students before an educational activity that may cause personal discomfort. The authors of this Perspective assert, however, both that this concept does not distinguish between psychological trauma and discomfort and that well-intentioned trigger warnings target the wrong goal—the avoidance of distress. Exposure to discomfort not only is unavoidable in the practice of medicine but may be crucial to personal and professional moral development. The authors argue that a more appropriate solution is to create safe spaces for dialogues about difficult topics and jarring experiences. This approach places even the notion of free speech under a critical lens—it is not an end in itself but a means to create a professional ethic dedicated to treating all individuals with excellence and justice.

Ultimately, this approach aspires to create an inclusive curriculum sensitive to the realities of teaching and learning in increasingly diverse societies.

**To read more:**

[http://ovidsp.tx.ovid.com.ezproxy.library.uvic.ca/sp-3.24.1b/ovidweb.cgi?&S=LGAMFPDENEDDODMMNCHKBEIBEOPAAA00&Link+Set=S.sh.22.23.26%7c22%7csl\\_10](http://ovidsp.tx.ovid.com.ezproxy.library.uvic.ca/sp-3.24.1b/ovidweb.cgi?&S=LGAMFPDENEDDODMMNCHKBEIBEOPAAA00&Link+Set=S.sh.22.23.26%7c22%7csl_10)

[http://ovidsp.tx.ovid.com.ezproxy.library.ubc.ca/sp-3.24.1b/ovidweb.cgi?&S=LGAMFPDENEDDODMMNCHKBEIBEOPAAA00&Link+Set=S.sh.22.23.26%7c22%7csl\\_10](http://ovidsp.tx.ovid.com.ezproxy.library.ubc.ca/sp-3.24.1b/ovidweb.cgi?&S=LGAMFPDENEDDODMMNCHKBEIBEOPAAA00&Link+Set=S.sh.22.23.26%7c22%7csl_10)

And the commentary:

**The Perils and Rewards of Critical Consciousness Raising in Medical Education**

Bleakley, Alan

**Academic Medicine** Volume 92(3), March 2017, p 289–291

**Abstract:**

Inequalities in society are reflected in patterns of disease and access to health care, where the disadvantaged suffer most. Traditionally, doctors have kept politics out of their work, even though politics often shape medicine. What political responsibilities, then, should doctors have as they facilitate the learning of medical students? The article in this issue by Kumagai, Jackson, and Razack goes straight to the heart of this question. These authors ask whether educators should be wary of “cutting close to the bone” in discussing issues that may restimulate trauma in some medical students.

Kumagai and colleagues suggest that it is actually the ethical responsibility of educators to introduce students to discomfort as a means of raising students’ critical consciousness or their ability to sensitively gauge the positions of others and to engage in dialogue to address issues such as inequality and inequity so that previously silent and silenced voices can be heard. The author of this Commentary expands on this argument, further supporting the need to democratize medical culture and politicize doctors. Educators, as expert facilitators of this new critical consciousness raising, must create safe spaces for students to work through issues to avoid educational iatrogenesis. Such an approach to medical education is an extension of the traditional art of medicine, at the core of which are patient care and tolerance. Ethics, aesthetics, and politics can come together in such a reflexive medicine curriculum.

**To read more:**

[http://ovidsp.tx.ovid.com.ezproxy.library.uvic.ca/sp-3.24.1b/ovidweb.cgi?&S=LGAMFPDENEDDODMMNCHKBEIBOPAAA00&Link+Set=S.sh.22.23.26%7c16%7csl\\_10](http://ovidsp.tx.ovid.com.ezproxy.library.uvic.ca/sp-3.24.1b/ovidweb.cgi?&S=LGAMFPDENEDDODMMNCHKBEIBOPAAA00&Link+Set=S.sh.22.23.26%7c16%7csl_10)

[http://ovidsp.tx.ovid.com.ezproxy.library.ubc.ca/sp-3.24.1b/ovidweb.cgi?&S=LGAMFPDENEDDODMMNCHKBEIBOPAAA00&Link+Set=S.sh.22.23.26%7c16%7csl\\_10](http://ovidsp.tx.ovid.com.ezproxy.library.ubc.ca/sp-3.24.1b/ovidweb.cgi?&S=LGAMFPDENEDDODMMNCHKBEIBOPAAA00&Link+Set=S.sh.22.23.26%7c16%7csl_10)