1. Affordances of Knowledge Translation in Medical Education: A Qualitative Exploration of Empirical Knowledge Use Among Medical Educators

Onyura, Betty PhD; Légaré, France MD, PhD; Baker, Lindsay MEd; Reeves, Scott PhD; Rosenfield, Jay MD, MEd; Kitto, Simon PhD; Hodges, Brian MD, PhD; Silver, Ivan MD, MEd; Curran, Vernon MEd, PhD; Armson, Heather MD, MCE; Leslie, Karen MD, MEd

Abstract

Purpose: Little is known about knowledge translation processes within medical education. Specifically, there is scant research on how and whether faculty incorporate empirical medical education knowledge into their educational practices. The authors use the conceptual framework of affordances to examine factors within the medical education practice environment that influence faculty utilization of empirical knowledge.

Method: In 2012, the authors, using a purposive sampling strategy, recruited medical education leaders in undergraduate medical education from a Canadian university. Recruits all had direct teaching and curricular development roles in either preclinical or clinical courses across the four years of the undergraduate curriculum. Data were collected through individual semistructured interviews on participants' use of empirical evidence, as well as the factors that influence integration of empirical

knowledge into practice. Data were analyzed using thematic analysis.

Results: Fifteen medical educators participated. The authors identified both constraining and facilitating affordances of empirical medical education knowledge use. Constraining affordances included poor quality and availability of evidence, inadequate knowledge delivery approaches, work and role overload, faculty and student change resistance, and resource limitations. Facilitating affordances included faculty development, peer recommendations, and local involvement in medical education knowledge creation.

Conclusions: Affordances of the medical education practice environment influence empirical knowledge use. Developing strategies for effective knowledge translation thus requires careful assessment of contextual factors that can enable, constrain, or inhibit evidence use. Empirical knowledge use is most likely to occur among medical educators who are afforded rich, facilitative opportunities for participation in creating, seeking, and implementing knowledge.

Link: (Free article; no need for UVIC or UBC proxy)

http://journals.lww.com/academicmedicine/Fulltext/2015/04000/Affordances_of_Knowledge_Translation_in_Medical.32.aspx

2. **Developing understandings of clinical placement learning in three professions: Work that is critical to care;** Alison Ledger and Sue Kilminster
   Medical Teacher April 2015; 37 (4) pp. 360-365

Abstract

Background: This study contributes further evidence that healthcare students' learning is affected by underlying assumptions about knowledge, learning and work.

Aims: To explore educators and students' understandings of early clinical placement learning in three professions (medicine, nursing and audiology) and examine the profound impacts of these understandings on students' learning and healthcare work.

Methods: Narrative interviews were undertaken with 40 medicine, nursing, and audiology students and 19 educators involved in teaching these student cohorts. Interview transcripts were read repeatedly and interpreted using current practice-based understandings of learning.

Results: Across interviews and professions, students and educators made distinctions between aspects of clinical placements which they understood as "learning" and those which they tended to disregard as "work". In their descriptions of learning in clinical workplaces, medicine and nursing students and educators privileged activities considered to be technical or specialised, over activities that were understood to be more "basic" to care. Furthermore, interviews with medical students and educators indicated that rich and unique possibilities for learning from other members of the healthcare team were missed.

Conclusions: Distinctions between "learning" and "work" are unhelpful and all participation in clinical workplaces should be understood as valuable practice. Action is needed from all parties involved in clinical placement learning to develop understandings about learning in practice.

3. Towards socio-material approaches in simulation-based education: lessons from complexity theory
   Tara Fenwick and Madeleine Abrandt Dahlgren
   Medical Education April 2015; 49(4); 359-367

Context

Review studies of simulation-based education (SBE) consistently point out that theory-driven research is lacking. The literature to date is dominated by discourses of fidelity and authenticity – creating the 'real' – with a strong focus on the developing of clinical procedural skills. Little of this writing incorporates the theory and research proliferating in professional studies more broadly, which show how professional learning is embodied, relational and situated in social – material relations. A key concern for medical educators concerns how to better prepare students for the unpredictable and dynamic ambiguity of professional practice; this has stimulated the movement towards socio-material theories in education that address precisely this question.

Objectives and Methods

Among the various socio-material theories that are informing new developments in professional education, complexity theory has been of particular importance for medical educators interested in updating current practices. This paper outlines key elements of complexity theory, illustrated with examples from empirical study, to argue its particular relevance for improving SBE.

Results

Complexity theory can make visible important material dynamics, and their problematic consequences, that are not often noticed in simulated experiences in medical training. It also offers conceptual tools that can be put to practical use. This paper focuses on concepts of emergence, attunement, disturbance and experimentation. These suggest useful new approaches for designing simulated settings and scenarios, and for effective pedagogies before, during and following simulation sessions.

Conclusions

Socio-material approaches such as complexity theory are spreading through research and practice in many aspects of professional education across disciplines. Here, we argue for the transformative potential of complexity theory in medical education using simulation as our focus. Complexity tools open questions about the socio-material contradictions inherent in SBE, draw attention to important material dynamics of emergence, and suggest practical educative ways to expand and deepen student learning.

4. **Residents' Views of the Role of Classroom-Based Learning in Graduate Medical Education Through the Lens of Academic Half Days**

Chen, Luke Y.C. MD, MMEd; McDonald, Julie A. EdD; Pratt, Daniel D. PhD; Wisener, Katherine M. MA; Jarvis-Selinger, Sandra PhD

Abstract

Purpose: To examine the role of classroom-based learning in graduate medical education through the lens of academic half days (AHDs) by exploring residents' perceptions of AHDs' purpose and relevance and the effectiveness of teaching and learning in AHDs.

Method: The authors invited a total of 186 residents in three programs (internal medicine, orthopedic surgery, and hematology) at the University of British Columbia Faculty of Medicine to participate in semistructured focus groups from October 2010 to February 2011. Verbatim transcripts of the interviews underwent inductive analysis.

Results: Twenty-seven residents across the three programs volunteered to participate. Two major findings emerged. Purpose and relevance of AHDs: Residents believed that AHDs are primarily for knowledge acquisition and should complement clinical learning. Classroom learning facilitated consolidation of clinical experiences with expert clinical reasoning. Social aspects of AHDs were highly valued as an important secondary purpose. Perceived effectiveness of teaching and learning: Case-based teaching engaged residents in critical thinking; active learning was valued. Knowledge retention was considered suboptimal. Perspectives on the concept of AHDs as "protected time" varied in the three programs.

Conclusions: Findings suggest that (1) engagement in classroom learning occurs through participation in clinically oriented discussions that highlight expert reasoning processes; (2) formal classroom teaching, which focuses on knowledge acquisition, can enhance informal learning occurring during clinical activity; and (3) social aspects of AHDs, including their role in creating communities of practice in residency programs and in professional identity formation, are an important, underappreciated asset for residency programs.

LINK:
http://ezproxy.library.uvic.ca/login?url=http://journals.lww.com/academicmedicine/Fulltext/2015/04000/Residents__Views_of_the_Role_of_Classroom_Based.34.aspx

UBC: (has the journal ; unable to get links that work).

5. **The troubling inconsistencies within the medical educator role**

Kevin McLaughlin

A short, thought-provoking editorial by the Assistant Dean UGME at the University of Calgary on how we use different principles when dealing with students than we do with patients.

LINK: http://informahealthcare.com.ezproxy.library.uvic.ca/doi/full/10.3109/0142159X.2014.956062

UBC: http://informahealthcare.com.ezproxy.library.ubc.ca/doi/full/10.3109/0142159X.2014.956062

6. **The integrated curriculum in medical education: AMEE Guide No. 96**

David Brauer and Kristi Ferguson

Abstract

The popularity of the term "integrated curriculum" has grown immensely in medical education over the last two decades, but what does this term mean and how do we go about its design, implementation, and evaluation? Definitions and application of the term vary greatly in the literature, spanning from the integration of content within a single lecture to the integration of a medical school's comprehensive curriculum. Taking into account the integrated curriculum's historic and evolving base of knowledge and theory, its support from many national medical education organizations, and the ever-increasing body of published examples, we deem it necessary to present a guide to review and promote further development of the integrated curriculum movement in medical education with an international perspective. We introduce the history and theory behind integration and provide theoretical models alongside published examples of common variations of an integrated curriculum. In addition, we identify three areas of particular need when developing an ideal integrated curriculum, leading us to propose the use of a new, clarified definition of "integrated curriculum", and offer a review of strategies to evaluate the impact of an integrated curriculum on the learner. This Guide is presented to assist educators in the design, implementation, and evaluation of a thoroughly integrated medical school curriculum.

LINKS: http://informahealthcare.com.ezproxy.library.uvic.ca/doi/full/10.3109/0142159X.2014.970998

UBC: http://informahealthcare.com.ezproxy.library.ubc.ca/doi/full/10.3109/0142159X.2014.970998

7. Introversion and medical student education: challenges for both students and educators.

Davidson B, Gillies RA, Pelletier AL.

Abstract

ISSUE:

Introversion is one of the personality factors that has been shown to be associated with performance in medical school. Prior cross-sectional studies highlight performance evaluation differences between introverted and extraverted medical students, though the mechanisms and implications of these differences remain relatively unexplained and understudied. This gap in the literature has become more salient as medical schools are employing more interactive learning strategies into their curricula which may disproportionately challenge introverted learners.

EVIDENCE:

In this article, we provide an overview and working definition of introversion as a valid construct occurring on a continuum. We apply a goodness of fit model to explore how various medical training contexts may be more or less challenging for introverted students and the potential consequences of a

poor fit. As preliminary support for these hypothesized challenges, we share observations from students self-identified as introverts. Examples include introverted students feeling at times like misfits, questioning a need to change their identity to succeed in medical school, and being judged as underperformers. We offer pragmatic suggestions for improving the fit between introverted students and their training contexts, such as teachers and students pausing between a question being asked and the initial response being offered and teachers differentiating between anxious and introverted behaviors. We conclude with suggested areas for future qualitative and quantitative research to examine how medical school curricula and the teaching environment may be differentially impacting the learning and health of introverted and extraverted students.

IMPLICATIONS:

Extraverted behaviors will continue to be an important part of medical training and practice, but the merits of introverted behaviors warrant further consideration as both medical training and practice evolve. Educators who make manageable adjustments to current teaching practices can improve the learning for both introverted and extraverted styles of academic engagement.

Link:
http://www.tandfonline.com.ezproxy.library.uvic.ca/doi/full/10.1080/10401334.2014.979183#abstract

UBC:
http://www.tandfonline.com.ezproxy.library.ubc.ca/doi/full/10.1080/10401334.2014.979183#abstract

8. **Competencies, Milestones, and Entrustable Professional Activities: What They Are, What They Could Be**   Sklar, David P.. MD
Academic Medicine April 2015; 90(4) p.395-397

No abstract. An interesting three-page commentary on the challenges of assessing competencies, milestones and EPA's, ending with a series of recommendations. He references several other articles on competencies in the same issue. Clicking on the links in the references will take you to those articles.

LINK:
http://journals.lww.com.ezproxy.library.uvic.ca/academicmedicine/Fulltext/2015/04000/Competencies,_Milestones,_and_Entrustable.1.aspx

UBC: (has the journal; unable to get links that work that are less than half a page long)

9. **A Guide to Introducing and integrating reflective practices in medical education.**
   Jeffrey Sternlieb
   International Journal of Psychiatry in Medicine Vol 49 (1) 95-105 March 2015

Abstract

It is a significant challenge for any medical education program to provide adequate training in medical knowledge. It can be just as daunting to include appropriate opportunity to learn about and manage the emotional impact of illness experiences, the healing process, and provider-patient relationships. While there may be only a few basic changes to the core of medical knowledge, advances in medical practice regularly have an impact on the nature of patient care. Life-long learning is essential to maintain one's competence. However, everything doctors and other medical professionals learn about relationships with patients during their training is relevant for the rest of their career. One primary source of this learning are reflective practices. However, there is no guide or description of or comparison among the distinguishing characteristics of reflective processes. In addition, there are no criteria for the selection or integration of reflective processes in medical training or beyond. This article proposes understanding reflection as a complex, three-level process and identifies dimensions which differentiate a variety of reflective process activities. The discussion includes considerations for selecting which activities might be usefully incorporated in education curricula, and identifies conditions of medical training cultures that will support successful integration.

 LINK: http://ijp.sagepub.com.ezproxy.library.uvic.ca/content/49/1/95.long

UBC: http://ijp.sagepub.com.ezproxy.library.ubc.ca/content/49/1/95.long

10. **Louder than Words: Power and Conflict in Interprofessional Education articles 1954-2013**
    Elise Paradis and Cynthia R Whitehead
    Medical Education April 2015;49(4) 399-407

Context

Interprofessional education (IPE) aspires to enable collaborative practice. Current IPE offerings, although rapidly proliferating, lack evidence of efficacy and theoretical grounding.

Objectives

Our research aimed to explore the historical emergence of the field of IPE and to analyse the positioning of this academic field of inquiry. In particular, we sought to investigate the extent to which power and conflict – elements central to interprofessional care – figure in the IPE literature.

Methods

We used a combination of deductive and inductive automated coding and manual coding to explore the contents of 2191 articles in the IPE literature published between 1954 and 2013. Inductive coding focused on the presence and use of the sociological (rather than statistical) version of power, which refers to hierarchies and asymmetries among the professions. Articles found to be centrally about power were then analysed using content analysis.

Results

Publications on IPE have grown exponentially in the past decade. Deductive coding of identified articles showed an emphasis on students, learning, programmes and practice. Automated inductive coding of titles and abstracts identified 129 articles potentially about power, but manual coding found that only six articles put power and conflict at the centre. Content analysis of these six articles revealed that two provided tentative explorations of power dynamics, one skirted around this issue, and three explicitly theorised and integrated power and conflict.

Conclusions

The lack of attention to power and conflict in the IPE literature suggests that many educators do not foreground these issues. Education programmes are expected to transform individuals into effective collaborators, without heed to structural, organisational and institutional factors. In so doing, current constructions of IPE veil the problems that IPE attempts to solve.

LINK: http://onlinelibrary.wiley.com.ezproxy.library.uvic.ca/doi/10.1111/medu.12668/full

UBC**:** http://onlinelibrary.wiley.com.ezproxy.library.ubc.ca/doi/10.1111/medu.12668/full

And the commentary: **LINK**
http://onlinelibrary.wiley.com.ezproxy.library.uvic.ca/doi/10.1111/medu.12686/full

UBC:

http://onlinelibrary.wiley.com.ezproxy.library.ubc.ca/doi/10.1111/medu.12686/full