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Recommended Citation

Bate, F., & Steketee, C. (2010). *Understanding the pedagogical world-view of clinical teachers in Australia: An evidence-based approach*. **Paper presented at the European Association for Practitioner Research on Improving Learning (EAPRIL) Conference. Lisbon, Portugal, 24-26 November, 2010.**

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Understanding the pedagogical world-view of clinical teachers in Australia: An evidence-based approach.

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This paper was peer reviewed and accepted for delivery at the European Association for Practitioner Research on Improving Learning (EAPRIL) Conference 2010 in Lisbon, Portugal. This paper was used as a basis for the presentation and will be further developed for submission to the European Association for Research into Learning and Instruction (EARLI) journal: *Learning and Instruction*.

Abstract

The education of tomorrow's medical workforce is critical to the sustenance of healthy and progressive communities, particularly in the context of an aging population. Ongoing professional development focusing on the processes underpinning teaching and learning are important for clinical teachers (typically practicing doctors and surgeons) who, as busy professionals, also shoulder much of the responsibility for passing medical knowledge from one generation to the next. This paper discusses a recent study which posed two core questions: What pedagogical principles do clinical teachers perceive as important in underpinning their role as educators? And How do these perceptions differ from those held by education professionals? Results of the study revealed stark differences between clinical teachers and education professionals. These differences have implications for future professional support programs.

Introduction

This study is informed by previous research into perceptual differences between clinical teachers and professional educators which was set in Canada (McLeod, 2009). This Canadian study identified 30 pedaogigical principles and adopted a Delphi consensus-building method with 10 clinical teachers and 21 education professionals. Results revealed some similarities in perceptions between clinical teachers and education professionals, but a lack of concordance on a number of key

aspects of adult learning theory particularly on matters of assessment, supervision, role modelling, mentoring and problem-solving. The current study set out to test the findings of the Canadian study in an Australian context. A similar theoretical perspective on important attributes of adult learning was adopted which comprised 28 principles categorised into five sub-scales. These sub-scales have their roots in the schema adopted by Jonassen, Peck and Wilson (1999) which acknowledged the importance of learning as an active, constructive, cooperative, authentic and reflective process.

Research procedure

Whereas the Canadian study tracked a small group of clinical teachers as they arrived at consensus, the current study captured the perceptions of a larger number of clinical teachers at one point in time. An extra dimension was also added to the current study which gathered data on perceived need for professional development. An online questionnaire was administred to 61 of 199 clinical teachers employed at an Australian University Medical School (response rate, 31%). At the same university, 12 of 15 education professionals also participated (response rate, 80%). The questionnaire ran in May 2010 and acheived acceptable levels of reliability (e.g. Chronbach Alphas for clinical teachers 0.859 on the Importance dimension and 0.948 on the Professional development dimension). An ANOVA comparison of means between clinical teachers and education professionals was conducted to ascertain if there were significant differences between the two groups on Importance and Professional development dimensions.

Findings

Significant disparities between the perceptions of clinical teachers and education professionals were noted on what constitutes important educational principles. Clinical teachers generally felt that the identified pedagogical principles were less important, but were more likely to appreciate opportunities for professional development. Consistent with the Canadian study, findings from this research indicated that assessment (particularly formative assessment) was not valued highly by clinical teachers when compared with the perceptions of education professionals. Other disparities were noted. For example, clinical teachers were:

- Less likely to want to discern what students already knew as a precursor to teaching.
- More likely to want to teach things that were not in the curriculum, but which they felt were important.
- Less likely to want to seek to improve their practices through reflection.

From a professional development standpoint, the greatest priority for clinical teachers was in knowing how to develop engaging teaching resources.

Significance of the study

The issue of planning, developing, implementing and reflecting upon educational interactions is difficult for knowledge-rich but time-poor clinical teachers. This study has been useful in (a) activating a debate on important pedagogical principles that are evident in clinical settings such as teaching hospitals, (b) quantifying differences between clinical teachers and education professionals and (c) helping to target professional development towards what clinical teachers see as important in their specific contexts. The evidence gathered in relation to assessment in particular corroborates a similar study (McLeod, 2009), and suggests that a fresh approach to assessment built around principles of life-long learning may be more useful for both clinical teachers and their students in the longer term. The application of leading-edge learning technologies (e.g. m-learning) to help transform assessment practices and medical curricula in general is an avenue worth pursuing for future research and development.

Conclusions

Results from the research revealed significant challenges that need to be faced to help provide timely and tailored professional development. The study showed that clinical teachers required skills in developing engaging teaching resources, knowledge of how to make workshops more authentic and vibrant, and a greater appreciation of contemporary students' learning styles. This appetite for knowledge and skills is tempered by the reality of clinical teachers' patient lists and student load, along with the scarcity of time put aside for their own professional development. The challenge of responding to this environment might call for an efficient use of new learning technologies in building professional development artefacts that can be applied at a number of levels and in a range of contexts. Stimulating an interest in assessment amongst clinical teachers, including how assessment practices can sustain learning, was also shown to require attention.