How feedback can foster professional growth of teachers in the clinical workplace: A review of the literature

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ABSTRACT

Student ratings of teaching have received much attention in both higher and medical education research. Paramount has been the attention to the robustness of the instruments used to capture these ratings as a source of feedback for teachers. However evidence is scarce with regard to what happens after ratings are fed back to the teachers. This paper will focus on feedback facilitation strategies needed for medical teachers in the workplace setting to improve their teaching. First, the attributes of clinical teaching will be introduced, followed by a disquisition on feedback uptake, and finally reflection as a tool to improve teaching. Second, several recently published strategies aimed at improving clinical teaching through the facilitation of feedback are discussed.

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Background

Assuring and enhancing the quality of teaching is a major concern to higher education institutions worldwide. Quality assurance efforts in higher education, largely focused on accounting for teaching quality, have shifted towards a focus on improving teaching quality (Harvey & Newton, 2004). How does one handle the improvement of teaching quality when a (large) part of the curriculum consists of internships situated in the workplace? How can employees who have not been formally trained to be supervisors and teachers be supported to take on this important role? These are questions which are pertinent to medical curricula worldwide. Due to the important role of clerkships (clinical rotations through various hospital departments aimed at further developing clinical reasoning, physical examination and inter professional collaboration skills) in the medical curriculum, physicians working in the hospital perform a supervisory and/or teaching role in addition to clinical duties. Given this special setting which is aimed at patient care and not student learning, specific strategies are required to improve the quality of supervision and teaching by clinicians (Dolmans, Wolfhagen, & Scherpbier, 2003; Stalmeijer, Dolmans, Wolfhagen, & Scherpbier, 2009; Van Berkel, 2010).

This paper presents an overview of the literature that has described efforts to provide effective feedback based on student ratings to teachers in workplace settings and the principles by which they aim to do this. Firstly, we will provide a general overview of the issues within the clinical workplace which make support and training of clinicians in their teacher's role pertinent. Secondly, we will elaborate on the trend within medical education to develop student rating instruments to provide feedback to these 'clinical teachers'. Thirdly, we will focus on the potential limitations and pitfalls within this process. Finally we will discuss several strategies to optimize evaluation and feedback of clinical teachers as a way to improve teaching quality in the clinical workplace.

Methods

This paper is based on comprehensive searches for research literature which was performed as part of two dissertations aimed at faculty development and quality assurance within the clinical workplace (Boerboom, 2011; Stalmeijer, 2011). In addition to these

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literature searches an additional, specific search was conducted for studies describing feedback for the purpose of faculty development. Only studies published in peer reviewed scientific journals were included. The included studies were read, using a reading list that reflected the purpose of this paper: to provide an insight in how to provide effective feedback to teachers in a medical workplace setting. The current paper is a synthesis of this literature.

The challenges of teaching in the workplace

All internships are complicated by the fact that the setting which serves as the learning environment (the workplace) is first and foremost meant for working and production and not student learning (Spencer, 2003). Given the importance of learning in the workplace in the process of becoming a medical doctor, the field of medical education has paid a lot of attention to (1) defining characteristics of good clinical teachers (Dolmans, Wolfhagen, Gerver, de Grave, & Scherpbier, 2004; Irby, 1994; Irby & Bowen, 2004; Kilminster & Jolly, 2000; Snell et al., 2000; Ullian, Bland, & Simpson, 1994), (2) ways to train clinicians to become good clinical teachers (Irby, 1995; McLean, Cilliers, & Van Wyk, 2008; Neher, Gordon, Meyer, & Stevens, 1992; Ramani & Leinster, 2008) and (3) ways to evaluate clinicians as clinical teachers (Beckman, Ghosh, Cook, Erwin, & Mandrekar, 2004; Fluit, Bolhuis, Grol, Laan, & Wensing, 2010). The fact that the dynamic tensions within and the demands of the workplace complicate effective teaching contribute to the need of these endeavours. Dornan, Boshuizen, King, and Scherpbier (2007) have stated that the core condition for workplace learning is 'supported participation', i.e. the medical doctors who have a role as educators in the clinical workplace, help students participate in patient care by being both supportive and challenging. The medical education domain provides a rich context from which to draw examples of how feedback might stimulate the professional growth of teachers in the workplace.

We will first elaborate on the various procedures and instruments developed to use evaluation and feedback as a way to train clinicians as teachers.

Evaluation as a faculty development initiative

To support clinical teachers in the performance of their teaching roles in the clinical workplace faculty development has gained increasing prominence in medical education (Prideaux et al., 2000; Steinert, 2005; Steinert et al., 2006). To promote excellence in clinical teaching, providing feedback on supervisory skills of clinical teachers has become an important part of faculty development (Ramani, 2006). Although faculty developers have an important role in providing this feedback (McLean et al., 2008), student feedback, of which (numeric) ratings are an important part, is in many cases the main source of information about the quality of the teaching of individual clinical teachers (Beckman et al., 2004; Fluit et al., 2010; Irby, Ramsey, Gillmore, & Schaad, 1991; McOwen, Bellini, Guerra, & Shea, 2007). There is compelling evidence that student ratings can provide valid and reliable feedback (Marsh & Roche, 1997). Student ratings as part of faculty development initiatives can assist teachers to identify areas for improvement, stimulate teachers to reflect on their teaching practice and stimulate the making of a strong commitment to change (Boerboom, Jaarsma, et al., 2011; Van der Leeuw, Slootweg, Heineman, & Lombarts, 2013).

Why feedback matters

What is the evidence for feedback in relation to faculty development within the workplace setting? Feedback plays a central role in supporting cognitive, technical and professional development (Archer, 2010). Authors agree that in order to improve professional performance, one should first know how he/she is doing and what can be done better through receiving feedback (Davis et al., 2006; Krackov & Pohl, 2011; Mann et al., 2011). Valid and reliable information about one's performance is necessary as people are known to have difficulties in reliably self-assessing their performance (Eva & Regehr, 2007; Mann et al., 2011). In the context of medical education, feedback can help to generate standards for teaching, preferably based on a theoretical foundation of effective (clinical) teaching (Biggs, 2001). Feedback is also recognized to stimulate the work engagement of professionals (Bakker & Demerouti, 2008). This is especially true when job demands are high, like in the context of clinical teaching (Bakker & Demerouti, 2008; Spencer, 2003). Engaged professionals are more effective, more productive and more creative.

Instruments providing and structuring feedback

Instruments for providing clinical teachers with feedback on their supervisory skills have received a great deal of attention in the literature and many studies have reported on the robustness and validity of instruments using student ratings for providing feedback to clinical teachers (Beckman et al., 2004; Fluit et al., 2010; Snell et al., 2000). In most cases these instruments are composed using input from stakeholders, which is favourable because stakeholder involvement will not only enhance the content validity of the instrument in question, it will also enlist support for its use (Bowden & Marton, 1998). In many studies though, the effectiveness of the evaluation and the feedback on the clinical teachers (and their context) remain underexposed (American Education Research Association and American Psychological Association, 1999; Fluit et al., 2010). This is regrettable because information about the reactions of clinical teachers after receiving feedback from student ratings and the effect of this feedback on teaching effectiveness can add substantially to the validity of these instruments (Beckman, Cook, & Mandrekar, 2005).

The limitations of evaluations as a faculty development initiative

Using evaluations for enhancing teaching has certain limitations. These limitations may be due to the instrument itself, but also due to the response of the recipient to feedback.

Limitations: not using theory to guide instrument development

As stated above, the majority of instruments for evaluating clinical teaching are based on the input of stakeholders (Bowden & Marton, 1998; Fluit et al., 2010). However, in many cases, the theoretical dimensions underlying the compositions of these instruments are not made explicit (Dolmans et al., 2004; Stalmeijer, Dolmans, Wolfhagen, Muijtjens, & Scherpbier, 2008). For evaluation results to be helpful to clinical teachers in optimizing their teaching practice, the evaluation instrument should have a solid theoretical foundation which in turn should resonate with the espoused theory of learning and teaching of the institute (Biggs, 2001). When evaluation feedback is not underpinned by these theories of effective teaching, it is difficult to establish in which direction efforts to improve teaching practice should be headed and, consequently, real improvement will likely not occur (Bowden & Marton, 1998), i.e. the teacher will just receive some tips and tricks and will not be stimulated to actually reflect on his or her teaching behaviours (Biggs, 2001).