Peer Observation of Clinical Teaching: A Guide

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Abstract

Peer observation of teaching (POT), also called peer review of teaching, has been well established in the general higher education literature and is now gaining increasing prominence in medical education. It aims to provide supplementary information on teaching quality that triangulates evaluation gained from student feedback which has historically been the sole method of informing teaching effectiveness. This review explores the literature to describe the variety of POT schemes that have been created and describes the differing purposes of formative developmental quality enhancement models and more summative quality assurance models. It focuses on one model, a formative collaborative model of peer observation, and discusses the key steps involved at each stage of this process. Furthermore, the benefits and challenges to POT implementation are considered in relation to the unique challenges inherent in clinical teaching.

Key Points:
- Peer observation of teaching schemes aim to enhance teaching quality through utilising peer observation and formative feedback to help drive development of teaching skills.
- Most schemes follow a similar format of pre-observation meeting, observation and subsequent reflective debrief.
- The observer is not seen as having 'answers' but instead acts as a 'critical friend' and helps facilitates a process of reflective dialogue.
- Careful consideration must be given to the type and role of any documentation or record guides used.

Keywords: Peer observation

Article

Background

Ascertaining the quality of teaching has historically relied on student feedback. However, there is increasing recognition that this should not be used as the sole method of informing teaching effectiveness (D. M. Irby, Gillmore, & Ramsey, 1987; Kidd & Latif, 2004). Student feedback may be personality-driven, subject to confounders (Conigliaro & Stratton, 2010) and may not comment fully on the nuances of clinical instruction (D. Irby & Rakestraw, 1981). For example, it is known that students positively rate faculty members who award higher grades (Kidd & Latif, 2004) and others uniformly rate their tutors highly (D. M. Irby et al., 1987). There have therefore been calls to triangulate student feedback with data from multiple sources (Centra, 1993). A review article on the evaluation of clinical teaching describes a number of methods offering

additional perspectives including objective structured teaching encounters (OSTEs), teaching portfolios and patient feedback (Snell et al., 2000). Another method well established in the general higher education literature, and now gaining increasing prominence in medical education, is direct peer observation of teaching (POT). This article reviews the literature to describe the differing models and stages of POT schemes and explores common benefits and challenges that clinical educators should consider when designing and implementing POT-based schemes.

Observation of Teaching Models

Gosling (2002) describes three models of third-party observation of teaching; an evaluative model, a developmental model and a collaborative peer review model . In the evaluation model, a senior faculty member observes a teaching episode in a quality-assurance approach for the purposes of appraisal/ probation. In the developmental model, the observer is an educationalist who aims to improve teaching competencies as part of quality enhancement. Both these models utilise an 'expert' who provides feedback in a unidirectional summative manner. The third model, collaborative peer review, follows a formative structure wherein a colleague observes a teaching episode delivered by their peer. With the aid of a guide or rating scale, the observer documents skills and behaviours not usually identified by students including the instructor's content knowledge, delivery, teaching style and the range of learning activities employed (Berk, Naumann, & Appling, 2004). In the debrief that follows, both observer and teacher reflect on the teaching episode to identify strengths and potential areas for improvement.

Gosling used the generic term 'peer observation of teaching' (POT) for all three models despite the first two models not being truly peer-led given power disparities between both parties. Much of the literature that started to emerge uses the term 'peer observation of teaching' to refer to any third-party observation including even explicitly summative schemes. Gosling therefore later revised his terminology to emphasise the formative collaborative process between peers and renamed POT as 'peer-supported review of teaching' (Gosling & O'Connor, 2009). Other synonyms in the literature include peer review-, peer reflection- or peer evaluation of teaching. In the remainder of this paper, the term POT is used to signify collaborative / peer-supported review of teaching.

Formative versus Summative Models

There is much debate in the literature as to whether observation of teaching schemes should solely be a formative tool to encourage professional teaching skill development (quality enhancement) as per the collaborative model or whether it may also be used summatively (quality assurance) as per the developmental and evaluative models. Opponents of summative-based schemes argue that it is not robust enough to address underperformance or identify promotion candidates given its poor reliability (low inter-rater consistency based on small numbers of reviews) and validity (its true ability to assess teaching skills in a time-limited fashion) (Gosling & O'Connor, 2009; Shortland, 2004). It is therefore generally agreed that teaching observation schemes should remain, as Gosling describes in his peer-supported review model, a formative tool to allow teaching development in an open non-threatening environment (Centra, 1987). There is also contention around whether even formative-based POT schemes should be voluntary or mandatory. Indeed, when POT schemes have been introduced on a compulsory university-wide basis, it was found that staff did not fully engage with the drive to develop teaching practice (Shortland, 2004).

Organisers of POT schemes must therefore make explicit from the outset their objectives and expectations and avoid creating a system that combines conflicting dual aims of teacher development and quality assurance that can create mistrust and division from participants (Adshead, White, & Stephenson, 2006). Confusion as to the role of the observer may result in a threatening and confrontational environment that does little to promote a constructive dialogue aiming to enhance teaching effectiveness (Sullivan, Buckle, Nicky, & Atkinson, 2012).

Differences with clinical teaching

Within healthcare professions, there has historically been an over-emphasis on viewing academic performance through clinical excellence, research and publications. However, there is far less recognition of the role of clinical educator development (Harden & Wilkinson, 2011). Ultimately, the quality of delivered patient care will improve if the learner experience is enhanced through increased quality of clinical teaching (Leach & Philibert, 2006).

Although not as prolific as in the general higher education literature, POT schemes within healthcare professional education have been described as early as the 1980s (D. M. Irby, 1983). However, observation of clinical teaching involves unique differences and challenges to traditional classroom based teaching. Clinical teaching can be more unpredictable, emotive and must be based around the needs of any patients involved with the teaching episode. Medical educators often find teaching an isolating experience with few formal mechanisms in place for peer interaction and sharing of teaching experiences (Ludwick, Dieckman, Herdtner, Dugan, & Roche, 1998). This is important given that many clinical teachers take on such roles without formal pedagogical training and instead experientially develop a repertoire of teaching skills (MacDougall & Drummond, 2005).

Furthermore, clinical practice is inherently very varied and is based not just on factual knowledge but on clinicians' own prior experiences and intuition. As a result, management plans may differ between clinicians for the same clinical case. Peer observers of clinical teaching need to keep this in mind and set aside their own judgement of the clinical context and instead focus on the teaching skills being observed (Cairns, Bissell, & Bovill, 2013). As a result, whilst some studies have suggested that the peer observers should be from the same clinical discipline as the teacher being observed (Davis, 2011), this is generally not seen to be an essential requirement.

Peer Selection within POT Schemes

Three main formats for peer-selection within collaborative peer review have been described. Some POT schemes allow the teacher to select their own peer observer. Whilst trusting, knowing and getting on well with one's observer has been shown to have a positive influence on the success of a POT scheme (Costello, Pateman, Pusey, & Longshaw, 2001), teachers may select a peer who is more likely to provide positive feedback and less likely to challenge areas for development (Bell, 2001). Therefore it is argued that it is better to instead use a collegial model of randomly paired academics who act as both mentors and mentees and thus develop a lasting supportive relationship aimed at improving teaching quality (Bennett, Parker, & Smigiel, 2012). A third 'daisy-chain' format has been described which requires a colleague to observe a peer's teaching who in turn observes a different member of the group leading to a continual chain of reflective dialogue and dissemination of good teaching practice (Bowen-Jones, Barber, & Martin, 2009). Whichever format is used, potential challenges may arise depending on the seniority of the peer. A junior colleague may find it difficult to provide constructive feedback to someone more senior (Boyd, 2009) whilst a more senior peer observer can increase anxieties for the teacher who may perceive the process as becoming more summative in nature. It is generally accepted that peer observers must undergo specific training before embarking on this role (Newman, Lown, Jones, Johansson, & Schwartzstein, 2009). Training should explore the purpose of the POT scheme, its proposed format, use of any documentation guides and skills training around facilitation and feedback.

Stages of a POT Scheme

Collaborative peer-review consists of three distinct stages: the pre-observation meeting, the observation and the post-observation meeting. The pre-observation meeting allows both observer and teacher to meet and establish trust, minimise anxieties and clarify the purpose of the observation (Martin & Double, 1998). During this meeting, the teacher is given the opportunity to focus the process onto specific aspects of their teaching that they themselves have identified as needing development (Trujillo et al., 2008). The observer should make clear the overall process of the observation, the proposed format of feedback and reiterate the confidential and supportive manner that is inherent to a successful formative peer observation. The use of any rating tools

should be discussed with the teacher. In addition, the observer needs to understand the context of the forthcoming teaching episode including the intended learning outcomes, student stage of the course and the role of the teaching session within the overall curriculum.

The observation itself is usually done 'live' with the observer sitting within the teaching environment. If patients are involved then explicit patient consent should be sought. The observer generally should not intervene with the instructional process however for clinical teaching episodes, there may be a need for intervention if urgent patient safety concerns arise. An alternative to live observation is the use of video-recorded teaching sessions. This still conveys the reality and immediacy of the teaching episode whilst allowing the teacher to directly observe their own teaching behaviours that are worthy of comment (McLeod et al., 2013). The teacher undergoing peer observation should generally conduct their teaching session as they normally would and ignore the observer's presence in order to receive a more meaningful critique. However, it is equally valid for participants to change the way they usually teach if they wish the peer observation process to focus on the utility and success of a novel teaching method. During the observation stage, the observer often uses a guide, as detailed later, to help document observed behaviours and skills.

During the post-observation meeting, the peer observer facilitates analysis of the teaching using observed behaviours and skills as prompts to encourage the teacher's self-reflection on their performance. The observer is not seen as having 'answers' but instead acts as a 'critical friend' (Dahlgren et al., 2006). A number of feedback models may be used though many schemes utilise revised Pendleton's rules (Pendleton, Scofield, Tate, & Havelock, 1984). In keeping with a recent review on giving feedback (King, 1999), the observer must provide constructive comments that are descriptive (based on observed behaviours rather than personality), specific, sensitive to the needs of the teacher, directed towards behaviour that can be changed and selective (based on one to two key areas). This should be done in a non-judgmental manner to promote an encouraging and supportive learning environment.

Observation Documentation

Despite a number of POT documentation tools being described in the literature, none of these are purported to be the sole valid means by which to conduct POT schemes. Tools will differ based on the purpose of the process, be it formative or summative. More summative versions of teaching observation schemes tend to use multi-item rating checklists though this is not ideal for collaborative peer observation as the observer themselves may miss out on their own opportunity for learning when focussing on checklist documentation (Finn, Chiappa, Puig, & Hunt, 2011). Formative schemes tend to use prompt headings and open ended free-text questions to allow observers to freely record observed behaviours and skills across a variety of teaching domains. A study comparing web-based and paper-based peer review tools found the former easier to use, navigate and complete (Bennett et al., 2012).

Berk et al. (2004) describe a five-step process for developing POT rating scales. Step one is specifying the domains that detail the teaching behaviours, skills, and characteristics that define effective teaching. However, there is still no clear consensus as to what constitutes these domains, with multiple attempts in the literature to better define such attributes. Medical educators have attempted to define good clinical teaching by focussing on the attributes and characteristics that constitute a good clinical teacher (Buchel & Edwards, 2005). However translating these into an observational tool poses challenges especially considering that two-thirds of the important traits found in outstanding clinical teachers are non-cognitive including personality types, relationship skills, and emotional states (Sutkin, Wagner, Harris, & Schiffer, 2008). After deciding the domains, educators in step two create rating items for each. At step three, the scale format will need to be decided for each item. This may be structured (e.g. Likert scales), unstructured (e.g. free text responses) or a combination of both. Thereafter the tool needs to undergo faculty review and field testing as step four. Lastly, in step five, it is suggested that the tool undergoes testing for validity and reliability however if the POT scheme is purely formative in nature then this is less of a concern as most tools demonstrate good content validity despite its variable inter-rater reliability (Gosling & O'Connor, 2009).

Benefits to POT Implementation

Collaborative peer review ultimately aims to enhance students' learning experience through developing and disseminating good teaching practice (Gosling & O'Connor, 2009). The overwhelming majority of teachers who undergo peer observation suggest that the process is constructive, non-threatening and focuses on teaching skill development (Cairns et al., 2013; Sullivan et al., 2012). Reflective practice in this way is advocated as a means of professional development in a confidential climate for both experienced and new academic staff (Schön, 1987). POT schemes recognise that teaching, rather than being an innate skill, is a skill to be acquired and developed over time (Harden & Wilkinson, 2011). It additionally elevates teaching involvement to a scholarly activity akin to the traditional academic focus on research involvement (Harden & Wilkinson, 2011).

Potential negative views can be addressed by ensuring that feedback is constructive and offered as advice rather than a mandate to change (Davis, 2011). The process of facilitated self-reflection allows identification of a tutor's teaching strengths and weaknesses. Suggested development strategies can be trialled to address areas of weakness whilst the identification of strengths validates a teacher's effort and allows such practice to be reinforced and communicated to other teachers (Gosling & O'Connor, 2009). Peer observation also decreases the isolation felt by clinical educators and can help foster a community within which effective teaching methods are explored and shared.(Adshead et al., 2006) Faculty members who know each other better as a result of this community are more likely to implement changes recommended by their peers (Sullivan et al., 2012). Clinical teachers have found that POT schemes have enhanced their professional development and feelings of worth (Sullivan et al., 2012).

It is well accepted that the process offers mutual benefits to both teacher and observer. By observing a peer teach, observers are naturally made more aware of their own teaching style and may borrow new teaching techniques from those they are observing (Beckman, 2004). By being separate to the teaching, observers also appreciate how students respond to different teaching styles.

Furthermore, POT schemes have been shown to help teachers improve their interactions with students (Marshall, 2004) and that repeated observations and feedback provision improves a range of teaching skills (Regan-Smith, Hirschmann, & Iobst, 2007). Tutors report that POT schemes encourage a more learner-centred approach to teaching and promote additional professional development activities (Gusic, Hageman, & Zenni, 2013). POT schemes also allows observers to gain a deeper understanding of wider issues such as the programme's curriculum, learner experience and the overall educational process (Horowitz, Van Eyck, & Albanese, 1998).

Challenges to POT Implementation

A number of potential pitfalls and challenges to POT schemes have been reported. The majority of these relate to practical issues relating to implementation including cost, time and paperwork (Wellein, Ragucci, & Lapointe, 2009). Staff may view POT schemes as a tick-box mechanical exercise rather than reflecting a faculty's true commitment to enhance teaching. This view may be more evident when the scheme is implemented as a mandatory component of teaching activity with engagement reducing when POT schemes are seen as a 'top-down' imposition (Adshead et al., 2006).

Another common challenge is that POT schemes can feel threatening and anxiety provoking, especially if it is seen to be externally-imposed (Adshead et al., 2006; Pattison, Sherwood, Lumsden, Gale, & Markides, 2012). Anxieties relate not only to being observed but also the fear of negative feedback and criticism. These fears are heightened when there are perceived power differentials between observer and teacher (Gosling & O'Connor, 2009). A level of trust between the observer and teacher is therefore crucial (Siddiqui, Jonas-Dwyer, & Carr, 2007). Initial anxieties fade as tutors fall into the comfort of their teaching role with little conscious awareness of the observer (Cairns et al., 2013). However, some teachers may still feel uncomfortable with a colleague present reviewing their performance. Some teachers believe that POT

schemes challenge their academic freedom and perceived right to teach privately behind closed doors (Schulman, 1993).

Teachers may feel that the observed sessions are non-representative of their actual teaching (Berk et al., 2004). Furthermore, the Hawthorne effect may cause the teacher to consciously modify their natural teaching style (Franke & Kaul, 1978). Conversely, heightened levels of anxiety may cause teachers to under-perform. Observers themselves may be influenced by preconceived ideas and experiences of the teacher they are reviewing (Beckman, Lee, Rohren, & Pankratz, 2003). These concerns are less of a concern if the POT scheme is purely formative in nature and may be further negated through multiple observations. Observers may also feel reticent in providing honest constructive feedback to peers given prior, or anticipated future, interactions and relationships.

A number of potential biases may influence the success of any POT process as outlined by Berk et al. (2004) Biases that particularly afflict peer ratings include incompetence bias (tendency to assign high ratings because of a lack of competence and/or confidence in rating teaching behaviours), buddy bias (a degree of acquaintance / familiarity with one's peer can inflate peer ratings), and back-scratching bias (observer gives higher ratings to their peer on the assumption that he or she will then receive high ratings in return). Observer training, as previously mentioned, is crucial in addressing and mitigating the potential for these biases to arise.

Conclusions

Peer observation of teaching is now a well-established and accepted method of providing meaningful data for teaching improvement that supplements the traditional single source of student evaluation. The general higher education literature is rich with opinion and studies describing a variety of POT schemes, whilst medical education has only more recently witnessed a surge in the implementation of POT schemes for clinical educators. However, faculties need to be aware of the unique differences and challenges that clinical teaching poses and how these may affect peer observation. Furthermore, faculty must also endeavour to implement POT schemes as a formative collaborative method that allows improvement of teaching skills through reflective practice and avoid any temptations to incorporate summative components which can create additional anxieties around scrutiny and criticism. With appropriate observer training and clear explanations to participants of the scheme's formative nature occurring prior to any implementation, faculty can help ensure that all parties fully engage with and mutually benefit from this powerful professional developmental tool.

Notes on Contributors

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