RESEARCH ARTICLE

A Peer Observation of Teaching Process for Faculty who Teach Online

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Peer observation of teaching (POT) is a process used to assist faculty who want to improve teaching. Barriers including time, ambiguity of review processes, and unqualified reviewers can hinder participation in POT activities. To address these issues a POT process that incorporated recognized standards, communicated the process, trained reviewers, and limited observation times was implemented for online faculty. Results indicated the quantity of changes made to observed courses were nearly double those of unobserved courses, and observed faculty made 29% more updates than unobserved peer counterparts. Observed courses experienced a larger percentage of substantial changes (35%) than unobserved courses (10%), and substantial changes made by observed faculty (37%) were higher than unobserved faculty (7%). Reviewers reported that performing observations was an invaluable experience, and recommendations for future policies suggest the implementation of POT processes that address time, ambiguity, and training issues to encourage substantial online course updates.

Keywords: POT, peer review, formative, online teaching

Higher education institutions have long embraced the practice of incorporating peer reviews to enhance faculty performance (Pagani, 2002). More specifically, the peer review of teaching (PRT) has been promoted as an effective mechanism for the overall improvement of teaching (Chism, 2007a; Yiend, Weller, & Kinchin, 2014), and is required by many institutions (Lomas & Kinchin, 2006; Murray & Grant, 1998). However, as online course offerings increase, it is less clear how to effectively and efficiently review faculty who instruct online (Swinglehsurst, Russell, & Greenhalgh, 2008), particularly with regard to the peer observation of teaching (POT). Additional issues that institutions face as they attempt to incorporate PRT and POT processes include a lack of faculty time, absence or ambiguity of accepted standards, and concern for reviewer qualifications (Chism, 2007b). This article addresses these issues by providing a brief background on peer review and observations of teaching, followed by the description and testing of an online course POT process, and concluding with the results of implementation and implications for future policies concerning online peer teaching observations.

BACKGROUND ON PRT AND POT

Peer review of teaching is multifaceted and most commonly includes examination of curriculum design, observations of teaching, student assessment, consultation with teaching experts, and individual self-reflection (Hatzipanagos & Lygo-Baker, 2006; McNaught, 2003; Smith, 2014). The primary goal of most PRT processes is to improve the teaching practices of those who participate (Thomas et al., 2014), and researchers suggest that the purpose of a review is critical to its effectiveness. Gosling (2014) identifies three types of reviews (evaluative, developmental, and collaborative), and asserts that collaborative reviews are the most effective because they are the most collegial and least threatening of the three options. Likewise, Swinglehurst et al. (2008) suggest that peer reviews that are focused on an evaluative outcome can cause tension and undermine the benefits of a peer review process. They and others (Arreola, 2007; Bernstein, Jonson, & Smith, 2000; Blackmore, 2005) advocate for a formative process that fosters constructive feedback and reflective practices associated with effective teaching. An area within the PRT process in which this type of formative constructive feedback can be readily provided is during teaching observations.

Peer Observation of Teaching

A core element of the PRT process is peer observation of teaching, which Kinchin (2005) describes as, "an intentional process of observation in which a university teacher sits in on a teaching session of a colleague with the express intention of offering feedback as a 'critical friend'" (p. 2). According to Blackmore (2005), the POT process has the primary aim of inciting positive changes in teaching practices of those being observed. However, Martin and Double (1998) assert that POT activities are beneficial to both the observer and the observed because the act of observing as well as being observed provides insight into personal practice. Similarly, Cosh (1998) and Fullerton (1999) tout the dual benefits of POT by demonstrating that both the observer and the observed are able to reflect upon and improve their teaching as a result of the peer review experience.

While POT is a critical component of an overall PRT process (Thomas et al., 2014), Gosling (2005) acknowledges that the traditional observational process in which a reviewer visits a classroom while a faculty member teaches is not appropriate when observing online teaching. Instead, Gosling (2005) advocates for observation of the designed learning tasks within an online course as opposed to faculty performance, which is typically the focus of face-to-face observations. Swinglehurst et al. (2008) utilize this approach and, as suggested by Gosling (2005), focus on the observation of instructional methods and materials used within an online course to effectively perform an online POT. While their study demonstrates that a POT process can be used with online courses, they also identify issues such as clarity, time, and trust as potential barriers to be addressed.

Barriers to PRT and POT

Despite the potential benefits of PRT and POT processes, faculty are hesitant to participate in these activities (Chism, 2007b; Iqbal, 2013). Researchers identify time, ambiguity over standards and processes, and concerns about reviewer qualifications as key barriers to the implementation of effective PRT and POT practices (Chism, 2007b; Smith, 2014; Swinglehurst et al., 2008), with time serving as the largest impediment.

Time.   Hutchings (1996) indicates that both the reviewer and reviewee are impacted by time constraints. In addition to normal activities, faculty members are expected to take on extra roles as reviewers and reviewees. This can entail hours of reviewer training on top of the time it takes to perform and document the reviews; for reviewees, it can take an extensive amount of time to implement the suggestions that are derived from a thorough review (Thomas et al., 2014). Because PRT and POT activities are often not considered in promotion and tenure decisions (Iqbal, 2013) and faculty workloads infrequently include the performance of these activities, time serves as the major obstacle in the implementation of PRT and POT practices (Kell & Annetts, 2009).

Ambiguity.   In addition to time concerns, ambiguity regarding the process that will be utilized (Thomas et al., 2014) and the standards that will be applied during the review (Keig, 2000) can also be a barrier to PRT and POT participation. Faculty want to know how they will be assessed and be assured that acceptable standards of good teaching assessment are in place. This issue is accentuated in online teaching where faculty recognize that 'good' online teaching requires unique skills, but often struggle to define the components of 'good' online teaching (Swinglehurst et al., 2008). Deciding on a well-defined process and clearly communicating the quality standards that will be used to indicate 'good' online teaching can decrease ambiguities and dampen fears that can hinder faculty participation (Smith, 2014). Additionally, once quality standards are determined, it is crucial to ensure reviewers receive proper training on the provision of feedback related to those standards.

Reviewer qualifications.   Boyer (1990) reports that faculty have concerns about the amount of training provided to peer reviewers, and also question whether other faculty are qualified to evaluate and provide feedback on their teaching. Hanson (1993) reports that teaching feedback from faculty who were subject specialists and non-specialists were equally reliable and valid, and Quinlan and Akerlind (2000) demonstrate that effective cross-disciplinary reviews can occur in PRT and POT. However, the caveat underscoring both of these findings is that reviewers must be appropriately trained in giving and receiving constructive feedback (Lomas & Kinchin, 2006; Thomas et al., 2014). Numerous studies report that faculty participating in PRT and POT consider reviewers to be more competent, accurate, and insightful if they undergo training, and are more satisfied with the review experience afterwards when reviewers have received training (Bell & Mladenovic, 2008; Kohut, Burnap, & Yon, 2007; Shortland, 2010).

Summary and Statement of Purpose

Academic institutions have long-held the practice of using accomplished teaching faculty in PRT and POT activities to observe and assist peers who want to improve teaching. These review practices, when done effectively, lead to the direct incorporation of instructional updates and provide reviewed faculty members a better understanding of how to improve teaching practices. However, as the provision of online courses becomes commonplace, it is unclear how knowledgeable online faculty can be used in the same manner to support peers who wish to improve his or her online teaching. In particular, it is unclear how a key element of the PRT process, POT, can be accomplished in an online environment. According to previous research, a POT process should address several potential barriers including time limitations of faculty, ambiguities concerning standards and processes, and reviewer qualifications, if it is to lead to instructional changes.

The purpose of this study is to describe a new POT process designed to address the aforementioned key concerns, and explore changes in instructional practices that occur after implementation of this process. To determine if the new process is effective in inciting the incorporation of instructional updates, the following research questions are explored: 1) Do the quantity and types of teaching updates made within a POT reviewed courses differ from updates in courses that are not reviewed?; and 2) Do the quantity and types of teaching updates made by faculty who receive a POT review differ from updates made by faculty who are not reviewed? Lastly, to examine the new POT process in relation to time, ambiguity, and reviewer qualification concerns, a debriefing with POT reviewers is performed.

METHODS

To design a POT process for online faculty, the observational focus had to concentrate on course design and assessments, which Thomas et al. (2014) recognized as key elements of online teaching. It also had to include recognized best practices for online teaching, which would serve as guides for the review. Lastly, the process had to limit the POT to a small but representative sample of online teaching, much like the "spot review" of teaching that is obtained when performing a POT in a face-to-face course. Given these parameters, the POT process described below was created.

POT Process

The POT process began with the identification of standards to be applied during observations. Extensive research performed by the nationally recognized Quality Matters[TM] (QM) organization guided this process, and the "Top 21" items identified as "essential" on the QM rubric were deemed appropriate standards for the POT process (MarylandOnline, 2014). The "Top 21" QM items provided the metrics for a spot review of online teaching, and were placed into a worksheet that was shared with reviewers and reviewees. A detailed description of the full process including activities, time frames, and resulting products of the POT was also shared with all participants in advance of reviews. Thus, ambiguity concerns about standards and processes were addressed through the adoption and sharing of standards, and dissemination of process information prior to any observations.

To address time concerns, POT teams consisting of three trained reviewers per online course were formed. Each three-person POT team consisted of two faculty members and one instructional designer, who are described in more detail in the next paragraph. Once a team was assigned to perform a POT, all three team members individually observed 2-4 lessons, the syllabus, and other resource areas within the online course, writing findings on the QM Top 21 worksheet. This process took one hour or less because of the limited number of lessons that were observed. All three team members then came together for no more than an hour to discuss results of the individual observations and make final decisions on the feedback and resources to be provided to the faculty member being observed. The focus was on the provision of constructive feedback that was formative and assistive in nature, not evaluative. The final POT worksheet, complete with constructive feedback and resources, was then provided to the reviewed faculty member. The entire POT process took less than three hours to complete per course observation, which helped alleviate time concerns.

As a measure to ensure faculty were qualified to participate in the POT process, faculty reviewers participated in the Applying the QM Rubric workshop to familiarize themselves with the overall standards, then attended a one-hour in-house training session on

how to perform spot reviews with the twenty-one essential elements. The workshop focused on observation skill training in online course environments and how to provide constructive feedback and helpful resources to faculty peers. Campus instructional designers who hold full QM Reviewer certification also attended the one-hour training session.

Design and Data Gathering

The POT process described above was used by ten review faculty and nine instructional designers to perform observations of ten full-time faculty who teach at least one online course. A total of ten online courses (one per faculty) were included in the POT reviews. To investigate the impacts of the POT process on the courses and teaching practices of reviewees, updates made within their courses were compared to updates made in non-reviewed courses and by non-reviewed faculty.

To address the first research question related to the impact of the POT process on course updates, data were gathered and compared on the quantity and types of course updates made within ten online courses (5 reviewed, 5 not reviewed). Five of the reviewed faculty members taught multiple online courses, which allowed for comparisons of the quantity and types of changes that occurred in the five POT courses versus changes made in five online courses taught by the same faculty members but not part of the POT process.

To address research question two related to faculty impact, the type and quantity of changes made by the remaining five faculty members who participated in the POT process were compared to instructional changes made in online courses taught by four of their faculty peers who did not participate in the POT process. In total, changes within ten POT process online courses and nine online courses that were not part of the POT process were examined. All nineteen courses were scheduled to be taught in the next full semester (fall), and no degree changes or curriculum revisions were occurring that would require substantial course updates or impact data gathering.

To gather data on the quantity and types of course updates that were made, two snapshots of the nineteen online courses were archived by the researchers within the learning management system (LMS). The first snapshot occurred prior to the start of peer observations (spring), and the second snapshot occurred at the beginning of classes in the next full semester (fall). These electronic snapshots allowed the researchers to unobtrusively identify and log every course update that occurred within these online courses in the time between the peer observation period (spring) and the start of the next full semester (fall).

To document and analyze the quantity of course updates that occurred, researchers used LMS data and the course archives to identify every course update that was made between the first and second snapshots. Through this process it was possible to precisely calculate both the total and average updates made per online course. To determine the types of changes made, each identified course update was examined and categorized by researchers as 'routine' or 'substantial'. Routine changes involved course updates that faculty are expected to perform every semester and primarily included course management revisions such as updating assignment due dates, revising the course schedule to reflect new semester dates, making minor syllabus changes, repairing broken resource links, and modifying office hours. Substantial changes involved revisions that required more significant time and mental effort on the part of the faculty member, and included updates to the curriculum, instructional materials, or assessments that altered or added to the course in an instructionally meaningful way. These included changes such as providing or revising course and lesson competencies, creating and adding rubrics to assessments, recording and incorporating instructor videos, and

completely altering the course layout. Once categorization was complete, totals and averages for routine and substantial changes within each course were calculated.

In addition to monitoring course changes, a peer reviewer debriefing meeting occurred after all observations were completed. Data gathered during this meeting allowed the researchers to assess the perceived effectiveness of the POT process from the observer's perspective. All reviewers (ten faculty, nine instructional designers) participated in the debriefing and provided feedback either verbally or on an open-ended paper questionnaire to the following five questions: 1) What worked well during the process? 2) What did not work well during the process? 3) What suggestions do you have to improve the process? 4) What was the best thing about the process? and 5) What was the worst thing about the process?

RESULTS AND DISCUSSION

The purpose of this study was to describe a new online POT process and explore changes in instructional practices that resulted from its implementation. Research questions were examined that addressed the effectiveness of the POT process in instigating course updates, and a debriefing with reviewers occurred to determine if the new process effectively addressed traditional POT barriers of time, ambiguity, and reviewer qualifications.

Concerning the first research question, analysis of the snapshot archives demonstrated the quantity of updates made to courses that underwent the formative review process were nearly double those of courses that were not reviewed. These data demonstrated that faculty averaged almost twice the instructional updates to courses in which they received specific feedback from POT reviewers than for those in which they received no feedback. This finding supported researchers who have suggested that the provision of constructive feedback leads to direct improvements in teaching (Blackmore, 2005; Chism, 2007a; Smith, 2014; Thomas et al., 2014).

However, although the POT process did incite these faculty to make direct changes to the reviewed course, they did not apply the constructive feedback they received to courses that were not reviewed, indicating the absence of overarching instructional changes. Thus, the feedback provided by this POT process alone was not enough to stimulate generalized improvements in teaching practices, which supported the position taken by these same researchers (Blackmore, 2005; Chism, 2007a; Smith, 2014; Thomas et al., 2014) that long-term and sustained changes to teaching practices require a comprehensive PRT that is multifaceted and reflective in nature.

Equally as informative were the results to research question one associated with the type of course updates made. Analyses revealed 35% of the revisions that occurred within the reviewed courses were classified as 'substantial' adjustments; in other words, more than a third of the reviewed course revisions added to the course in an instructionally meaningful way, such as the incorporation of assessment rubrics or inclusion of new instructor videos. Conversely, less than 10% of the revisions that were made to the non-reviewed courses were substantial in nature, meaning more than 90% of the changes that occurred in non-reviewed courses involved nothing more than 'routine' updates such as date changes and schedule revisions. This finding supported the ability of the new POT process to incite positive and meaningful instructional changes, which has been touted by Blackmore (2005) to be the primary purpose of POT. It also demonstrated that the difference in the quantity of updates between reviewed and non-reviewed courses involved more than the mere addition of routine changes. Rather, the additional updates were substantial in nature, which indicated faculty were more willing to dedicate time and make significant updates to courses when specific constructive feedback was provided (Lomas & Kinchin, 2006; Peel, 2005; Shortland, 2010).

This study also investigated the impact of the POT process on faculty who were reviewed versus those who were not in the second research question. Results showed that both the quantity and type of updates were stronger for faculty who underwent the POT process. The POT faculty group averaged 29% more updates than their peer counterparts, and 37% of all participant revisions were substantial in nature as compared to 7% of the revisions made by non-participating faculty. As with the previous finding, this result suggested that the POT process may have provided the feedback and resources needed by faculty to incorporate substantial changes in their online courses; conversely, 93% of all changes made by non-participants were routine in nature. As Kinchin (2005) has indicated, intentional feedback provided by a 'critical friend' is the essence of POT, and results of this study supported the assertion that the provision of course-specific constructive feedback can encourage faculty to participate in the improvement of online teaching in meaningful ways.

In addition to analyzing course update data and answering the aforementioned research questions, the POT process was also examined from the peer reviewer's perspective. A debriefing meeting was held with POT reviewers to ascertain their perceptions of the process, and they uniformly indicated that performing the observations was an invaluable professional development experience. As witnessed in previous studies (Cosh, 1998; Fullerton, 1999; Kohut et al., 2007; Peel, 2005; Shortland, 2010), this group discussed how the training, team collaboration, and actual observation of another's online teaching will serve to inform their future online teaching practices.

When reviewers identified aspects of the process that worked well and provided their perceptions concerning the best thing about the POT process, the most common response was that the reviews were not labor intensive and took less time than expected. This demonstrated that the new POT process addressed time concerns, which Kell and Annetts (2009) identified as the largest obstacle to the implementation of POT processes. Reviewers also confirmed that having a well-defined process and clearly communicating the quality standards was critical to their understanding of the role they played as observers, supporting the work of Keig (2000), Smith (2014), and others who advocate that reduction of ambiguity improves the POT process (Swinglehurst et al., 2008; Thomas et al. 2014). Lastly, peer reviewers stated the training and the placement of reviewers into teams was both informative and comforting. They reported that the training was effective in preparing them to provide "the right kind of feedback," which is a critical skill that reviewers must possess (Lomas & Kinchin, 2006; Thomas et al., 2014). They also suggested that working in teams made them feel more prepared, and they valued the opportunity to interact with and learn from colleagues during the review process.

Responses at the peer reviewer debriefing session also indicated there remains room for improvement in the POT process. Several suggestions emerged that were small and specific in nature, such as the request for additional examples within the training session and scheduling the reviews earlier in the semester. However, the broadest and most requested change was for the POT process worksheet to be converted into a fillable form that contains the most commonly provided feedback in drop-down boxes. This finding supported Smith's (2014) recommendation that templates be provided to streamline documentation for reviewers, and is a suggestion that would further attend to time concerns.

The positive responses regarding time, ambiguity, and qualifications indicated that the new POT process achieved its goal of addressing these previously identified barriers. Additionally, the lack of reviewer criticism for the process during the debriefing and the absence of suggestions for major changes was encouraging. While minor revisions were suggested and will be incorporated into future implementations, the debriefing demonstrated that the overall process was perceived favorably by reviewers.

CONCLUSIONS AND IMPLICATIONS

Based on recommendations from the literature, a formative POT process aimed at supporting faculty who teach online was developed and implemented. Results indicated that the new process adequately addressed the common concerns of time, ambiguity, and qualifications, as reviewers had favorable perceptions and reviewees were positively impacted by participation. However, findings also confirmed that POT is only one piece of the larger PRT process if long-term changes to teaching practices are desired.

Although outcomes of the current study demonstrated the ability of the POT process to incite faculty to make larger quantities and more substantial course updates, those behaviors did not transfer to non-reviewed courses. As suggested in the review of literature, a robust PRT must include an effective POT process, but it should also involve elements such as student assessment, consultation with teaching experts, and individual self-reflection. Thus, while this study demonstrated it is possible for institutions to create effective online POT processes that impact instructional practices within observed courses, findings also suggested they should consider how an online POT fits within a larger PRT process if the overarching goal is to effect long-term changes in the online teaching practices of faculty.

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