

Moving the Discussion Online: Asynchronous Discussion for Clinical Post-Conference in a Baccalaureate Nursing Program

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Abstract

Although post-conference at the end of the clinical day is commonly used for nursing students to reflect on nursing practice, personal and contextual factors can create barriers to student engagement in meaningful discussion. Asynchronous online post-conference has been suggested as a viable alternative but little is known about the suitability of that modality. The purpose of this pilot project, therefore, was to examine asynchronous online discussion as a format for clinical post-conference. The sample consisted of 20 second year baccalaureate nursing students. Data were collected through a questionnaire with Likert-type and open-ended questions about student perceived effectiveness and satisfaction. The data were analyzed using descriptive statistics and conventional content analysis. The students perceived asynchronous online clinical post-conference as effective for their learning and they were satisfied with the modality. Benefits they experienced were *being able to participate when convenient, having time to reflect, having equal opportunity to participate, and being actively engaged in the discussion*. Some students also experienced challenges, namely *trying to figure out what to say and dealing with drawbacks, which were not having face-to-face interaction and needing a lot of time to participate*. Research needs to be carried out to determine effectiveness of online clinical post-conference for learning outcomes.

Keywords: clinical conference; education, nursing; reflection; internet

Introduction

Clinical learning is about developing an understanding of nursing through actual experience and critical reflection is an essential component of clinical learning in nursing (Davis, Taylor, & Casida, 2011). Traditionally nursing educators in undergraduate programs have used the clinical post-conference as a method to facilitate reflection. Clinical post-conference may be defined as a group meeting held at the end of the clinical day, generally in the clinical setting, whereby students have the opportunity to reflect on and discuss clinical experiences and issues that are relevant to their practice, their education, and the nursing profession (Stokes & Kost, 2012). Sharing their experiences and understanding with the guidance of their clinical instructor can enhance insight for all the group members (Bonnell, 2012). However, it can be difficult to get students actively engaged in the discussion. Factors such as fatigue and time restraints at the end of the day and a mismatch between the conference method and student verbal communication skills, personality, or learning style can create barriers to discussion. Needing more time to think about the clinical day and process the clinical experience also might impede student full participation in a clinical conference at the end of the day (VandeVusse & Hanson, 2000). These barriers can lead to a post-conference experience that is less than optimal for reflective learning (Hermann, 2006).

In an effort to meet the needs of the student of today, more and more nursing schools are incorporating online technology into their programs (Myers, Mixer, Wyatt, Paulus, & Lee, 2011). Instructional technology provides for nontraditional approaches to teaching and learning, such as asynchronous online group discussion, which refers to written discussion, among members of a group, on a web-based platform such that there is no face-to-face or real time interaction (Salzer, 2011). Asynchronous discussion forums have been described as excellent supportive and collaborative learning environments (Hermann, 2006) and as providing appealing flexibility for students (Reeves & Reeves, 2008). Although online post-conference has been suggested as a viable alternative to face-to-face post-conference for reflection and discussion (Davis, et al., 2011), little research has been conducted to determine the suitability of that modality.

Therefore, the purpose of this project was to examine asynchronous online discussion as a format for clinical post-conference. The following questions were addressed:

(a) What are baccalaureate nursing students' perceptions of the effectiveness of asynchronous online discussion for their learning?

(b) What is baccalaureate nursing students' satisfaction with asynchronous online discussion?

Literature Review

Only one study was found in which online clinical post-conference was evaluated. In that study, Cooper, Taft, and Thelen (2004) used a sample of 68 senior Bachelor of Science in Nursing students to compare online clinical post-conference (n= 30) with face-to-face clinical post-conference (n=38) on effectiveness in achieving learning objectives and meeting nursing student needs and preferences. Quiz scores and an 11-item clinical conference evaluation tool were used to assess outcomes. Although there was no significant difference in quiz scores

between the two groups, students in the online post-conferences identified convenience, equal opportunity for participation, and increased time for thought and reflection as the major benefits of online discussion. They also identified barriers to learning for the online format, namely, inexperience with technology and an increase in the amount of time required for participation compared to face-to-face conferences.

Several studies have been conducted to examine asynchronous online discussion as an augmentation to learning in other forms of nursing education. Mahoney, Marfurt, daCunha, and Engebretson (2005) evaluated the addition of an online asynchronous discussion module to a classroom based undergraduate psychiatric nursing course. Eighty-seven percent of student respondents indicated that they preferred at least some online learning compared to 13% who preferred a totally traditional approach to learning. Students identified convenience as a strong benefit of online learning and thought that the online discussion fostered better critical thinking than what occurred in traditional classroom learning. Overall, the online discussion was found to be superior in terms of quality and quantity of discussion and to engage more students than classroom discussion. However, the greater level of self-direction required for online learning compared with classroom learning was noted to be a disadvantage by some students.

Similar to Mahoney et al. (2005), Lyons and Evans (2013) introduced asynchronous online discussion into their face-to-face introductory research course for undergraduate nursing students. Students identified being able to learn from each other, being engaged with the course content, and feeling connected to each other as the main benefits of the online discussions. They expressed being frustrated when there was a time delay between peer postings such that they did not receive immediate responses to their postings. However, overall, a majority of the students found the online discussions to be valuable to their learning and they were satisfied with the approach.

Online discussions also have been examined with postgraduate nursing students. Morgan, Rawlinson, and Weaver (2006) evaluated students' experiences of reflecting online during the final module of their post-degree Public Health programme. The findings are consistent with undergraduate students' perceptions of online learning. A majority of the post-graduate students thought that the online reflective activity was valuable and that their online reflections were more extensive than what they had produced in the traditional classroom environment. Students also reported that the flexibility to participate at a time that was convenient for them increased their sense of control over their learning and positively impacted their motivation to learn. Issues noted with the online learning concerned the greater time commitment for reflection and the difficulty experienced by some students with time management and the need to be self-directed.

In another study of post-graduate nursing students, Campbell, Gibson, Hall, Richards, and Callery (2008) examined learning outcomes by comparing assignment marks for online and face-to-face discussions in a web-based research course. In contrast to Cooper et al. (2004) who did not find an effect for quiz grades, Campbell, et al. (2008) found that the marks obtained by the students who participated in online discussions were higher than marks

obtained by students who participated in face-to-face discussion. In addition, the more engaged students were in the online discussions, the higher their grades.

Taken as a whole, the evidence indicates that online discussion is a useful tool in nursing education. However, we know little about online discussion for clinical post-conferences, more specifically. Therefore, this project was designed to contribute further understanding of asynchronous online discussion as a format for clinical post-conference in nursing.

Conceptual Framework for Online Post-Conference

The development and implementation of the online post-conferences for this project were guided by adult education theory and social constructivist theory. Adult education theory has several assumptions about the nature of the adult learner that must be taken into account in order to facilitate effective adult learning, including that adults are self-directed and internally motivated (Knowles, Holton, & Swanson, 2011). They benefit from collaborative and participatory approaches to learning (Murrell, Russell, Hartig, & Care, 2007). Thus, teaching should be student-centered and should promote self-direction and active engagement in learning (Vandever, 2009). The participants in this project were adult learners; therefore, these teaching principles were considered both in selecting the topics and requirements for the discussions and in choosing asynchronous online discussion as the format for post-conference. Asynchronous online discussion allows for flexibility and self-directed and active learning (Halstead & Billings, 2009).

Social constructivist theory is based on the premise that knowledge is created through meaningful interactions with others (Young & Maxwell, 2007). Through social discourse knowledge is analyzed, shaped, and constructed into new knowledge (Philpott & Batty, 2009).

Learners bring their own individual understandings and experiences to the interaction and through their discourse with others are able to construct new understandings. Thus, an integration of personal factors with social factors produces learning (Schunk, 2000). Consistent with social constructivism, online discussion allows for collaborative peer learning through meaningful dialogue (Halstead & Billings, 2012; Young & Maxwell, 2007).

Method

This pilot project was reviewed and approved as a quality assurance project by a university research ethics committee. It took place in a province in western Canada. Given that so little is known about asynchronous online clinical post-conference, a descriptive design was used to explore this approach to teaching and learning.

Sample

The convenience sample consisted of three groups of nursing students who were enrolled in a second year clinical course in a Bachelor of Science in Nursing (BSN) program. Each group had six or seven students for a total of 20 participants. The students ranged in age from 22 to 38 years and a majority (n = 17) were women.

Procedure

The students attended clinical, in either rehabilitation or long-term care settings, for two days a week in a six week clinical course. Two of the clinical groups were led by the same clinical instructor (the first author) and the other group by a different clinical instructor (unaffiliated with the project). For each group, a traditional face-to-face clinical post-conference was held on one day of the respective week and an asynchronous online clinical post-conference was held on the other day. Due to clinical scheduling, traditional and online conferences were held for five weeks with one group of students and four weeks with the other two groups of students.

The face-to-face post-conferences were unstructured reflections about the clinical day and clinical practice and were guided by the group's clinical instructor. The online post-conferences were set up as group discussions through the University's secure web-based learning management system. There were three separate discussion groups to coincide with the three clinical groups. Each discussion group was accessible only by students in that group. Security measures were in place to prevent unauthorized access to the group discussions. Although each clinical instructor facilitated the online discussion for her own group(s), the topics, format, and requirements for the discussions were developed by the first author and were the same for all three groups of students, with one group having one extra topic for the fifth conference. Each week the clinical instructor posted a topic for discussion and each week students were expected to make one original contribution and provide at least two responses to other students' comments. Examples of clinical setting-specific topics for discussion included understanding the experience of dementia, supporting older people in aging, and understanding life transition in the context of rehabilitation. Other topics included having the students examine their personal expectations for their clinical performance and having them examine their empathetic responsiveness in any particular client situation they had encountered. The students were informed of the importance of protecting client confidentiality and were requested not to divulge any possibly identifying information.

Data Collection

Data were gathered through the Online Post-Conference Questionnaire. The self-administered Questionnaire consists of 20 items rated on a 5-point Likert scale, with responses ranging from strongly disagree (rated as 1) to strongly agree (rated as 5), and 4 open-ended questions. The questionnaire was developed by the authors. Both authors have extensive experience in clinical teaching and conducting clinical post-conferences. The second author also has extensive experience in developing and facilitating online discussion for theory and seminar courses. Half of the 20 Likert-type items addressed student perceived effectiveness for

learning (e.g., *The online discussion challenged me to think deeply about the subject matter*, *The online format encouraged students to be active participants in the discussion*) and half addressed student satisfaction with the approach (e.g., *I would recommend this online discussion format to other students, I felt comfortable discussing my opinion online*). The internal consistency reliability for the 20 items was demonstrated by an alpha coefficient of 0.80 in this sample. The open-ended questions were developed so students could elaborate on their experience with the online discussions. They were asked to comment on why the online format was effective or not effective for their learning, what they found beneficial, what they found challenging, and what worked well for them and what needed improvement. All students responded to the open-ended questions. The questionnaires, which were completed anonymously at the end of the clinical course, were handled by an intermediary

Data Analysis

The quantitative data from the 20 Likert-type items were analyzed descriptively for frequencies and means. The qualitative data from the open-ended questions were analyzed independently by both authors using conventional content analysis as described by Hsieh and Shannon (1995). Responses to the questions were read and reread numerous times to derive descriptive codes. The codes were then categorized on the basis of similarity to form themes. Agreement was reached between the two authors on the final themes.

Results

The overall mean score of 4.51 ($SD = .73$) and mean subscores of 4.38 ($SD = .74$) and 4.61 ($SD = .70$) for effectiveness and satisfaction, respectively, indicate that the students perceived asynchronous online clinical post-conference as effective for their learning and they were satisfied with the modality. These findings are illustrated by the students' responses to specific items on the questionnaire. For instance, with respect to effectiveness, all the students agreed or strongly agreed that the online discussion forum contributed to their learning. With respect to satisfaction, all students agreed or strongly agreed that they would recommend the online discussion format to other students.

Further light is shed on the findings with student responses to specific questions about face-to-face post-conference vis-à-vis the online format. Only one student (5%) indicated a clear preference for face-to-face clinical post-conference over online post-conference. By rejecting face-to-face clinical post-conference as their preference, eight students (40%) implied that they preferred online post-conference. However, the remaining 10 students (50%) responded neutrally, suggesting that they did not have a preference for one format over the other – that one approach to post-conference was as satisfactory as the other. Interestingly, and consistent with the lack of preference by some students for one method over the other, all but one student (95%) agreed or strongly agreed that the mix of face-to-face and online post-conference helped accommodate individual rates and styles of learning.

The qualitative data fit two main categories: benefits and challenges. Benefits were prominent in the students' comments and were categorized into four themes:

1. *Being able to participate when "convenient"*. Students thought that the asynchronous online post-conference was convenient as it allowed them the opportunity to participate when it worked best for them. As one student noted, "It worked well to be able to do it when it was convenient for us." Similarly, another student commented, "You could do it when you had the time because as a student time is so limited so I liked how it worked for everyone."

2. *Having time to "reflect"*. Many of the students found that the asynchronous online format gave them extra time for reflection. "I liked being able to sit down and consider other people's opinions without having to immediately respond." They had the time they needed to think and truly engage with the topics before sharing their thoughts. "I liked having time to think about and write a response. Sometimes I can't think of what I would like to say in face-to-face post-conference so this really benefited me."

3. *Having "equal opportunity" to participate*. Students thought that the online discussion forum offered an equal opportunity for everyone to participate. All students were required to participate in the online post-conference; thus, all had an opportunity to share their thoughts. "It gave everyone a voice and made it feel like everyone was on the same level."

4. *Being actively engaged in the discussion*. Students found that the online forum allowed for more active participation, which led to better discussion than what they experienced in the face-to-face post-conference. In the online post-conference students were able to engage with the discussion topics and with each other in a way that they found more difficult to do in face-to-face post-conference because of personal and format restraints. For example, one student who had limited language facility remarked, "Because English is a second language for me, sometimes I find it difficult to be effective in face-to-face conferences, so I felt more present during the online one." Another student commented that she liked the online format and found that "There was a lot more discussion that happened. It was easier to get your opinion out there. There was no waiting for someone else to talk and then you lose your train of thought or chance to add what you wanted."

Although all students experienced benefits from the asynchronous online post-conference format, some also experienced challenges, which are categorized into two themes:

1. *"Trying to figure out what to say"*. All students were expected to make contributions to the online discussions and finding appropriate or new things to say posed a challenge for some. "Trying to figure out what to say if I didn't have much to say about the topic [was difficult], and also responding to others and trying to think of how I could give them feedback" ... "without regurgitating what [others had] said".

2. *Dealing with drawbacks*. A few students identified drawbacks to online discussion, in particular, *not having face-to-face interaction*, and *needing a lot of time to participate*. Not having face-to-face interaction posed difficulty because of lack of verbal and non verbal cues in online discussion. "I enjoy interacting with others face-to-face so that I can see facial

expressions. With online discussion I was not able to see people express their emotions in person so that was challenging.” Further, online discussions require a lot of time because of the need to read others’ comments and contribute through writing. “I think too hard before I write and it takes forever to get my thoughts down.”

Discussion

The asynchronous clinical post-conferences worked well as guided by adult education theory and social constructivist theory. The students rated the post-conference discussions as effective for their learning and they were satisfied with the online modality. These findings are consistent with previous research in which students indicated that online discussions enhanced their learning and were valuable (Lyons & Evans, 2013; Mahoney et al., 2005; Morgan et al., 2006). All of the students thought that having online post-conference contributed to their learning and reported that they would recommend the online format to other students. This indicates that even the student who preferred face-to-face post-conference and those who did not have a preference for one form of clinical post-conference over the other still found online post-conference valuable for their learning. However, even though the students responses were favourable toward the online format, almost all thought that a mix of in-person and online formats support individual rates and styles of learning, suggesting that a combination of approaches might best facilitate learning. Indeed, that view is supported by others who contend that the use of blended online and in-person educational methods may be more effective for learning than any single delivery method (Lowenstein, 2011; Singh, 2003).

The students identified several benefits of asynchronous online clinical post-conference that lend support to their perception of its effectiveness for their learning and their satisfaction with it. Their view that asynchronous online post-conference was *convenient*, provided them with extra *time to reflect* on the discussion topics before having to share their thoughts, and afforded them *equal opportunity to participate* in discussion is consistent with what other undergraduate nursing students experienced when they participated in online clinical post-conference (Cooper et al., 2004). It seems a fair assumption that such attributes of an online approach to education would facilitate engagement in learning. Indeed, the students in this project found that the online forum promoted their *active engagement in discussion*, which led to better discussion than what they had experienced in face-to-face post-conferences. Similarly, nursing students in other studies have reported that more engagement and better reflection is achieved in the online environment than in the traditional classroom environment (Mahoney et al., 2005; Morgan et al., 2006). Those views are supported by the experiences of faculty members who conducted online discussions with nursing students and who thought that online discussion promoted the students’ reflective dialogue about clinical practice (Moran, 2005) and promoted deeper and more meaningful discussion than did traditional post-conference discussions (Hermann, 2006). It is a basic tenet of pedagogies and androgogies that active engagement of learners fosters critical thinking and construction of knowledge (Knowles et al., 2011; Young & Maxwell, 2007).

In addition to benefits, challenges with online learning also have been identified. In this project, although the students thought there was engagement in the discussion topics, some students had trouble *figuring out what to say* in terms of finding appropriate or new things to discuss. Online discussions are intended to promote reflection, critical thought, and problem solving through group participation (Davis et al., 2011; Murrell et al., 2007). However, as the quality of the students' actual discussion postings was not evaluated for this project, it is not known whether the postings by the students who were challenged to find something to say were affected. Other challenges encountered by students involved *not having face-to-face interaction* in online discussions and *needing a lot of time to participate* in online discussions. Lack of face-to-face interaction is a well recognized challenge in online learning (Armstrong, 2010; Salzer, 2011). Verbal and physical nonverbal cues are important features of communication and when these are missing, such as in the case of online discussion, it may be difficult for participants to gather the meaning that is being conveyed and know how to respond. Without verbal and physical nonverbal cues, the language used by participants needs to be more formal and the writing needs to be more descriptive and elaborate for the intended meaning to be accurately conveyed (Armstrong, 2010). This can contribute to needing extra time to participate in online discussions, which can be exacerbated for students who prefer communicating orally as opposed to in writing or who have difficulty making their thoughts known in writing. That online discussions are time-consuming is a drawback identified by students in other studies as well (Cooper et al., 2004; Morgan et al., 2006) and might help explain why so many students in this project thought that a mix of online and face-to-face post-conferences accommodates individual rates and styles of learning.

Implications for Nursing Education and Research

The findings of this project indicate that based on student experiences, online post-conference is a suitable alternative to face-to-face post-conference. Although the students identified benefits to online clinical post-conference that might help mitigate barriers to effective reflection encountered in traditional face-to-face post-conferences, some students also identified challenges to online clinical post-conference that could potentially negatively impact the quality of online discussions. However, because of methodological limitations of this project, more research needs to be carried out to provide support for the findings.

The findings are based on a small, convenience sample of nursing students from one baccalaureate nursing program and the evaluation questionnaire was newly developed for this project. Further, the findings are based on student perceptions. Little research has been done to evaluate the effectiveness of online discussion for learning outcomes. Therefore research needs to be carried out to determine the impact of online clinical post-conference on learning outcomes. It also is important to know whether, to what extent, and in what form a blended approach of face-to-face clinical post-conference and asynchronous online post-conference affects learning outcomes.

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