

Re-Designing an Undergraduate Capstone Course: Connecting through Online Discussion

By:

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Abstract

An online community was created to support a cohort of undergraduate nursing students in their final capstone course positioned in different cities across the country. It was developed to facilitate collaborative learning relationships amongst these undergraduate nursing students in the final term of their program. This was a re-design of the regular face-to-face meeting course component for students in their final preceptored practice course, working variable hours in different time zones across the country. Students developed supportive, genuine, caring connections with each other online, giving and receiving encouragement and helpful feedback. They participated online in discussions and inquiry, sharing and thinking through practice experiences. With physical distance a challenge to interaction between students and instructor, it was important that the online environment be created to be conducive and open to developing positive learning relationships. Feedback from student evaluations identified the importance of a supportive environment and instructor facilitation which promoted independent, meaningful learning for students placed in different locations all over the country.

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This paper will examine the use of the online discussion forum to support student learning and develop meaningful connections between instructor and students across physical distance. An online community was established with undergraduate nursing students in the final term of their nursing program, situated in placements across the country. The introduction of the online discussion forum was piloted in two different terms to replace the face-to-face weekly meeting component of this final course. The majority of the students in this capstone course are usually placed in locations around the city, and so, are able to attend in-person meetings. Course requirements have the students engage in practice with a preceptor, undertaking the working schedule of the professional practitioner, and attend weekly meetings for discussion and connection with peers and instructor on the university campus. For the students in settings across the country, the face-to-face meetings are not possible, and so, it was important to consider a means by which they would be able to interact and connect with peers and instructor for support and continued development of their learning.

The use of the online discussion forum was therefore implemented to enable asynchronous meetings for students preceptored in different time zones across the country working variable shift hours. This was a re-design to fulfil the required weekly meeting component of the course. The incorporation of online discussions was a new learning experience for these students as their program had encompassed only face-to-face instruction. The newness of this form of learning, and the physical distance between students and instructor, highlighted the importance of the instructor in establishing and sustaining a quality learning environment online. The instructor, as such, needed to be instrumental in creating and maintaining an environment that would be supportive and conducive to student learning. The online forum was

thus established to facilitate connection, inquiry, and collaborative learning purposed to develop critical thinking and reflection to support these students in their practice placements. Portraying certain attributes and capabilities as the instructor were significant to the quality of the online environment, and consequently, to the learning achieved. Approachability, respect, integrity, and engagement displayed online by the instructor were important to encourage students to actively participate and collaborate in their learning. Instructor knowledge of practice was necessary to facilitate student critical thinking as they developed their capability and competency to function in professional practice roles.

Student feedback from the instructor evaluations was attained at the end of the 13-week term. The students identified qualities they considered important for the instructor to demonstrate to facilitate student learning through the online environment. Attaining student perspective of their experience using the online discussion forums is helpful, and can inform educators on strategies to better support and facilitate their connection, collaboration, and learning.

Background

Technology has become an extensive presence in 21st century society—in employment, in healthcare, in professional practice, and in education. Its prevalence in the workplace and in higher education promotes the value of including technology appropriately in educational environments. Educators have emphasized the need for integration of technology into education to support and enhance learning, reflecting its importance for institutions, educators and graduating professionals (Kim, Kim, Lee, Spector, & DeMeester, 2013; Lavin, Korte, & Davies, 2010; Oh & Reeves, 2014). Technology has the potential to be used to support the creation of online collaborative learning space, for discussion and inquiry, to overcome the constraints of time and space. An online discussion forum can engage students in written communication to

increase opportunity for inquiry and greater thinking, and so, affording students time to absorb and reflect on information, contributing to more profound learning and critical thinking (Garrison, 2011; Lai, 2012; Lee & Baek, 2012).

Re-Designing a Course Component

During the final term of our undergraduate nursing program, students are placed in final practicums with preceptors, learning one-on-one with a practicing professional. An on-campus seminar is included as a course component for face-to-face interaction with peers and faculty instructors. One group of students, the “out-of-town” group, comprising 11-13 students are placed in different locations across the country—they are not in the same city as the institution and faculty instructor. To accommodate this group of students situated in various cities and provinces across the country, this face-to-face component was re-designed to incorporate an online discussion forum as the environment for learning and interaction amongst the students and their faculty instructor.

The Community of Inquiry Framework

The Community of Inquiry (CoI) has been noted to be a framework for online learners to gain understanding, and develop individual learning, reflection and critical thinking, through collaborative inquiry and discussion (Garrison, 2013). It was initially developed to facilitate the innovation of teaching and learning in higher education, occurring with technology integration to establish learning environments, such as online discussion forums (Garrison, 2011). The CoI was considered a suitable framework on which to establish the online discussion forum for this undergraduate course component, as it aims for community, collaboration, constructivism, inquiry, and metacognition, all significant for student connection and learning.

The framework encompasses three interdependent identities portrayed online: *cognitive presence*, *teaching presence*, and *social presence*. The instructor for this undergraduate course undertook a primary role in “being” these three presences online to build and sustain the learning environment. As outlined in the framework, *cognitive presence* recognizes the attainment of knowledge and understanding, and *teaching presence* facilitates and focuses the inquiry. Both presences are therefore supported and developed through the interpersonal exchanges initiated by *social presence*. *Cognitive presence* is characterized by demonstration of critical thinking through meaningful inquiry, discussion, and reflection during interactions in the learning environment; student discussion postings in the online forum (Garrison, 2011; Hosler & Arend, 2013; Richardson, Sadaf, & Ertmer, 2013).

The Three Presences of the Instructor

To provide the students with quality support and learning, the instructor aimed to cultivate the *social*, *teaching*, and *cognitive presences* as identified in the CoI (Garrison, 2011). In so doing, a climate of trust and openness was developed, and the online setting created to be conducive to student inquiry, discussion, thinking, and reflection, helping them integrate theory and practice. Pollard, Minor, and Swanson (2014) have noted the influence of the quality of the instructor *social presence* on student engagement and participation, and merit of learning. As such, the students were prepared for connecting, learning, and thinking through facilitation and modeling by the instructor to be the predominant expression of *social*, *teaching*, and *cognitive presences* within the online learning community. By portraying *social presence*, the instructor is able to cultivate the online community to develop and sustain student group cohesion and functioning. The persona projected online aimed to reflect a tone of welcome and

approachability through written communication, notably important to establishing and sustaining the CoI, and to ensure engagement and active student participation.

Social presence was demonstrated by:

- Developing and sustaining a safe and supportive learning environment to initiate group cohesion and functioning
- Initiating communication and welcoming students to the course, ensuring tone of communication to be warm, friendly, and approachable
- Projecting enthusiasm and engaging them in their learning and interpersonal exchanges, demonstrating respect, understanding, sensitivity and valuing for student perspectives
- Being easily accessible to students, being prompt and responsive to their questions and needs

Identified in the framework, *teaching presence* embodies the design and implementation of educational strategies, establishing and facilitating the learning environment to attain meaningful construction of knowledge. *Teaching presence* has been identified as most important in developing the *cognitive presence* to facilitate critical thinking (Garrison, Cleveland-Innes, & Fung, 2010; Hosler & Arend, 2013). A variety of strategies have been recommended for *teaching presence* to incorporate when facilitating student learning to develop inquiry and critical thinking, such as coaching, scaffolding, and questioning (Ertmer, Sadaf & Ertmer, 2011; Garrison, 2011; Hosler & Arend, 2013; Rienties, Giesbers, Tempelaar, & Lygo-Baker, 2013; Stein & Wanstreet, 2013).

As an educational approach, coaching has been used to facilitate critical thinking development in online discussion forums (Stein and Wanstreet, 2013). The instructor monitored the discussion forums, reviewing student postings, and providing encouragement, guidance, and

feedback as warranted to foster their thinking and reflection (Murphy, Mahoney, Chen, Mendoza-Diaz & Yang, 2005). Having the knowledge of a practicing professional in the field of study enabled capability to support students to continually improve their thinking and knowledge through our discussions. As such, coaching involved motivating, monitoring, and advancing student thinking, inquiry, and reflection through written communication within the online discussion forums (Murphy et al., 2005; Stein & Wanstreet, 2013).

Hosler and Arend (2013) recommend various instructional strategies for use within online discussion forums, emphasizing appropriate questioning, and proposing a scaffolding approach to facilitate student deliberation and encourage them to critically contemplate their decisions. The instructor would first exemplify and demonstrate the questioning helpful to the learning situation; the instructor would present comments and questions to further their thinking in response to their discussion postings. Following, the students were to then respond to each other and the instructor, as noted in the posting guidelines generated for this course. They were encouraged to comment and inquire in response to each other's postings, and to self-inquire and reflect as they reviewed the online communication.

Richardson et al. (2013) similarly promote questioning, identifying the potential of certain types of questions to stimulate critical thinking. They demonstrate the significance that the types of question prompts used in discussion can have in attaining the desired level of thinking in student responses. Bloom's revised taxonomy of the cognitive domain (Krathwohl, 2002) has been identified as a means of leveling to develop questions. The position is that if the questions asked reflect the higher levels of thinking, they can engender this higher level from the learners (Ertmer et al., 2011; Kim, Patel, Uchizono, & Beck, 2012). To facilitate deeper learning beyond the first level of remembering, the questions generated in response to the postings, aimed

for the higher levels of understanding, applying, analyzing, evaluating, and creating of the taxonomy (Krathwohl, 2002). The questions used were to encourage students to generate explanations, propose ideas, evaluate and critique evidence, and explain reasoning and decision-making. The questions and comments invited the students to develop discernment, consider all information available, the particular situation/context, and arrive at an appropriate, thought through response.

Teaching presence was therefore expressed through:

- Providing guidelines to discussion postings, and developing discussion topics aimed to facilitate deep, meaningful learning
- Facilitating the online discussions, using question prompts and responses to further thinking, inquiry, discussion, and reflection to enable deeper understanding and critical thinking
- Encouraging participation by all students

In striving to develop *cognitive presence*, an inquiry approach undertaken by *teaching presence* using appropriate questioning at suitable periods during discussion were valuable in assessing, encouraging, and evaluating learner comprehension and knowledge, and in stimulating critical thinking (Hosler & Arend, 2013; Ku, Ho, Hau, & Lai, 2014; Richardson et al., 2013; Tofade, Eisner, & Haines, 2013).

Cognitive presence was communicated through:

- Sharing professional practice knowledge and real-life practice examples, to help students connect theory and practice and consolidate learning
- Encouraging student development of self-inquiry and reflection to develop own practice, with integration of new learning into nursing practice

- Providing domain-specific knowledge to guide and develop student understanding towards attaining critical thinking

To support student learning and development of their nursing practice during their preceptorship “out-of-town”, the online forum encompassed questioning using coaching and scaffolding as a means to facilitate inquiry, discussion, and reflection. Discussion topics were developed with the goal to encourage student self-inquiry, stimulate thinking, promote sharing of experiences and perspectives, and foster collaboration in their learning. Guidelines to postings were provided to ensure respectful, insightful, and comprehensive discussions.

In facilitating the online forum, the instructor provides domain-specific knowledge to guide and advance student understanding and critical thinking (Kupczynski, Ice, Wiesenmayer, & McCluskey, 2010). Using coaching involved instructor observation of student demonstration of thinking during their participation online, and responding with comments, prompts, and questions to encourage their thinking and further their reflection and understanding of nursing practice. Scaffolding entailed instructor modeling of inquiry and critical thinking in the online forum to stimulate discussion and further reflection, and encourage students to develop their own self-inquiry and contemplation. Together, these strategies supported student development of their own capabilities to question, reflect, and think, strengthening capabilities for future professional practice.

Anecdotally, the instructor noted the student postings to be impressive, demonstrating their contemplation and thinking of their experiences to develop their practice. Their diligence was admirable, and they would review every member’s postings and respond as appropriate. They would respond to instructor and peer comments revealing their discernment and reflection, encourage each other, share their perspectives, and collaborate in their learning. The students

would share their diverse experiences from their different settings of practice, raise ethical dilemmas they were facing, and include relevant evidence researched to inform practice. Their postings were rich, carefully deliberated, and revealed insight and awareness into professional practice.

Results from Instructor Evaluations

The trial of the online forum was implemented in two different terms with two different cohorts of “out-of-town” students: Group A (n=11 students) and Group B (n=13 students). The evaluation feedback from the students was an opportunity to learn from the students what was helpful to them. The evaluation included an open-ended question for students to share any feedback they deemed important in their own words.

Limitations

As a new experience of learning for the students in the two different terms (n=11 and n=13), they did note appreciation for the use of the online discussions as a means to support them and their learning. A limiting factor to the results is the small number of students in the groups which also constrained the number of students completing the evaluation. With Group A, 82% (9 of 11) students completed the course evaluation for one term. With Group B for the next term, 38% (5 of 13) students completed the evaluation.

Student Perspective

Responding to the open-ended question, students shared attributes and capabilities they considered important for an instructor to have to support them and their learning through the online environment. The following excerpts were gathered from the student feedback and articulate what they deem important for instructors to demonstrate:

- “Created a very positive learning environment and promoted and inspired independent learning . . . able to support students from all over the country in a meaningful way.”
- “support. . . responses were always supportive, insightful and positive.”
- “approachable and easy to reach instructor . . . respectful and flexible approach was very encouraging and motivated me. . . . be supportive and to answer questions.”
- “very knowledgeable. . . very supportive and encouraging”
- “readily available and involved in our group discussions, questioning us and always making us look at the bigger picture . . . very personable . . .”
- “extremely approachable . . . knowledgeable and shared her knowledge with us. . . supportive and provided . . . respectful feedback.”

The students identified being supportive and approachable as important attributes for the instructor to demonstrate. Being respectful, encouraging, available, involved, and knowledgeable were noted as beneficial to student learning.

The students appreciated that questions and responses to encourage deeper, more comprehensive thinking on discussion topics was helpful. They valued the incorporation of practical discipline knowledge to support their developing understanding of professional practice and thinking. The students commented on the significance of the positive learning environment and clarity of communication to their development, emphasizing instructor approachability and presence in the online environment.

Summary

The inclusion of the online discussion forum for this course trialed a re-design of the face-to-face meeting component. The student feedback was positive about its use and their written postings did demonstrate depth in their discussions indicating meaningful inquiry,

thinking, and reflection. From the students' feedback, the presence of the instructor and the characteristics portrayed online were important to supporting the online forum and the quality of the discussions transpiring. In creating and sustaining a supportive online learning environment, the instructor needs to be encouraging and promote active student participation in the discussions. The instructor facilitates student learning and development of critical thinking through the use of questions and prompts aimed at higher levels of thinking in the online discussions. By exemplifying the building of supportive connections with the students, the instructor models and inspires student connections and the building of meaningful relationships with each other in the online community.

Student perspective has the potential to inform educators on developing instructor qualities helpful to engaging and inspiring student participation in their learning. While this course was specifically aligned with the nursing program, online discussions when supported with quality facilitation and encouragement for learning, has capacity to connect instructors and students, develop collaborative learning, and foster much-needed critical thinking. With the availability of technology in education, establishing well-facilitated online discussion environments for student learning has potential to overcome physical distance as in this course. Responding to student feedback can lead to quality improvement of courses to incorporate changes and developments in strategies to benefit their learning.

While this case involved a specific discipline and two trials with small numbers of students, it can provide a basis to further develop instructional practice, and be a reminder that cultivating quality online presence is important to student learning. Research with additional groups of learners, different instructors, and different disciplines would better inform on useful strategies across various programs and courses of study. Further examination of the role of the

instructor in the online environment would be helpful for developing faculty new to this form of instruction, and to engaging students in adopting diverse means of teaching and learning.

Conclusion

With the advent of technology use in education, there is increased opportunity for teaching and learning to occur outside of traditional face-to-face classroom settings. Online discussions can provide a valuable alternative to in-person seminars, with potential to foster deeper student thinking, develop self-inquiry, and meaningful reflection; opportunity to achieve collaboration and peer support in learning. The asynchronous nature of the online forum enables students to participate as able when faced with time-constrained schedules.

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