

# Establishing guidelines for teaching assistants in an online accelerated RN-BSN program

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**Abstract.** Effectively using teaching assistants is one strategy that can enhance engagement in a Community of Inquiry. This pilot study aimed to determine: 1) if standardized guidelines for teaching assistants improved student perceptions of the Community of Inquiry and 2) faculty satisfaction and intent to use the guidelines after study completion. A two-phase approach using the Community of Inquiry survey and open-ended questions assessed student perceptions of online learning and teaching assistant performance. Phase 1 data were used to develop teaching assistant guidelines. The guidelines were implemented in phase 2, and the survey was repeated. Faculty perceptions of the guidelines were ascertained through a separate survey. Descriptive and bivariate statistics measured quantitative data. Narrative analysis and NVivo software explored open-ended items. Students surveyed in Phase 1 reported positive perceptions of the Community of Inquiry on a 5-point Likert Scale (with 1 indicating strongly agree and 2 indicating agree). Phase 2 revealed that students maintained positive perceptions of the Community of Inquiry, however, they were less positive than Phase 1. T-tests indicated no improvement in student perceptions after guideline implementation. Student concerns regarding the teaching assistant's performance were consistent in both phases. The faculty found guidelines helpful and intended to use them in the future. Student perceptions of Community of Inquiry in courses utilizing guidelines were less positive than students taking classes without guidelines. Multifactorial issues, mainly COVID-19, impacted survey participation, engagement, and implementation of guidelines. Despite this, findings led faculty to determine best practices for teaching assistants in accelerated online courses.

**Keywords:** Teaching assistants, online learning, community of inquiry, guidelines.

## INTRODUCTION

There are 777 programs in the United States that offer the Registered Nurse to Bachelor of Science in Nursing (RN-BSN) degree, with more than 600 of these offering the degree in an online format (AACN, 2019). RN-BSN programs focus on teaching strategies in the online learning environment (OLE) that develop knowledge, skills and attitudes to assist nurses in providing quality care (QSEN, 2019). Technology, lack of interaction with faculty and peers, group work, and personal issues were all described as challenges and barriers in the OLE (Scott

and Turrise, 2021). One way to overcome these challenges is to create a community of inquiry (Col) that promotes learning (Armellini and Stefani, 2015). Student perceptions of a Col are influenced by feedback originating from faculty and teaching assistants (TAs) (Robertson *et al.*, 2021). Improving online learning effectiveness through the development of a Col can serve as an instructional approach, and can influence the success of the learning experience (Szeto, 2015).

The Col framework is a method of critical thinking and

practical inquiry that includes the dimensions of teaching presence (TP), social presence (SP), and cognitive presence (CP) (Garrison *et al.*, 2000). A primary goal of the Col is to create an environment where successful learning can occur (Hayes *et al.*, 2015). CP is defined as the extent to which students can construct and confirm meaning through sustained reflection and discourse. While CP relates to obtaining meaning through interaction within the community, SP and TP are learners' interactions with classmates and the instructor (Kim-Godwin *et al.*, 2018). The ability of the instructor to adequately communicate goals and learning activities, motivate and engage the student, and provide timely feedback that impacts the development of TP. SP occurs when students identify with the online community, engage in open communication, and develop interpersonal relationships (Seckman, 2018). The use of TAs in the RN-BSN online accelerated courses can enhance the effectiveness of the Col and contribute to student success.

A nursing school at a southeastern university in the United States offers the RN-BSN degree in an online accelerated program (OAP) with approximately 1700 students enrolled. Due to the large numbers of students, each course has a coordinator with several course sections running simultaneously. Each section of the class has one faculty facilitator from the School of Nursing (SON) and a TA provided by an outside vendor. The vendor provides information on the TA roles and responsibilities, but how individual faculty choose to use the TA varies as there are no specific guidelines. In an open discussion with faculty, it was concluded that inconsistency in how the TA is used creates difficulty in determining their efficacy in the OLE. Therefore, the purpose of this pilot study was to determine if implementing a standardized set of TA guidelines improved student perceptions of online learning in the Col.

## METHODS

This multi-method pilot study examined the online learning effectiveness using the Col survey in two separate phases. A comparison was made between student perceptions of the Col before and after the TA guidelines were implemented. The courses, faculty members, and teaching assistants remained consistent in Phase 1 and 2 of the study to the extent they could be controlled. There was attrition of one TA and one faculty member.

In Phase 1, course faculty and TAs collaborated to provide quality instruction in online accelerated courses over a 7-week period. There were no specific or consistent guidelines for incorporating the TAs beyond the general instructions provided by the contracted vendor. Course faculty assigned the TAs tasks such as

monitoring the classroom interactions and grading discussion boards and other written assignments. In some courses, the TA graded all assignments. At the end of Phase 1, students were surveyed regarding the effectiveness of the TA using the Col instrument and open-ended questions.

A standard set of TA guidelines was created using faculty expertise and a literature review of best practices from this data. The guidelines addressed the roles and responsibilities of the TA, including workload, grading, establishing presence, communication expectations, and assessing the "tone and pulse" of the class. Once developed, faculty and TAs received written and video instructions on applying the guidelines.

Guidelines were implemented in Phase 2 of the study. Students were again surveyed at the end of the 7-week Phase 2 session to determine their perception of the Col and TA effectiveness. The faculty were able to give feedback on the guidelines through a short survey as well.

## Participants and setting

Students enrolled in the RN-BSN online accelerated program were invited to participate in the study after IRB (Institutional Review Board) approval. Participants were recruited through an email invitation sent through the learning management system after final grades were submitted. The email invitation described the process and purpose of the study and included a secure link to the online survey. Respondents were informed that participation was voluntary and could in no way impact the grade earned in the course. Consent was implied if participants completed the survey. The courses and sections surveyed were determined by the research team based on fall and spring teaching assignments. As an incentive, participants who completed the survey were offered a chance to enter a random drawing for one of six \$25 gift cards. Phase 1 (n=415) had a 15% response rate (n=62); Phase 2 (n=320) had a response rate of 12% (n=42).

## Online survey instrument

Both Phase 1 and 2 included a demographics section and the Col survey measured student perceptions on the three constructs of TP, SP, and CP to determine the effectiveness of a Col in online learning. There were 33 items (TP=13, SP=9, CP=11) measured using a 5-point Likert scale (1=strongly agree, 2=somewhat agree, 3=neither agree or disagree, 4=somewhat disagree, and 5=strongly disagree). Initial instrument testing of the Col was conducted at four institutions with 287 participants and found to be a valid and reliable method of measurement for all three subscales with Cronbach's

alpha of .95 for TP, .92 for CP, and .93 for SP (Shea and Bidjerano, 2010). Three open-ended questions to determine the student perceptions of TA interaction in the course were also included.

In Phase 2, investigators used open-ended comments from Phase 1 to develop a 5-item survey to assess student perceptions of TA engagement and knowledge. After Phase 2, faculty were given a 7-question survey to determine their satisfaction with the implemented TA guidelines and their intent to use them.

### Data collection

Both Phase 1 and 2 surveys were created using Qualtrics software. After the initial invitation, a reminder was emailed in 3 days, and a final reminder/invitation was sent after 7 days. The survey remained open for 2 weeks. Data collection occurred in two phases. Phase 1 surveys were sent in Fall 2019 before implementing the standardized TA guidelines and after final grades were submitted for the first 7-week session. Phase 2 surveys were sent in Spring of 2020 at the conclusion of the 7-week session after implementing the TA guidelines. The faculty also completed a survey at the end of Phase 2.

### Data analysis

The research team performed all data analysis in Phases 1 and 2. Data were stored on a password-protected secure device in a locked university office. The data file was uploaded to a Statistical Package for Social Sciences 24.0 (SPSS). Survey responses with missing data were eliminated from the analysis.

Descriptive statistics were used to analyze the demographic characteristics of respondents, the Col survey, and the faculty survey. Bivariate statistics (*t*-tests, correlations) were used to examine the relationships between Col dimensions in the study's Phase 1 and Phase 2. In addition, narrative analysis using NVivo software was conducted on 3 open-ended items in Phase 1, which led to the development of the 5-item survey in Phase 2 to determine the student perceptions of TA effectiveness. The efficacy of the TA standardized guidelines was assessed by comparing the results from Phase 1 and Phase 2.

## RESULTS

### Sample description

Demographic characteristics were similar in Phases 1 and 2. In both phases, most participants (93%) were white females between the ages of 25 to 44. They reported having a great deal of computer experience, and

all had taken at least 1 online course.

### Student perceptions of learning effectiveness

Student perceptions of learning effectiveness were assessed with the Col survey, which measured TP, SP, and CP. In Phase 1, students gave a high rating to their learning experience on teaching, social, and cognitive presence (TP= 1.47, SP =1.78, and CP=1.57), ranging from strongly agree to agree. Phase 2 results were lower, indicating that the Col did not improve after implementing the TA guidelines. However, results still determined that students had an overall positive perception of the Col (TP= 2.01, SP =2.06, CP=2.1).

### Student perceptions of the role of teaching assistants

To better understand how the students perceived the TA role, the research team performed a narrative analysis of three open-ended items in Phase 1. The first question was, "How did you feel about the experience of having a Teaching Assistant in the course in general?" Fifty-five responses were received; 3 themes emerged: 1) **timely feedback**, 2) **credible resources**, and 3) **lack of meaningful contribution**. First, students reported that TAs improved the class by "grading fairly" and "equally," providing "prompt" and "thorough feedback" on assignments with "quicker turnaround time." A second theme, "credible resource," was demonstrated by the TAs "sharing their knowledge and clinical expertise" while being a "resource" and providing "clear directions/explanations." Additionally, most students stated that TAs were more "available" to "assist" and "be helpful" and were "understanding." Worth noting but less frequently mentioned was student "indifference" about the TA's role in the course. TA presence had "no effect," "didn't have a huge impact on learning," and "didn't contribute in a meaningful way."

Next, participants were asked, "Do you think that your Teaching Assistant had the knowledge and ability to evaluate your performance? Please explain why or why not." There were 56 written responses, and the following two themes emerged: 1) **competence** and 2) **necessity**. Students indicated that based on feedback and personal introduction, the TA "had knowledge and experience," "was knowledgeable on course topics," and had "career experience." When grading, students responded that TAs demonstrated "competence on the topics." They were "insightful to the subject at hand" and "had numerous years of nursing experience." In contrast, some students had difficulty understanding why "they [TAs] are necessary for an online course" because they had little interaction or received little feedback from the TA.

In a final question in Phase 1 and 2, participants were

**Table 1.** Student Perceptions of the TA in Phase 2

Survey Items	Extremely	Very	Moderately	Slightly	Not at all
How knowledgeable was the TA about the course content?	12 (28.6%)	1 (2.4%)	18 (42.9%)	9 (21.4%)	2 (4.8%)
How well did the TA facilitate (or lead) the discussions?	8 (19.0%)	4 (9.5%)	11 (26.2%)	10 (23.8%)	9 (21.4%)
How clearly did the TA answer questions?	10 (23.8%)	8 (19.0%)	15 (35.7%)	4 (9.5%)	5 (11.9%)
How helpful was the feedback given by the TA?	12 (28.6%)	10 (23.8%)	10 (23.8%)	9 (21.4%)	1 (2.4%)
How satisfied are you with the TA?	11 (26.2%)	6 (14.3%)	12 (28.6%)	8 (19.9%)	5 (11.9%)

<sup>a</sup>TA: Teaching Assistants

asked for feedback on improving the TA role. Responses from the two phases were similar. The primary theme that emerged was the need for enhanced **communication**. Students requested a more in-depth introduction from the TA, which would better outline their education, experience, and background. The students wanted disclosure from the TA as to exactly how their role would impact them. It was also requested that the TA take a more active role in disseminating instructions, explaining concepts, and clarifying assignments. In terms of feedback, students desired that the TA be more effective at communicating constructive criticism.

### Student perceptions of the TA in Phase 2

Phase 2 consisted of a 5-item survey using a 5-point Likert scale (1= extremely and 5=Not at all). The survey was derived from the analysis of open-ended questions in Phase 1. The overall perception of the TA was positive, although the responses were most frequently on the neutral end of the spectrum. Most respondents reported that the TA's feedback was helpful (extremely and very =52.4%), while considerable numbers of students perceived that the TA answered questions clearly (extremely and very =42.8%), but they did not feel their TA facilitated discussions well (slightly and not at all = 45.2%) (Table 1).

### Faculty perceptions of the TA guidelines in Phase 2

In Phase 2, faculty perceptions of the TA Guidelines were assessed using a separate 7-question survey. All responding faculty members reported that they found the

guidelines helpful and intended to use them in future classes (N=15). The majority (N=9) noted an increase in TA engagement after the TA guidelines were implemented.

## DISCUSSION

An effective Col is one way to promote successful learning in the OLE (Armellini and Stefani, 2015; Hayes *et al.*, 2015). This study evaluated the Col for RN-BSN students in the OLE before and after implementing standardized TA guidelines. In Phase 1, faculty utilized TAs, but responsibilities differed based on faculty preferences. Facilitation of social and intellectual exchange could influence the outcomes from Col in the OLE because of the inconsistencies in how the TA was used (Mills *et al.*, 2016). Students rated learning effectiveness high, despite the absence of formal guidelines to delineate the role of the TA. Findings may be attributed to experienced online course faculty and their actions and attitudes regarding design, delivery, and facilitation, as well as influencing teaching, cognitive, and social presence (Mills *et al.*, 2016).

Surprisingly in Phase 2, students rated learning effectiveness lower after the TA guidelines were implemented. It should be noted that although the Phase 2 ratings were not as high for Col, the scores remained positive in the measures of social, cognitive, and teacher presence. The lower scores in Phase 2 could be attributed to the impact of the COVID-19 pandemic on students, faculty, and TAs. Practicing nurses make up most of the RN-BSN student population, and the pandemic resulted in changes in their home, work, and academic endeavors. Nursing faculty and TAs also had to adapt within the OLE

to provide flexibility and make changes in their courses to accommodate students' challenges, including homeschooling children, illness, lack of childcare, and stress from changes to everyday life. These potentially led to a decrease in the quality of interaction between faculty, TAs, and students. Lack of interaction and personal issues can contribute to lower Col scores which may have been the case in Phase 2 (Barber, 2016).

The Col framework details necessary components for student success in the OLE (Smadi *et al.*, 2019). To contribute to that success, faculty should consider TA roles when facilitating courses in the OLE using the Col framework. Cognitive presence should incorporate deep and meaningful learning to connect theory to practice (Padilla, 2018). CP can be implemented through case studies that require problem-solving. Social Presence combines emotion and open communication to build relationships (Padilla, 2018). Timely feedback, interactive learning experiences, and creating space to develop connections between peers and faculty may improve cognitive and social presence (Seckman, 2017). Faculty interactions with students should be respectful, positive, encouraging, timely, and frequent (Plante and Asselin, 2014). Teacher presence incorporates design, facilitation, and activities to achieve learning outcomes by allowing students to construct knowledge through applied learning (Padilla, 2018). Teacher presence is vital to creating social and cognitive presence and is correlated to perceived learning and satisfaction (Padilla, 2018). Thus, TP would be essential when TAs are incorporated into a course.

Students reported a lack of familiarity with the TA role, and the TAs' expertise, thus making it unclear how or if the role differed from the course faculty, making a subsequent evaluation of the TA difficult for students. One suggestion included a formal introduction of the TA and regular, focused interaction. There was a need for the instructor and TA to maintain consistency in grading and feedback. Attending to these student responses would improve TA, faculty, and student interactions in future courses. These suggestions could easily be added to the courses and communicated to the TA to enhance teaching and SP for future classes.

In Phase 2, faculty used the standardized TA guidelines and were encouraged to adopt them to make them course-specific without changing the fundamental components. Each TA received the guidelines to guide their role in the RN-BSN program. Faculty and TAs used a checklist to ensure the role was consistently applied and specific instructor preferences were articulated in writing. The faculty indicated that the guidelines were helpful, noted an increase in TA engagement, and planned to continue to use the guidelines in other courses.

Although most of the participants reported the TA's timely feedback as helpful and found the TAs to be a resource clinically and academically, while others were

'neutral' in their responses to TA knowledge, clinical experience, and competency. If the faculty member preferred to be more active in the discussions rather than task the TA in that role, the students might not have perceived the TA as helpful in that area. It also could be helpful to lay out the responsibilities of the faculty and TA to the students, so the students understand their roles. The TA should also have clear instructions regarding facilitating discussions in the OLE if that is an expectation. Although faculty indicated standardization was helpful in terms of delegated responsibilities, and further evaluation of how the TA could be utilized best in online courses would be warranted.

### Limitations

This project began before the outbreak of the COVID-19 pandemic. Though online classes continued throughout the pandemic, and all student participants were Registered Nurses (RNs), as most employed full time, and juggling changes in family roles while attending this, accelerated online RN-BSN program. The small number of participants in this pilot study should also be considered a limitation. Although the same RN-BSN program was utilized, because of the carousel model of enrollment, and different participants were surveyed in Phase 1 and Phase 2.

### CONCLUSION

As the number of students enrolled in online accelerated nursing programs increase, continuous evaluation of quality improvements is essential. Creating an effective Col is a proven way to enhance the effectiveness of quality instruction and contribute to student success. The judicious use of TAs in online accelerated courses can contribute to a robust Col. Although faculty had the freedom in how to use a TA in their individual classes, adopting basic guidelines provided consistency and clarity in roles and responsibilities. Student perceptions of the Col were positive over Phase 1 and Phase 2, but the implementation of the TA guidelines did not improve student perceptions of the Col. Findings helped faculty members to determine best practices for using TAs to enhance the effectiveness of online learning in Col. In addition, results guided the creation of TA Guidelines, which are now used by online faculty in undergraduate and graduate programs. The guidelines were also adapted for TAs in the face-to-face prelicensure program. Subsequently, policies used in the undergraduate and graduate programs were developed to further delineate the role of the TA in the school of nursing. Although there was no perceived improvement in the effectiveness of the Col, consistency in how the TA is used provided a better understanding of the roles and responsibilities for both the

faculty and TA. Collaboration between the faculty and TAs can enhance the Col, promoting success for the RN-BSN students in the online learning environment.

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## REFERENCES

- American Association of Colleges of Nursing, AACN (2019).** Degree completion programs for registered nurses: RN to master's degree and baccalaureate programs [Factsheet]. Retrieved from <https://www.aacnnursing.org/News-Information/Factsheets/Degree-Completion-Programs>.
- Armellini A, Stefani M (2015).** "Social presence in the 21st century: an adjustment to the community of inquiry framework". *Br. J. Educ. Technol.* 47:1202-1216.
- Barber M (2016).** "Disengaged faculty, technology terrors, group work disasters: A qualitative exploration of challenges experienced by online MSN students". Poster Presentation. CHHS Research Day March 2016, UNCW, Wilmington, NC.
- Garrison R, Anderson T, Archer W (2000).** "Critical inquiry in a text-based environment: Computer conferencing in higher education." *Internet High Educ.* 2:87-105.
- Hayes S, Smith S, Shea P (2015).** "Expanding learning presence to account for direction of regulative intent: Self, co, and shared regulation in online learning." *Online Learn.* 19:15-30.
- Kim-Godwin Y, Turrise S, Lawson S, Scott M (2018).** "Student Perceptions of Peer Evaluation in an Online RN-to-BSN Course." *Nurse Educ.* 43:317-321.
- Mills J, Yates K, Harrison H, Woods C (2016).** "Using a community of inquiry framework to teach a nursing and midwifery research subject: An evaluative study." *Nurse Educ.Today* 43:34-39.
- Padilla B, Kreider K (2018).** "Community of inquiry framework for advanced practice nursing students." *J. Nurse Pract.* 14:87-92.
- Plante K, Asselin M (2014).** "Best practices for creating social presence and caring behaviors online." *Nurs. Educ. Perspect.* 35:219-223.
- Quality and Safety Education for Nurses, QSEN (2019).** About us. <http://qsen.org/about-qsen/>.
- Robertson S, Steele J, Mandernach J (2021).** "Exploring Value Variations in Instructor Presence Techniques for Online Students." *InSight: A J. Scholarly Teach.* 16:16-49.
- Scott M, Turrise S (2021).** "Student Perspectives: Discussion Boards as Learning Strategies in Online Accelerated Nursing Courses." *J. Nurs.Educ.* 60:419-421.
- Seckman C (2018).** "Impact of Interactive Video Communication Versus Text-Based Feedback on Teaching, Social, and Cognitive Presence in Online Learning Communities." *Nurse Educ.* 43:18-22.
- Shea P, Bidjerano T (2010).** "Learning presence: Towards a theory of self-efficacy, self-regulation, and the development of a communities of inquiry in online and blended learning environments." *Comput.Educ.*55:1721-1731.
- Smadi O, Parker S, Gillham D, Müller A (2019).** "The applicability of community of inquiry framework to online nursing education: A cross-sectional study." *Nurse Educ. Prac.* 34:17-24.
- Szeto E (2015).** "Community of inquiry as an instructional approach: what effects of teaching, social and cognitive presences are there in blended synchronous learning and teaching?". *Comput.Educ.* 8:91-201.