

Student Peer Review and Receptiveness to Feedback in Global Classrooms

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ABSTRACT

Background: Development of skills in peer-to-peer feedback in multicultural and global contexts is important to excellent teaching practice in nursing education.

Purpose: This study identified student attitudes toward giving and receiving peer-to-peer feedback between international peers in a graduate-level online instructional design course.

Methods: Twenty-one graduate nursing students in 2 nurse educator programs from the United States and Finland participated in this descriptive study. Pre- and postcourse Feedback Orientation Scale (FOS) scores were analyzed in combination with student reflections on learning experiences related to peer-review course activities.

Results: Mean pre- to postcourse overall FOS scores increased, suggesting greater student receptiveness to peer feedback, particularly in the dimensions of utility and self-efficacy. Postcourse reflections demonstrated increased appreciation for opportunities to triangulate feedback from multiple, diverse sources.

Conclusions: Opportunities for graduate students in nurse educator programs to exchange peer-to-peer feedback with international peers foster growth in positive attitudes toward receiving and using peer feedback.

Keywords: formative feedback, international, nursing faculty, online education, peer-to-peer feedback

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The capacity for effective communication and globally informed collaborations between nurses with diverse cultural backgrounds is essential in today's health care settings. International student collaboration in nursing courses fosters cross-cultural understanding and communication skills needed for work within global virtual teams.¹ Facilitating international

collaboration and cross-cultural engagement through well-designed online instruction allows nursing students to increase cultural awareness through reflection and enhances cultural sensitivity without students needing to leave their home institution.²

Teaching future nurses to give and receive peer feedback is important in the development of professional competency, self-reflective abilities, and a sense of empowerment.^{3,4} Although student-to-student feedback in nursing education is described in the literature, the nature and meaning of the communication of feedback between peers in an international context are not well understood. Opportunities to receive feedback from multiple, diverse perspectives is critical to the development of instructional design skills for future nurse educators,⁵ but the literature provides only limited evidence related to how international educational collaborations involving student-to-student peer review and feedback impact learners.

This study explored factors that influence future nurse educators' attitudes toward and receptiveness to peer feedback in a global online classroom. This study was conducted to lay the groundwork for understanding the nature of student receptiveness to giving and receiving feedback in international nurse educator classroom contexts. Deeper knowledge of how nursing students respond to feedback exchanges with international peers can support preparation of globally informed future nurse faculty who are culturally competent and have strong peer-review skills.

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Background and Literature Review

International collaborations in nursing education have substantial potential to increase knowledge through sharing of expertise in culturally diverse contexts.⁶ However, in-person, immersive, global experiences for students and faculty require significant amounts of funding and institutional support. In contrast, online collaborative learning experiences are cost-effective and feasible and can have a positive impact on cross-cultural awareness and learning outcomes for nursing students and faculty.⁷ Students who engage in interaction with international peers have an opportunity to enhance their intercultural sensitivity and develop important communication skills needed to care for increasingly diverse patient populations.⁸ Students have also reported an increased sense of value for interaction with peers from another country and competence in intercultural interaction after an asynchronous academic online course.^{1,6}

Peer-to-peer feedback is an influential component in self-reflective learning and practice in nursing. Peer feedback as an element of formative assessment supports more robust information for performance improvement from diverse perspectives than a single course instructor can provide alone.⁹ A student's *feedback orientation*, defined as their openness to seek, take up, and use feedback to maximize learning outcomes and improve performance, is critical to the effectiveness of feedback they receive from external sources.¹⁰ Furthermore, a student's ability and willingness to give and receive supportive peer feedback within an assessment culture of continuous learning have a positive effect on the opportunities they create for themselves to learn and improve performance.¹¹ Learning to give and receive feedback is essential in the development of professional nurses as lifelong learners; therefore, the cognitive-affective component in teaching peer feedback skills must be managed carefully by instructors.¹²

Future nurse educators need opportunities to learn how peer-to-peer feedback fits into the broader context of assessment, especially when peer feedback is used within diverse student groups. If teaching strategies in nurse educator programs empower students to understand peer review and exchange of supportive feedback with peers as a disciplinary commitment, then future nurse educators may be able to distribute the burden of delivering an increasingly greater quantity of high-quality feedback¹⁰ in a growing nurse faculty shortage.

A grant-funded collaboration between 2 nursing faculty members in the United States and Finland was formed to develop a better understanding of student peer-to-peer review and feedback when it is situated in the context of an online instructional design course. The specific aim for this study was to compare student pre- and postcourse definitions of high-quality feedback in an instructional design course and describe how students perceive and respond to peer feedback in an asynchronous, virtual, international learning environment.

Findings from this study will be used to inform larger studies on student-to-student peer review practices in international collaborative education settings in the future.

Methods

Design

Two course instructors, one in the United States and one in Finland, designed and developed a fully asynchronous online instructional design course and implemented it in a graduate-level nurse education program at their respective home institutions. A focal objective of the course was to develop peer-review and feedback skills between peers who speak English but have different first languages. The course was intentionally designed on the basis of evidence in the literature to support best practices in student-to-student peer review and feedback. Therefore, the faculty chose a pilot study approach to identify appropriate research processes, collect initial data, and gather information about feasibility and logistics to inform future studies about peer feedback in international nursing education learning spaces on a larger scale.¹³

Participants and Procedures

Participants were recruited for this study from graduate-level nursing students who were planning to become nurse educators and enrolled in nursing education programs (one program in Finland and the other in the United States). Institutional review board and organizational approvals were gained from both institutions.

The instructors, who were also the researchers on this study, developed the instructional design course with interactive elements created specifically for international student collaboration. Each instructor copied the course template to their own institutional learning management systems to comply with individual institutional requirements for privacy of student data. The course activities in which US and Finnish students interacted were carried out in commonly available digital applications outside of the learning management system. Each of the instructors taught the course to students at their home institution independently, but they maintained fidelity of the course and study implementation for both groups of students through continuous consultation and collaboration with each other throughout the 7-week instructional term.

Students spent the first 5 weeks of the course learning about quality standards and processes for instructional design, and they individually selected a course topic and wrote learning objectives, designed assessments, and created activities following the course design principles and strategies they had learned. During the first week of the course, students engaged in their first interaction with their international peers by posting a brief self-introduction in Flip, an online discussion tool (Microsoft, info.flip.com). Each student had a choice of using video, audio, text, or a combination of those modes to create their introduction post.

During week 2 of the 7-week course, students returned to Flip to post required responses to 2 peers' introductions. They also completed a second interactive assignment by choosing one objective from a large selection of poorly written learning objectives and posting their improved version with their rationale for the improvements they made. Students were encouraged to interact with their international peers in these discussions whenever possible. Also in week 2, students completed the precourse Feedback Orientation Scale (FOS) in an online survey tool. The FOS items were followed by several open-ended questions, including one asking them to state their personal definition of high-quality peer feedback.

During week 3, and in preparation for the peer-review and feedback activity, students completed a short (<1 hour) lesson on the role of peer review in the nursing discipline and strategies for giving high-quality, supportive feedback to peers. The lesson described high-quality feedback in terms of 5 primary characteristics: high-quality feedback is *focused* on a specific standard of performance, *descriptive* of observable features in the performance, *constructive* and collegial in tone, *blended* by including affirmations of strengths in the performance and areas that can be improved, and *achievable* in terms of recommendations for improvement that the learner is developmentally ready to process and act upon. More information on the peer review lesson and its contents and activities is available in the report of a previous study that also used this lesson.¹⁴

During week 6, students were paired for a nonanonymous exchange of peer feedback with a peer. The 5 Finnish students were paired with 5 US peers, whereas the remaining 11 US students were paired with a US peer. Students reviewed their peer's course design against the same grading rubric instructors used later to evaluate students' course designs (see Supplement Digital Content 1, available at: <http://links.lww.com/NE/B424>, Peer Review and Feedback Rubric). The peer reviewer was required to provide narrative feedback according to the 5 characteristics of high-quality feedback for every criterion. Student peer reviewers did not provide scores or ratings for any rubric criteria, and their feedback did not influence their peer's grade in any way. Instead, they received a grade from their instructor for the quality of feedback they provided.

During the final week of the course, week 7, students were required to respond to each feedback comment made by their peer reviewer on the same feedback spreadsheet they had received from their peer reviewer. The 2 complete feedback spreadsheets with all cells filled in were made available only to student peer-review pairs and instructors. Students completed the FOS again, which was followed by 6 open-ended questions. The pre- and postcourse FOS submissions were required and graded on completion as part of regular course activities

as a means for students to reflect on their learning and responses to the feedback process.

Data Collection

A modified version of the FOS¹⁵ was used to measure student attitudes toward receiving feedback (see Supplement Digital Content 2, available at: <http://links.lww.com/NE/B425>, Modified FOS and Survey Questions). The 20-item FOS was originally developed to measure feedback orientations on a 5-point Likert scale (1 = strongly disagree, 5 = strongly agree) in management science and was later modified for use in other workplace and educational settings. The FOS has 4 dimensions of feedback orientation: utility (perceived usefulness of feedback in achieving goals), accountability (sense of obligation to respond to feedback), social awareness (tendency to use feedback to be aware of other's views of oneself), and feedback self-efficacy (perceived competence to interpret and respond to feedback). The FOS was determined to be valid and reliable in workplace contexts in the original validation study,¹⁵ and validity and reliability were confirmed in higher education settings in later studies.^{10,11,16} In this study, the internal consistency of the modified FOS was good (Cronbach $\alpha = 0.87$), and internal consistency of the subscales was acceptable (utility, 0.87; accountability, 0.65; social awareness, 0.69; and self-efficacy, 0.65).

Data Analysis

Demographic characteristics were examined using univariate descriptive analysis. All interval or ratio scales were normally or nearly normally distributed; therefore, means were used to describe the data. Associations between demographic characteristics (using binary variables) and the outcome variable (feedback orientation) were analyzed using a Mann-Whitney *U* test. Associations between pre- and postcourse FOS scores were examined using a related-samples Wilcoxon signed rank test. Nonparametric tests were selected because of the small sample size. In all tests, an α of $P < .05$ was used to determine statistical significance. All analyses were conducted in SPSS version 28.0 (IBM Corp, Armonk, New York). In total, 17 US students and 7 Finnish students participated in the course, and of those, 21 (US = 16, Finnish = 5) consented to allow use of their data for the study.

Researchers conducted thematic evaluation of narrative responses to open-ended questions on the pre- and postcourse FOS surveys. They compared pre- and postcourse responses by individual participants to look for the development of student receptiveness to feedback and add explanatory value to the quantitative findings.

Results

All participants were RNs and BSN prepared ($n = 21$). The majority were female (81.0%, $n = 17$), were 30

assessment. These findings align with literature supporting the need for peer feedback activities to provide early opportunities for timely feedback from multiple sources.⁹

The findings from this study lay the groundwork for intentional collaborative course designs and future study of how students perceive and respond to peer feedback in nurse education classrooms that include different cultural or national backgrounds. Instructional interventions should be aimed specifically at developing a growth mindset prepared for self-reflection and performance improvement in response to peer feedback from diverse colleagues.

Implications for Teaching and Future Study of Peer-to-Peer Review

Students participating in peer feedback processes in global nursing education classrooms may benefit from having completed examples of supportive peer-to-peer feedback to avoid misunderstandings about expectations for quality and details in the feedback they provide.

Faculty should ensure that peer-to-peer feedback processes are formative and occur well before summative assessment of a performance or product. Students need developmental feedback on performance with time to implement improvements before final assessment.

Whenever possible, ask students to respond to peer feedback. Doing so stimulates self-reflection, triangulation of multiple, diverse sources of feedback, and a sense of accountability to receive and respond to feedback.

Evidence focusing on individual dimensions of feedback orientation can advance research and interventions to develop feedback skills in the health professions.¹⁶ Work by Kasch and colleagues¹¹ further refined the FOS used in this study, resulting in a measure of peer feedback orientation specifically for higher education contexts that measures attitudes toward giving and receiving peer feedback. The validated scale dimensions are accountability, communicativeness, utility, self-efficacy, and receptivity.¹¹ Future researchers who study nursing student attitudes toward peer-to-peer feedback should consider using this scale.

Limitations and Future Directions

Data for this study were collected from a small convenience sample and had an imbalanced number of participating students from 2 institutions in 2 countries. Therefore, findings cannot be generalized to collaborations between other countries. However, nonparametric tests revealed plausible associations between variables, indicating that the results are promising for application in larger study designs. Student self-reports are the sole source of data, without any objective measures of quality of feedback or learning outcomes to support the findings.

Conclusions

Faculty can facilitate development of global perspectives on nursing education by providing opportunities

for students in academic nurse educator preparation programs to interact with international student peers. This can be accomplished through virtual asynchronous collaborations that allow international peers to interact and yet never leave their home institution. Peer-to-peer feedback exchanges with international peers prepare future nurse educators not only to give and receive feedback and use it in constructive ways to improve course designs but also to teach peer-review skills to their own nursing students. In a peer feedback exchange with international peers, students enhance cultural competency skills, develop culturally sensitive approaches to communication, and find curiosity and inspiration to proactively seek feedback from diverse external sources and integrate feedback information in a self-reflective process for continuous improvement of nursing instruction.

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