

C O N T I N U I N G

E D U C A T I O N



Attitudes of RN-to-BSN Students Regarding Teaching Strategies Utilized in Online Courses

CATHY ABELL, PhD, RN, CNE
DEBORAH WILLIAMS, EdD, RN

In this descriptive study, researchers examined RN-to-BSN students' attitudes regarding different teaching/learning strategies incorporated in courses offered utilizing the online delivery format. A semantic differential scale was used to measure attitudes regarding the use of wikis, podcasts, video capture, talking PowerPoint, and discussion boards. The results indicated that students had the most favorable attitude toward tegrity lectures as a teaching strategy. This was followed by talking PowerPoint lectures and discussion board.

KEY WORDS

Online delivery • RN-to-BSN students •
Teaching strategies • Tegrity lecture

There is a push in higher education to offer distance education to meet the needs of students in various geographic locations.¹ One way to do this is by utilizing an online delivery format. This delivery format often includes an independent type of atmosphere where students work at their own pace within an environment that offers structure and activities which are scheduled during a specific timeframe. With the online method of delivery, as also found within the traditional classroom setting, a variety of teaching/learning strategies must be implemented. These strategies may include wikis, podcasts, video capture, talking PowerPoint, and discussion boards.

Wiki pages are used to establish an avenue for student collaboration.² This form of collaboration is an excellent way to promote group activities in online courses. Podcasts allow faculty to use audio or video recording of material and then publish this for students' access at a later date.³ Tegrity video (McGraw Hill Education, Columbus, OH), a type of video capture system, and talking PowerPoint (Microsoft, Redmond, WA) are additional technologies faculty can use to record lectures for students' access. In both tegrity and talking PowerPoint, students are able to hear the lecture and view the PowerPoint slides simultaneously. Additionally, with the video capture system of tegrity, faculty can lecture as in the classroom and may choose to include a video of them conducting the lecture in addition to the PowerPoint slides. In online courses, many times faculty use discussion boards to promote student engagement and sharing of views and ideas. As educational programs move to online instruction, it is important for faculty to assess students' attitudes regarding teaching strategies.⁴

Semantic differential scales are used to measure attitudes and beliefs.⁵ The scale has two opposite adjectives with a 7-point scale between them: 1 is the most negative, and 7 is the most positive.⁵ This instrument has been utilized by others in the academic setting such as noted by Bauer,⁴ Tracey et al,⁶ and Vaughn.⁷ Bauer⁴ utilized the instrument to examine students' attitudes about chemistry. Tracey et al⁶ selected a semantic differential scale to examine the general practitioner's thoughts about a recertification program. Vaughn⁷ utilized a semantic differential scale to examine attitudes of student nurses toward various teaching strategies utilized in a traditional classroom setting. A gap in the literature exists regarding the use of the semantic differential scale to measure perceptions of teaching strategies in online courses.

PURPOSE

The purpose of this study was to examine RN-to-BSN students' attitudes regarding different teaching/learning strategies incorporated in courses offered utilizing the online delivery format.

Author Affiliation: School of Nursing, Western Kentucky University, Bowling Green.

The authors have disclosed that they have no significant relationship with, or financial interest in, any commercial companies pertaining to this article.

Corresponding author: Cathy Abell, PhD, RN, CNE, School of Nursing (MCHC 3324), Western Kentucky University, 1906 College Heights Blvd #11036, Bowling Green, KY 42101 (cathy.abell@wku.edu).

DOI: 10.1097/CIN.0000000000000082

METHODS

This descriptive study was conducted two consecutive semesters, one fall and one spring semester. Approval was obtained for each semester from the institutional review board at the university where students were enrolled in an online RN-to-BSN program. The courses in this RN-to-BSN program were structured in a manner similar to face-to-face courses with topics and assignments scheduled for each week. Additionally, lecture was used as a means to introduce content and supported by other activities including discussion boards and individual and group assignments. As part of a course taught in the final semester of the program, students attended one face-to-face meeting. At this class meeting, the study was explained to the students, and the consent form was read to them. Completing the survey was interpreted as their consent for participation in the study.

Two convenience samples of RN-to-BSN students were utilized in the study. During the fall semester, 17 students were asked to participate in the study. A 100% participation rate was obtained. Demographics of the sample included three males and 14 females with a mean age of 32.24 (SD, 7.61) years, and mean length of time practicing as an RN was 7.47 (SD, 7.13) years. All but one subject indicated their highest degree of academic preparation prior to the program was an ADN; one subject did not answer this question. The second semester the study was conducted, 18 students were asked to participate, and again 100% agreed to do so. The sample consisted of two males and 16 females. Other demographic characteristics included a mean age of 37.83 (SD, 11.09) years, and mean length of time practicing as an RN was 9.49 (SD, 8.56) years. Thirteen of the subjects indicated their highest academic preparation prior to the program as an ADN and five indicated having a baccalaureate degree in another discipline.

A researcher-developed questionnaire was utilized to collect data. The questionnaire consisted of five demographic questions followed by a semantic differential scale to rate five teaching/learning strategies: podcast, tegrity video, talking PowerPoint, discussion board, and wiki. Subjects participating were asked to select a point on the semantic differential scale to rate the teaching/learning strategy based on how the strategy facilitated meeting course objectives. A 7-point scale was used with the adjectives worthless and beneficial being the anchors on each end.

RESULTS

For the fall, the mean for tegrity lectures was 6.29 (SD, 0.085), and for the spring, the mean was 6.67 (SD, 0.49). Talking PowerPoint and discussion board had the second and third highest mean scores for both semesters. For the

fall semester, the means were 6.12 (SD, 0.93) and 5.76 (SD, 1.39), respectively, and for the spring semester, mean scores were 6.47 (SD, 0.70) and 6.25 (SD, 0.97), respectively. Students enrolled in the fall semester scored podcasts higher than wiki, and this was reversed for the spring semester, with students indicating a more favorable impression of wiki than podcasts. Paired *t* tests were performed, and no statistically significant difference was noted between means for tegrity, talking PowerPoint, and discussion boards for either semester. During the fall and spring semesters, a statistically significant difference was noted between these three teaching strategies and podcast and wiki. Additionally, during the fall semester, a statistically significant difference was noted between podcast and wiki (Table 1).

DISCUSSION

Findings indicated that the use of tegrity video was perceived as being the most beneficial to the students in meeting course objectives. The RN-to-BSN students in this program are frequently nontraditional students. In this study, the mean age was 32.24 years for one semester and 37.83 years for the other. This group of students may be most familiar with the traditional lecture delivery method and therefore may be most comfortable with tegrity lectures as it is most comparable to the typical lecture style of presenting material. This would also be true with talking PowerPoint. The two with the lowest mean scores were wiki and podcasts. Wiki was used for a group project. This could have affected the rating as sometimes group projects pose some difficulty especially in online courses. During the spring semester, the mean for the wiki strategy was 5.91, compared with a mean of 4.29 for the fall semester. During the spring semester, five of the 18 subjects indicated having a previous baccalaureate degree. They may have had more opportunities for group projects in their academic tenure. Also, wiki was a newer strategy for faculty. Podcasts were not used very frequently; thus, students may have been less familiar with these. Another item of interest to the researcher was the fact that means for

Table 1

Ratings of Teaching Strategies



Strategy	Fall Mean (SD)	Spring Mean (SD)
Tegrity lectures	6.29 (SD, 0.085) ^a	6.67 (0.49) ^a
Talking PowerPoint	6.12 (0.93) ^a	6.47 (0.70) ^a
Discussion board	5.76 (1.39) ^a	6.25 (0.97) ^a
Podcast	4.40 (1.55) ^b	4.73 (1.39) ^b
Wiki	4.29 (1.83) ^c	5.19 (1.27) ^b

^{a,b,c}Means within a column having different superscripts are significantly different ($P < 0.05$).

all strategies increased the second semester the study was conducted. This prompted the consideration of faculty comfort and expertise with online delivery as affecting student's perceptions.

STRENGTHS AND LIMITATIONS

Strengths of the study were that the study was conducted with two groups and during different time periods. Additionally, this research introduced the use of the semantic differential scale to examine perceptions of teaching strategies utilized in courses presented online. This was an identified gap in the literature. Some limitations of the study included the sample size and subjects being from one program at one university.

From the findings, implications are noted for nursing education and nursing research. Nurse educators must continue to implement innovative teaching strategies in courses delivered utilizing the online format. Additionally, ongoing evaluation must occur including current strategies as well and new strategies. Student input in evaluation is recognized as important by not only faculty members, but also accrediting bodies. More research needs to be conducted with larger, more heterogeneous groups. It would also be interesting to examine faculty perceptions of teaching strategies. Also, quasi-experimental studies to examine the effect of various teaching strategies must be conducted.

CONCLUSION

Nurse educators are faced with the latest challenge of teaching utilizing the online delivery format. As in the traditional classroom, evaluation is critical in online courses.⁸ As faculty members introduce new strategies, they must evaluate how they promote students meeting course objectives. The researchers plan to replicate the study and include an examination of additional teaching strategies that have since been incorporated.

REFERENCES

1. Hebda T, Czar P. *Understanding Nursing Research: Building an Evidence-Based Practice*. 4th ed. St Louis, MO: Saunders Elsevier; 2009.
2. Wheeler S, Yeomans P, Wheeler D. The good, the bad and the wiki: evaluating student-generated content for collaborative learning. *Br J Educ Technol*. 2008;39:987-995.
3. Skiba DJ. The 2005 word of the year: podcast. *Nurs Educ Perspect*. 2006;27:54-55.
4. Bauer CF. Attitudes towards chemistry: a semantic differential instrument for assessing curriculum impacts. *J Chem Educ*. 2008;85:1440-1445.
5. Burns N, Grove SK. *Understanding Nursing Research*. 4th ed. Philadelphia, PA: Saunders; 2007.
6. Tracey JM, Arnold B, Richmond DE. Attitudes to recertification measured over time using a validated semantic differential scale. *Med Educ*. 1999;33:327-333.
7. Vaughn JA. Student nurse attitudes to teaching/learning methods. *J Adv Nurs*. 1990;15:925-933.
8. Billings DM, Halstead JA. *Teaching in Nursing: A Guide for Faculty*. St Louis, MO: Saunders Elsevier; 2009.

For more than 32 additional continuing education articles related to computers in nursing, go to NursingCenter.com/CE.