

Nursing Education Research Conference 2018 (NERC18)

The Use of Collaborative Testing to Promote Nursing Students Team Decision Making and Success

Sherri H. Marlow, DNP, RN, CNE

RN to BSN program, Cabarrus College of Health Sciences, Concord, NC, USA

Introduction

Today's learner is one that expects active learning activities that have a meaningful purpose and contribute to their educational goals. The previous educational experience for many of today's learners focused on small group work with active teambuilding activities (Duane & Satre, 2014). Active learning is a strategy that is student-centered and student driven with faculty facilitation. Active learning strategies are shown to increase the learner's comprehension and retention of complex concepts (Rivaz, Momennasab & Shokrollati, 2015; Duane & Satre, 2014; Eastridge, 2014).

The nursing profession requires a high degree of collaboration between nurses and amongst other healthcare discipline members (Duan & Satre, 2014). Active learning strategies within a nursing curriculum are an essential strategy to promote the nursing student's future ability to successfully assimilate into the profession, to develop critical thinking skills, and to learn effective communication skills with the healthcare team. Collaborative testing is an active learning strategy supported in the literature with promoting learning, critical thinking skills, and conflict resolution skills (Cortright, Collins, Rodenbauh, & DiCarlo, 2013; Centrella-Nigro, 2012).

Collaborative testing is an active learning strategy which requires the student to actively share perspectives and negotiate towards a shared decision. Collaborative testing is defined as a small group of students who work together in completing a course test (Eastridge, 2014). Students who participate in collaborative testing have reported increased confidence with group decision making (Rivaz et al, 2015; Eastridge, 2014; Duane & Satre, 2014; Parsons & Teel, 2013). Student course satisfaction was also found to be significantly increased when collaborative testing is used as a learning strategy (Centrella-Nigro, 2012).

Body

One concern expressed by nursing faculty is collaborative testing resulting in grade inflation which may negatively impact outcomes for a nursing program (Duane & Satre, 2014). While the literature review supports the value collaborative testing offers to learning, the impact on student program retention in a nursing educational program and nursing program outcomes for pass rate on the National Counsel Licensure Exam for Registered Nurses (NCLEX-RN) is limited. The purpose of this retrospective study is to identify the impact collaborative testing has on retaining a nursing student in an educational program. A secondary aim is to determine if those nursing students retained due to collaborative testing points are successful on the NCLEX-RN on the first attempt. The following research questions guided this two-year retrospective study:

1. Do students who pass an individual nursing course due to collaborative testing points have the same or similar graduation rate as nursing students who passed an individual nursing course without collaborative testing points?
2. Do students who pass an individual nursing course due to collaborative testing points have the same or similar first time NCLEX- RN pass rate as nursing students who passed all courses without collaborative testing points?

This retrospective study reviewed final course grades books that offered collaborative testing for the calendar years of 2010 and 2011. The graduation status and NCLEX-RN data is known for all nursing students during the study frame with a total of 266 nursing student educational records reviewed. During the retrospective analysis, 16 nursing students passed a nursing course due to the addition of collaborative testing points to their individual test grades. The impact of collaborative testing resulted in one nursing student passing two nursing courses due to the addition of collaborative testing points. A total of 14 nursing students of the 16 nursing students who passed a nursing course due to collaborative testing successfully graduated from the nursing program.

The nursing program on-time graduation rate is determined if the nursing student admitted to the nursing program completes the program within 3 years (150% time frame). The overall nursing program on-time graduation rate for 2010 and 2011 was 81% and 85% respectively. Nursing students who were retained due to collaborative testing have a similar on-time graduation rate of 81% with 13 of the 16 students graduating within the 150% time frame. One nursing student retained due to collaborative testing did graduate from the nursing program but exceeded the 150% timeframe.

The overall NCLEX-RN first time pass rate for the nursing program for 2010 and 2011 was 97% for both years. The first time NCLEX-RN pass rate for the 14 nursing students who were retained in the nursing program due to collaborative testing is 93% with 13 nursing students passing the NCLEX-RN exam on the first attempt. The nursing student who was not successful on the first attempt delayed taking the NCLEX-RN exam more than six months from the time of graduation. The delay in taking the NCLEX-RN exam for the first time is a confounding factor to consider for the nursing student who was not successful.

Conclusion

While this study found that 16 nursing students passed a course due to the points received from collaborative testing, the terminal nursing program outcomes for graduation rate and first time NCLEX-RN pass rates for those retained due to collaborative testing points are comparable to the overall nursing program outcomes. Thus, the collaborative testing points did not adversely impact nursing program outcomes for graduation rate and NCLEX-RN pass rates. Additionally, the study findings support that nursing students were able to make better collaborative team decisions versus independent decisions based upon the mean tests scores for the collaborative tests were statistically increased with all 76 tests reviewed in comparison to the individual test mean scores.

Collaborative testing can be applied differently within a nursing curriculum. Nursing faculty should consider how to apply collaborative testing as a learning strategy that nursing students and nursing faculty find meaningful and purposeful. Ongoing data collection regarding the impact collaborative testing has on nursing student outcomes should continue as a part of the nursing program regular review for curriculum currency and curriculum rigor. Overall, this study found collaborative testing to be an effective learning strategy to promote nursing student learning needs and nursing program outcomes.

Title:

The Use of Collaborative Testing to Promote Nursing Students Team Decision Making and Success

Keywords:

active learning strategies, collaborative testing and nursing education

References:

Centralla-Nigro, A. (2012). Collaborative testing as posttest review. *Nursing Education Perspectives*, 33(5), 340-341.

Cotright, R., Collins, H., Rodenbaugh, D. & DiCarlos, S. (2013). Student retention of course

content is improved by collaborative group testing. *Advances in Physiology Education*, 27(3), 102-108.

Duane, B. & Satre, M. (2014). Utilizing constructivism learning theory in collaborative testing

as a creative strategy to promote essential nursing skills. *Nurse Education Today*, 34, 31-34.

Eastridge, J. (2014). Use of collaborative testing to promote nursing student success. *Nurse Educator*, 39(1), 4-5

Parson, S. & Teel, K. (2013). Double testing: A student perspective. *Nursing Education Perspectives*, 34(37), 127-128.

Rivaz, M. Momennasab, M., & Shokrolatii, P. (2015). Effect of collaborative testing on learning and retention of course content in nursing students. *Journal of Advances in Medical Education & Professionalism*, 3(4), 178-182.

Abstract Summary:

The nursing profession requires a high degree of collaboration between nurses and among other healthcare discipline members. Nursing education should prepare today's nurses to interact and collaborate with all healthcare team members. Collaborative testing promotes learning, critical thinking skills, team communication and conflict resolution skills.

Content Outline:

Content Outline

I. Introduction

A. Active learning strategies are shown to increase the learner's comprehension and retention of complex concepts

B. Active learning strategies within a nursing curriculum are an essential strategy to promote the nursing student's future ability to successfully assimilate into the profession, to develop critical thinking skills, and to learn effective communication skills with the healthcare team.

C. Collaborative testing is an active learning strategy which requires the student to actively share perspectives and negotiate towards a shared decision.

II. Body

A. Collaborative testing is defined as a small group of students who work together in completing a course test (Eastridge, 2014). One concern expressed by nursing faculty is collaborative testing resulting in grade inflation which may negatively impact outcomes for a nursing program (Duane & Satre, 2014).

While the literature review supports the value collaborative testing offers to learning, the impact on student program retention in a nursing educational program and nursing program outcomes for pass rate on the National Council Licensure Exam for Registered Nurses (NCLEX-RN) is limited.

a) Do students who pass an individual nursing course due to collaborative testing points have the same or similar first time NCLEX- RN pass rate as nursing students who passed all courses without collaborative testing points?

b) Do students who pass an individual nursing course due to collaborative testing points have the same or similar graduation rate as nursing students who passed an individual nursing course without collaborative testing points?

B. Students who participate in collaborative testing have reported increased confidence with group decision making (Rivaz et al, 2015; Eastridge, 2014; Duane & Satre, 2014; Parsons & Teel, 2013). Student course satisfaction was also found to be significantly increased when collaborative testing is used as a learning strategy (Centralla-Nigro, 2012).

a) What are student's perception on how collaborative testing impact their ability to support their rationale for a clinical nursing decision?

b) Does collaborative testing as a learning strategy improve a small group of nursing students to make an accurate clinical nursing decision?

III. Conclusion

A. Collaborative testing can be applied differently within a nursing curriculum. Nursing faculty should consider how to apply collaborative testing as a learning strategy that nursing students and nursing faculty find meaningful and purposeful. Ongoing data collection regarding the impact collaborative testing has on nursing student outcomes should continue as a part of the nursing program regular review for curriculum currency and curriculum rigor. Overall, a two-year retrospective study by this presenter found collaborative testing to be an effective learning strategy to promote nursing student learning needs and nursing program outcomes.

First Primary Presenting Author

Primary Presenting Author

Sherri H. Marlow, DNP, RN, CNE
Cabarrus College of Health Sciences
RN to BSN program
Associate Professor
Concord NC
USA

Professional Experience: Associate Professor Faculty in online RN to BSN program for 8 years
Associate Dean & Nursing Faculty in a ADN pre-licensure School of Nursing for 17 years Chair site visitor for Accreditation Commission for Education in Nursing Site Visitor for 11 years Doctor of Nursing Practice from Gardner-Webb University in 2014 Master of Science in Nursing from University of North Carolina at Charlotte in 1998 Bachelor of Science in Nursing from University of North Carolina in 1992 Certified Nurse Educator from the NLN 207-2017

Author Summary: Dr. Sherri Marlow has been a Registered Nurse for over 25 years. For the past 21 years she has focused her career as a faculty member in a variety nursing education programs. Dr. Marlow is currently an Associate Professor at Cabarrus College of Health Sciences in Concord, NC. Dr. Marlow earned a Doctor of Nursing Practice from Gardner-Webb University. She has held a Certification of Nurse Educator from the National League for Nursing since 2007.