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Prepaing Nursing Faculty for Next Generation NCLEX: An Interactive Workshop

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Preparing Nursing Faculty for Next Generation NCLEX: An Interactive Workshop

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Doctor of Nursing Practice

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August 2023

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Abstract

Objective: The National Council of State Boards of Nursing (NCSBN) launched the next-generation NCLEX (NGN) in April 2023. Pre-licensure nursing faculty are unprepared for the change in teaching and evaluating nursing students' clinical judgment skills. **Method:** This was a quantitative workshop intervention with a pre-post survey. **Intervention:** Two-hour online and in-person workshops were held between August and October 2022 on how to create unfolding case studies following NCSBN's clinical judgment measurement model. A template was created for use by participants, with samples to follow along. **Results:** There was a significant difference in preparedness and confidence in those who attended the 2-hour workshop. Using a paired *t*-test, the means of the pre-NGSE-M scores [$M=30.47$, $SD= 5.234$, $N= 57$] were significantly different from the post scores [$M= 35.33$, $SD= 3.823$, $N= 57$], $t(56) = -4.860$, $p = .000$. **Conclusion:** Workshops were a positive way to increase confidence, preparedness, and networking opportunities among nursing faculty preparing students for NGN.

Key Words: Next Generation NCLEX, NGN, workshops, unfolding case studies

Dedication

I am very grateful to my family and friends for their trust and faith in my abilities and passion for education. My mother and father for their endless support and love for me. My sister for putting up with me and not giving up on me when I annoyed her with all my grammar questions. To my grandparents for always believing in me, pushing me to be the best person I can be, and trusting in God in all things. Without God, I would not be here, and it is due to His love and support that I am where I am in my journey.

Acknowledgments

I want to acknowledge my advisor Dr. Richards for believing in me and pushing me to do better and brighter things. Without Dr. Richards's support, I would not have had the motivation or dedication to finish my studies. I also want to acknowledge Dr. Buchholz for her support and commitment to my education.

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Preparing Nursing Faculty for Next Generation NCLEX: An Interactive Workshop

Chapter 1

The National Council of State Boards of Nursing (NCSBN) is the organization that develops the nursing licensure examinations and sets the standards nursing students need to achieve to become registered nurses (RN). In April of 2023, the NCSBN implemented the Next Generation NCLEX (NGN) that features unfolding case studies with new style questions using the Clinical Judgement Measurement Model (CJMM) (National Council of State Boards of Nursing [NCSBN], 2021). This change was supported by evidence that new graduate nurses are seen to be lacking critical thinking skills in their first few years (Muntean, 2012). This change seeks nursing educators to prepare undergraduate nursing students with a clinical judgment mindset.

Background and Significance

Muntean (2012) conducted a literature review on clinical nursing decision-making and its importance to the nursing profession. This study was started due to increased preventable adverse events linked to poor clinical thinking (Muntean, 2012). Clinical judgment, reasoning skills, and critical thinking are learned by gaining experience and knowledge in a particular skill (Muntean, 2012). Dickison et al. (2019) stated that clinical judgment comprises clients' competent and safe practice. As a result of Muntean's literature review, NCSBN added unfolding case studies and new question types to the NCLEX exam that will allow for measuring clinical judgment (National Council of State Boards of Nursing [NCSBN], 2022). The students will encounter a total of three unfolding case studies with six questions each, for a total of 18 items (NCSBN, 2022).

Several organizations and companies have produced material and tools to prepare nursing educators for the NGN. The University of Maryland, School of Nursing's Maryland Nursing Workforce Center, has created a series of webinars that were first live, then recorded for everyone to view (University of Maryland School of Nursing [UMSON], n.d.). Wolters Kluwer has prepared programs geared towards NGN for nursing programs to prepare students for exam taking (Wolters Kluwer, 2022). ATI has published a guidebook that is free for nursing educators to help navigate NGN (Ascend Learning, 2021). Another pioneer in nursing education is Keith Rischer, the founder of KeithRN.com, which supports educators and students in their nursing education journey. KeithRN has published several books, articles, and webinars to help nursing faculty understand NGN (Rischer, 2021).

Students who entered undergraduate nursing programs in the Spring of 2021, depending on the institution, would have been the nursing students who first encountered NGN, along with all future nursing students. To prepare nursing students, faculty must first be ready and armed with strategies and new ways of teaching. The most significant change with the NGN is the unfolding case studies and new types of questions. The new types of questions include multiple response select N, cloze (drag-and-drop and drop down), highlight, and matrix/grid (NCSBN, 2022).

The intervention for this study was a workshop for pre-licensure faculty on an unfolding case study and to increase preparedness and confidence. The workshop was approximately two hours long, which included resources to help understand the new concepts of the CJMM. Nursing faculty need to understand the new concept of the CJMM and how to educate students on understanding these complex concepts.

Problem Statement and Purpose

Nursing students are required to take the licensure exam called the NCLEX after graduation and complete all requirements. Requirements that are set by their State's Board of Nursing. As of April 2023, NCSBN implemented the NGN examination, which will test a student's clinical judgment and knowledge of nursing. Those teaching undergraduate nursing classes need to understand clinical assessment in the sense of learning and how to engage the students in this type of learning.

With the implementation of NGN in April 2023, now is the time to educate and transition pre-licensure faculty for the forthcoming changes. Costs for this project, which were a minimum, included making an eye-catching poster, other recruitment resources, and handouts/PowerPoint presentation for the workshop. Pre-licensure nursing programs and faculty all have an investment in a project of this kind due to the changes in education and the NCLEX. The workshop has given educators a chance to learn how to build an unfolding case study and talk to others facing the same challenges.

A few concerns with this type of project are timing, the unknown of the NGN, and the lack of studies on the NGN since it is an unfolding and progressing topic. Preparation for the NGN has already started; students entering programs now need these additional resources. Educators can no longer avoid the NGN but need to start preparing themselves and their students for the NGN. However, with the NGN being new, all educators are trying to understand the new way of teaching the NGN, including adding the CMMJ model to their curriculum. Now is the time to research and implement projects on NGN because devoted groups on social media and other platforms band together to share the knowledge known on the NGN.

Research Question

The purpose of this DNP project is to prepare and grow confidence in educators by learning how to write case studies towards the NGN with a focus on the Clinical Judgment Model by using workshops to prepare educators. After attending a hands-on workshop (T) on how to write a case study (I), do prelicensure nursing faculty (P) report improved feelings of preparedness and confidence (O) compared to their feelings before the workshop (C)?

Concepts and Definition of Terms

The identified concepts include Undergraduate Nursing Faculty, Next Generation NCLEX (NGN), feelings of preparedness, and workshop. This study focuses on undergraduate nursing faculty. The NGN is the new licensure exam executed by the NCSBN. Feelings of preparedness is a term used to measure some of the outcomes. A workshop will be the medium used in this study to reach nursing faculty in pre-licensure programs.

Undergraduate Nursing Faculty

Nursing faculty has many responsibilities, including evaluating students' academic capabilities (Billings & Halstead, 2020). Nursing education is constantly changing to prepare better future nurses (Billings & Halstead, 2020). Undergraduate nursing faculty are those responsible for preparing the students to be future nurses and for their licensure exams.

Next Generation NCLEX (NGN)

The NGN is the next step in change for nursing. Nursing is a professional career that constantly changes to keep up with the current times. The NGN will measure a student's clinical judgment (Sherrill, 2020). Sherrill (2020) states that educators should not teach the way they were taught because that healthcare is already outdated. The NGN aims to assess a student nurse's ability to think critically.

Preparedness

According to the Merriam-Webster dictionary, “prepared” is to go through a special process or treatment (Merriam-Webster, n.d.-a). The definition for preparedness is the state of being prepared (Merriam-Webster, n.d.-b). Putting these two definitions together, preparedness is being ready to put forth the plans that went through a process of being. Are educators prepared for the NGN? Can educators write unfolding case studies to promote and develop clinical judgment?

Workshop

A workshop is an event to explore, collaborate, create, and identify problems for a specific topic (Sufi et al., 2018). There are different types of workshops, but the common goal is to learn and share ideas with those with a common purpose (Sufi et al., 2018). Workshops are good resources to collaborate and discuss new topics to increase knowledge and improve practice.

Theoretical Framework

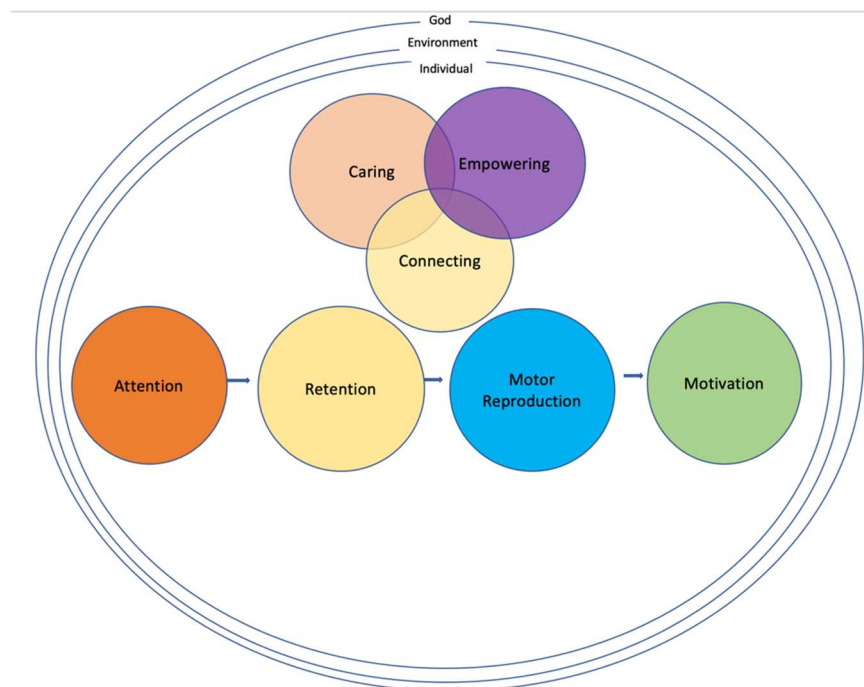
The two theories used for this project are the Adventist framework and Bandura's social learning theory. The Adventist framework brings the unique values of the Adventist faith, including caring, connecting, and empowering with God being in control of everything, followed by the environment and individual (Jones et al., 2017). Caring is what the nursing profession promotes in the heart and soul (Jones et al., 2017). As social beings, connecting is vital for support and belonging (Jones et al., 2017). Empowering is the feeling one gets from seeing the results of nursing or education; it is the "light bulb" moment (Jones et al., 2017). The core of the Adventist framework is God is at the center, and without him, caring, connecting, and

empowerment do not exist (Jones et al., 2017). God empowers the individual in their environment to do his will (Jones et al., 2017).

Bandura's Social Learning theory focuses on the importance of observing, modeling, and imitating the behaviors of others and how the environment and cognitive factors react (Bandura, 1971). This theory explains how as individuals, growth comes from observing and then doing, which proposes human features (Bandura, 1971). One of Bandura's (1971) key points is that learning is gained by direct experience. Using a workshop to help other educators create unfolding case studies is based on Bandura's social learning theory. Wanting to help each other in the educator realm brings in the Adventist framework by connecting with other educators and learning together by sharing knowledge and experience. Using the Adventist framework and the social learning theory, a workshop can bring educators together to feel more comfortable with the upcoming NGN format, see Figure 1.

Figure 1

Integration of the Adventist Framework and the Social Learning Theory



Chapter 2: Review of Literature

A comprehensive search was done using the CINAHL and Medline databases through Southern Adventist University's (SAU) online library with the terms Next Gen NCLEX, Next generation NCLEX, "Clinical judgment and nursing students," and nursing faculty (and) clinical judgment. Advanced settings were used to narrow down the literature between the years 2017 to 2022 and peer-viewed journals only. Citations from articles was another strategy to find relevant studies.

In addition, articles by the NCSBN were used to explore and describe changes to the NCLEX. These articles included Muntean's (2012) literature review on nursing clinical decision-making and Betts et al.'s (2019) article on creating a method for writing clinical judgment items for nursing exams. The NCSBN website was used to explore more about the NCLEX and NGN.

The first search using CINAHL with "Next Gen NCLEX" yielded four results. Changing the term to "Next Generation NCLEX" yielded 49 results, and Medline resulted in 14. Using "Clinical Judgment and nursing students" yielded 530 results, and Medline resulted in 15. Then changing "nursing students" to "nursing faculty and clinical judgment" gave 241 results and 170 from Medline. When Medline was used, there were fewer results, plus duplicates from CINAHL.

Presentation of Literature

The comprehensive search described above has reviewed numerous articles for this study. Most articles are level V-VI, with one at level II and a few at levels III-IV. A few articles are evidence level VI and VII from esteemed educators discussing the changes from NCSBN. Most articles are from 2017 to 2022, and the one from 2012 is the paper the NCSBN used to make their change in testing. When looking at the available research on the Next Generation NCLEX (NGN), a few different concepts emerged. The first concept included the change of the NCLEX

to NGN. The second concept looked at ways to prepare for NGN. The third concept involved researching the clinical judgment measurement model (CJMM), the primary model for the change to teach towards the NGN, plus a few other theories. The fourth was using workshops to help prepare educators.

NCLEX to NGN

The last significant change was in 1997 when the NCLEX-RN test plan was established (Wendt et al., 1997). The NCSBN develops and publishes test blueprints for educators to guide their curriculum and daily lesson plans (Ignatavicius, 2021). The NCSBN conducts research every three years on newly licensed nurses and their performances (Nunn-Ellison et al., 2020). The common theme was that the current NCLEX was not testing upon clinical judgment, where nurses see the most errors and mistakes (Ignatavicius, 2021). Muntean (2012) expressed the lack of clinical judgment skills from novice nurses, which has fueled the fire to start changing the NCLEX to include the ability to test a student's clinical judgment. This has been done by adding unfolding case studies to the NCLEX. The unfolding case studies have a snapshot of a patient's chart to mimic what is done in practice by the RN, challenging the student to critically think (NCSBN, 2022).

Lack of critical thinking has been an issue over the years. In the year, 1985 a tool was created to assess a nurse's critical thinking (Del Bueno, 2005). A report by Del Bueno (2005) looked deeper into the critical thinking crisis of newly graduated registered nurses. Her findings concluded no difference from the 1990s as in the early 2000s. Partial responsibility was with employers who expected new graduates to have the same critical thinking skills as nurses in the field for years (Del Bueno, 2005). Research on nursing students and critical thinking was done long before the NCSBN decided to move toward the NGN testing. A study by Bowles (2000)

investigated the relationship of nursing students at the end of their program in relation to critical thinking and judgment. The conclusions of this study stated that "there is a significant relationship between critical thinking and clinical judgment and [they] found that the graduates of the two nursing programs under study possessed some level of these two skills" (Bowles, 2000, p. 375).

The NCSBN developed the clinical judgment model to measure clinical judgment that delivers the best and safest patient care (Nunn-Ellison et al., 2020). The NGN will produce a more authentic assessment for student nurses to practice in the real world (Nunn-Ellison et al., 2020). Sherrill (2020) stated that educators had used the nursing process as a nurse's way of processing the way they think. However, the two most common reasons a novice nurse will see action against them is failure to notice and act (Sherrill, 2020). The NGN has modified the nursing process into the clinical judgment model to recognize/analyze cues, prioritize hypotheses, generate solutions, take actions, and evaluate outcomes (Sherrill, 2020).

Another article (Sommer et al., 2021) explored the complex content of the clinical judgment model and how to incorporate it into the nursing curriculum. The clinical judgment model must be added throughout the curriculum and not only in one area (Sommer et al., 2021). The goal is to produce competent clinical judgment skills in nursing students (Sommer et al., 2021).

Potter et al. (2021) conducted a descriptive study to determine if there was an effect of clinical hours and program types on the NCLEX pass rates. Their reason for this study was because of findings that novice nurses leave the bedside early in their careers due to a lack of confidence and inadequate preparation (Potter et al., 2021). This study concluded that the type of

program and the amount of clinical time did not correlate with the NCLEX pass rates (Potter et al., 2021).

There is a widespread debate about whether to use high-stakes testing, low-stakes testing or no stakes testing. Nursing school programs depend on the NCLEX- RN pass rate to support their programs, retain accreditation, and keep certification from their state boards of nursing (Richards, 2020). Many nursing schools have incorporated programs like ATI, HESI, UWorld, and Kaplan, for end-of-program benchmarks. According to Richards (2020), high-stakes testing is a valuable testing strategy. However, passing a high stakes test does not guarantee students have the knowledge to pass the NCLEX-RN. Using the NCLEX-RN blueprint is one method that has shown student success in learning the knowledge needed (Mathew & Aktan, 2018).

Faculty Preparedness

Educators have already been changing how they teach to include more clinical judgment content in their curricula. Zehler and Musallam's (2021) study uses game-based learning (GBL) activities to improve students' clinical judgment. The study results found a significant difference in students' clinical judgment after participating in GBL (Zehler & Musallam, 2021). Sarginson and McPherson (2021) published a study on using an interactive website called Nearpod, which provides a way to engage and interact with students. This study included two faculty and 48 students during an online class. The conclusions saw active engagement from students for the whole 3-hour class (Sarginson & McPherson, 2021).

In a study by Zhang et al. (2017), the aim was to evaluate the use of reflective training to promote and develop nursing students' clinical judgment. The results demonstrated that reflective training improved critical thinking (Zhang et al., 2017). Gonzalez Cano et al. (2021) state the

need to add clinical judgment throughout the nursing curriculum, including the clinical setting, beyond using case studies and care plans.

Educators use simulation to promote and develop clinical judgment in nursing students (Klenke-Borgmann et al., 2020). There was a significant increase in clinical judgment from nursing students when a high-fidelity simulation is used to develop clinical judgment (Klenke-Borgmann et al., 2020). Hensel and Billings (2019) concluded that the CJM needs to be throughout a program's curriculum using case studies and simulations while having students work through real-life scenarios. Another method of learning that educators used to develop clinical judgment was team-based learning (TBL), an inventive way to provide interactive education with engaging methods (Rhodes et al., 2021). The findings of this study showed that students reported positively regarding TBL (Rhodes et al., 2021).

There were several articles on nursing faculty's preparedness for the NGN, and the common theme is angst, anxiety, and fear (Caputi, 2019a, 2020; Siegel, 2019). It has become apparent that the teaching strategies of yesterday will not work for the NGN (Caputi, 2019a). This is the reason new models for clinical judgment are surfacing. Caputi (2020) stated that the new question types for the NGN mimic how the nurse should think in practice. Caputi (2020) confirmed that the clinical judgment model does not replace the nursing process but provides critical thinking support.

The main piece of the NGN is how to write toward the new style of questions and the unfolding case study. Poorman and Mastorovich (2020) described how to begin writing towards NGN; the process starts with developing a case study, then developing the different questions, for example, hotspot, CLOZE, Extended multiple responses, and extended drag and drop. Betts et al. (2019) also examined the new NGN-type questions with the added clinical judgment piece.

Doherty (2021) described how to write an NGN case study in eight steps, stating that you start with a goal for the case study. The following steps included telling a clinical story, recognizing cues, analyzing critical information, generating solutions, taking action, and evaluating (Doherty, 2021).

Boev and Simpson (2021) analyzed the NGN question type Cloze, a fill-in-the-blank question with an options drop-down menu. The cloze type of question includes the new type of scoring from the NCSBN. The NGN plus or minus scoring is a change that can help or hinder the student, it allows students to receive points for picking correct answers and minus points for incorrect answers all in one question (Boev & Simpson, 2021) Test development has been a challenging aspect of education for many years. Educators follow blueprints on what to add and track statistics on whether the test item is worth testing. Bristol et al. (2018) concluded that there is "no standard for quality practice in test development and administration" (p. 71). Another finding from Bristol et al. (2018) stated that educators reported using test banks with modifications. This finding suggests using questions already made and changing them to fit those educators' needs. As for NGN questions, the resources are very limited as authors and publishers are working on releasing these types of resources.

A study was done by Moran et al. (2021) on the preparedness and confidence level of undergraduate nursing faculty on writing items for the NGN. A snowball sampling design was used on social media to obtain participants (Moran et al., 2021). A survey was sent to all participants regarding their preparedness and confidence in writing NCLEX-style items (Moran et al., 2021). Moran et al. (2021) surveyed 300 nurse educators in 44 states on their preparedness and confidence in writing NGN test questions. Moran et al.'s (2021) findings showed a lack of confidence and unpreparedness in faculty regarding writing NGN-type questions. A significant

point in this study was the lack of preparedness in nursing educators for the NGN-style items (Moran et al., 2021). Now the question is how to prepare undergraduate nursing faculty for this change. The need is to train faculty in teaching and preparing NGN-type questions for future nurses.

Freeman Herreid (2019) had a recipe for how to write a perfect case study. These case studies were meant to help the study cover a specific topic in depth. According to the article, five things need to be decided before writing a case study, who is the target audience, which teaching method is used, what resources are required, what product is expected, and the type of assessment of the student (Freeman Herreid, 2019). Case studies are a great way to bring in and assess clinical judgment.

Frameworks for Change

Muntean (2012) stated that clinical reasoning and decision-making were essential for nurses. He noted three different frameworks and numerous variables that affect a person's clinical reasoning and decision-making abilities (Muntean, 2012). The frameworks that guide most of the research include Benner's modification of skills acquisition theory, information-processing model, cognitive continuum theory, and Tanner's clinical judgment model (CJM) (Betts et al., 2019; Caputi, 2019a, 2020; Dickison et al., 2019; Gonzalez, Nielsen et al., 2021; Hensel & Billings, 2019; Ignatavicius, 2021; Muntean, 2012; Poorman & Mastorovich, 2020; Sherrill, 2020; Zehler & Musallam, 2021). Another framework used in a few studies was the adult learning theories (Blozen, 2017; Zhang et al., 2017) Three terms were used to describe nurses' decision-making process: critical thinking, clinical reasoning, and clinical judgment (Gonzalez, Nielsen et al., 2021) The Clinical Reasoning Cycle and the CJM have been used to help develop clinical judgment skills in nursing students (Gonzalez, Nielsen et al., 2021).

Two articles defined a model to assess nursing clinical judgment, using the Intuitive-Humanistic Model/ Tanner Model, Dual Process Reasoning Theory/Cognitive Continuum Theory, and the Information Processing Model (Dickison et al., 2016, 2019). Tanner's Model of Clinical Judgment took the Intuitive-Humanistic Model, a type of reasoning along with analytic and narrative reasoning (Dickison et al., 2019). The Dual-Process Reasoning Theory saw clinical judgment as adaptive and sits between analytical and intuitive thinking (Dickison et al., 2019). The Information- Processing framework was used to propose the Clinical Judgment Model using the five processes: recognize cues, generate a hypothesis, judge the hypothesis, take action, and evaluate outcomes (Dickison et al., 2016, 2019). Using this framework, the NCSBN-CJM was made to help develop clinical judgment in nursing students.

Malcolm Knowles's Adult Learning Theory is a popular theory used for nursing due to the self-direction type of learning (Blozen, 2017). Blozen (2017) used Knowle's theory looking at accelerated programs and how to push students to be successful. Another study by Davis and Morrow (2021) used Peplau's Theory of Interpersonal Relations which uses the concepts of participant observation and empathic linkages to interact with patients. This theory is also used for faculty-to-faculty and student interrelationships to promote successful learning (Davis & Morrow, 2021).

Caputi (2019b) recommended faculty change their framework to support more critical thinking throughout the curriculum. Caputi (2019b) proposed one framework with three layers: Benner's Novice to Expert Theory, Tanner's Clinical Judgment Model, and the 19 Thinking Skills and Strategies/Competencies. This change brings forth new ideas and challenges to promote critical thinking in nursing graduates.

Workshops

It is common for studies to use workshops as an intervention to educate and disperse vital information. Faculty Development Programs are workshops that prepare faculty for change (Abdulghani et al., 2021). Abdulghani et al. (2021) conducted a study promoting a faculty development program (FDP) with formal training and experience. Abdulghani et al.'s (2021) study examined the effectiveness of an FDP in improving the quality of exam questions. Faculty development programs effectively prepare faculty for changing or new concepts for teaching and assessment (Abdulghani et al., 2021). This type of training allows for hands-on evaluation and collaboration with colleagues (Abdulghani et al., 2021). Sufi et al. (2018) discussed the importance of workshops and how to measure the workshop's impact on a specific topic.

Johnson et al. (2020) used a workshop and one-to-one coaching session to investigate the challenges of healthcare work among healthcare professionals and students. This study measured confidence, knowledge, and resilience (Johnson et al., 2020). The confidence scores were significantly higher after the intervention than the pre-intervention scores (Johnson et al., 2020). The feedback regarding the workshop was positive, and the consensus was that it helped the participants learn valuable skills (Johnson et al., 2020).

Heydari et al. (2019) used Kirkpatrick's program evaluation model to show that workshops on new teaching and learning methods significantly improved the staff's satisfaction, knowledge, and behavior regarding the material taught. The workshop evaluation showed that the participants were satisfied with the workshop (Heydari et al., 2019). Young et al. (2020) discussed a two-day event involving workshops, posters, and presentations as a vessel to get knowledge, expertise, and networking possibilities to participants who were healthcare library

knowledge service staff. The feedback from the participants was positive in meeting the aim of maximizing the learning and networking opportunities (Young et al., 2020).

Wu et al. (2019) used short-period workshops to educate postgraduate physicians on musculoskeletal ultrasound. This study showed that the participants perceived confidence increased significantly after attending a workshop, except for hip scanning, which scored low in confidence (Wu et al., 2019). Klement et al. (2020) used a 90-minute workshop for undergraduate education and specialist training for those in family medicine. The participants of this 90-minute workshop rated it “good” or “very good” via an evaluation (Klement et al., 2020). Some of the weaknesses identified by the participants were that there was limited time, and they wanted more time to exchange dialogue with participants (Klement et al., 2020).

Congruence of Organization's Strategic Plan

This project has three objectives. The first objective was to demonstrate an understanding of the NGN questions by creating case studies for different content areas. The second objective was to reach a sample size of a minimum of 50 undergraduate nursing faculty to educate on the NGN unfolding case study. The third objective was for participants to use the clinical judgment measurement model to build the unfolding case studies and to make strong resources for faculty to use with nursing students.

Project Objectives

Objective one was to demonstrate an understanding of the NGN questions by creating case studies for different content areas. The workshop aimed to help other educators understand what an unfolding case study contained and how to create one. The workshops had between two to five participants, which helped create a collaborative atmosphere.

Objective two was to reach a sample size of at least 50 undergraduate nursing faculty to educate on the NGN unfolding case study. The recruiting plan was to use networking sites for advertising the workshop and to spread the word among colleagues. There was also a poster to help with advertising.

The third objective three used the clinical judgment measurement model to build the unfolding case studies. Lasater's (2007) Clinical Judgment Rubric was used as a guide to evaluate the participant's case studies at the end of the workshop. This rubric was made to describe a student's performance regarding clinical judgment (Lasater, 2007).

Financial

The financial constraints of educating nursing faculty vary. However, many free resources and workshops are being offered to help bridge the gap of what is known about the NGN. In the realm of undergraduate nursing faculty, they are all in this change together, and collaboration is already taking place through networking and at conferences.

Literature Gaps

Next Generation NCLEX was launched in April 2023. The literature is minimal because it is a new concept educators struggle to understand and accept. However, the key is looking at other areas, for example, clinical judgment and teaching strategies. The literature is mainly from the last five years since it is a newer concept, with some other articles used to support the need for the change to the NGN. A few studies are emerging about writing NGN-style questions and the preparedness of nursing faculty. The lack of information and studies regarding the preparation of the NGN is a gap in the literature. Now is the time to research how to write exam items toward the NGN and understand the CJMM.

The entry-level exam for undergraduate nurses to practice as licensed registered nurses are constantly under review. The NCSBN researched nurses' clinical judgment and decision-making (NCSBN, 2021). Their conclusions resulted in novice nurses missing clinical judgment and decision-making capacity (Muntean, 2012).

New graduate nurses and nurses with years of experience lack the skills to navigate clinical reasoning and judgment (Dickison et al., 2019). There is a need to teach clinical judgment to undergraduate nursing students actively. The NCSBN developed the CJM to help guide the teaching and learning of clinical judgment (NCSBN, 2021).

Chapter 3: DNP Project Plan

In this section, the purpose of this scholarly project will be explained along with the rationale of why this project is necessary. The design, setting, and sample will be presented. The protection of human subjects will be discussed. The instruments and study intervention will be described along with the procedure, data collection, plan for data analysis, and scientific merit.

Purpose

This project aimed to educate undergraduate nursing faculty on how to write an unfolding case study that included the new NGN question types, through an interactive workshop to help with feelings of preparedness and confidence.

Objectives

By the end of the workshop, participants will create an unfolding case study with different question types. The participants unfolding case studies will be evaluated against the case study template, if the participants choose to share with the researcher.

Research Question and Hypotheses

The research question states: After attending a hands-on workshop (T) on how to write a case study (I), do prelicensure nursing faculty (P) report improved feelings of preparedness and confidence (O) compared to their feelings before the workshop (C)? There are four hypotheses for this project. H₁= participant New General Self-Efficacy Scale- Modified (NGSE-M) scores will increase following the workshop. H₂ = There is a relationship between the NGSE-M and the care study score among participants in the workshop. H₃ = no significant difference in the NGSE-M scores between those attending an online workshop and those attending in person. H₄ = no significant difference in the case study rubric scores between those attending an online workshop and those attending in person.

Methodology

Project Design

A quantitative workshop intervention with a pre-post survey was used. All participants attended a two-hour hands-on workshop on how to write an unfolding case study for the NGN. Participation was conducted either online or in person. All participants were emailed a link to a survey that included demographic and NGSE-M questions once they registered for the workshop with the date and time they were interested in attending. Multiple days and times were given during the completion of this project between August and October. Each workshop followed the same agenda: an introduction, an overview of the different types of NGN-style questions, a period of time to work on each question type, and a question and answer time. The population was undergraduate nursing faculty that prepared future nurses for their licensure exams.

Setting

There were two ways to attend this workshop. The first way was online via Zoom. The second method was in-person at educational conferences or by request for faculty educational purposes. Time was given for everyone to work on their case study and questions with instant feedback. Using an online platform allowed participants nationwide to participate in this study. In-person allowed for a more hands-on approach. Both methods had multiple dates and times available.

Sample

The projected sample size was a minimum of $N = 45$ participants from the United States of America. A priori sample size was found using a dependent t-test with one tail, an effect size of 0.5, a p -value of 0.05, and a power size of 0.95. Participants were recruited by social media

and education websites during the months of July, August, September, and October of 2022 to reach as many undergraduate nursing faculty. Inclusion criteria included undergraduate nursing faculty teaching prelicensure RN nurse students. Exclusion criteria included nursing students, faculty that did not or did not plan on teaching NGN, and faculty that exclusively taught at LPN programs. Attendees needed a computer with access to the internet to support Zoom.

Protection of human rights

To protect the rights of the participants of this study, identifying information was kept in a secure, password-protected computer that only the researcher had access to. When assessed, this project had minimal risk. Southern Adventist University's institutional review board (IRB) gave approval for this project (Appendix A). Informed consent was required before participation in this project (Appendix B).

Instruments

The demographic instrument, case study rubric instrument, and NGSE-M tool were used in the project. To measure the participant's preparedness before and after the workshop, the NGSE-M was used (Chen et al., 2001). This instrument measures eight items, using a five-point Likert scale to record answers (Chen et al., 2001). The Likert scale rates from strongly disagree (1) to strongly agree (5) (Chen et al., 2001). A low score indicated low self-efficacy, while a high score indicated high self-efficacy.

Procedure

Recruitment involved flyers being sent to various undergraduate institution directors, and Facebook educator groups. A QR code and a link was on the flyer for interested participants to scan and directed them to the first survey using QuestionPro Survey Software©. The first survey included informed consent, a demographic collection survey, and the NGSE-M. Once the survey

was completed, they were taken to the thank you page of the survey along with a link to the workshop template that was stored on a secure Google Doc© with view only for participants. The directions showed participants how to make a copy into their own Google© account or save on their computer.

During the workshop, the host and the participants worked together to develop unfolding case studies. At the end of the workshop, some of the participants shared with the researcher their completed case study to be evaluated by the researcher using a case study rubric. Before the completion of the session, the participants received a link to fill out the post-NGSE survey and workshop evaluation.

Plan for Data Analysis

The variables measured include preparedness and confidence by using the NGSE-M tool. The first variable was the preparedness and confidence of the nurse educator using the NGSE-M tool. The tool uses the interval level of measurement with eight items that are ranked on a Likert-type scale from 1-5. The second variable was the preworkshop and postworkshop groups. This variable is a nominal level of measurement. The third variable was the case study score, an interval level of measurement that was measured using a case study rubric document. This document had eight items using a 1-5 Likert-like scale. The fourth variable was location, whether a participant attended an in-person or online workshop.

IBM SPSS Statistics for IOS© was used to complete descriptive and inferential statistical analysis (dependent *t*-tests, and analysis of variance (ANOVA)). For the NGSE-M scores, case study scores, and workshop evaluation questions, descriptive statistics were used. Inferential statistics were used to test the hypotheses. Before hypothesis testing, the NGSE-M scores were checked for normal distribution. Nonparametric tests were used for variables without a normal

distribution and parametric tests were used for variables with a normal distribution. The raw data was downloaded into an Excel spreadsheet and then imported into SPSS for statistical analysis. Post hoc Alpha Cronbach's testing was conducted to check for internal consistency of the NGSE-M instrument.

Chapter 4: Results

The purpose of this educational workshop intervention with a pre-post design study was to help prepare nursing faculty for the Next Generation NCLEX by introducing and building unfolding case studies with the new types of questions. In this chapter, the research study's results are presented by answering the research questions and hypotheses.

Discussion of Results

PICOT Question and Hypothesis 1

After attending a hands-on workshop on how to write a case study, do prelicensure nursing faculty report improved feelings of preparedness and confidence compared to their feelings before the workshop? Yes, using a paired t-test, the means of the pre-NGSE-M scores [$M=30.47$, $SD= 5.234$, $N= 57$] were significantly different from the post scores [$M= 35.33$, $SD= 3.823$, $N= 57$], $t(56) = -4.860$, $p = <.001$ (Appendix C – Table 2).

Hypothesis 2

There is a significant relationship between the NGSE-M and the care study score among participants in the workshop. No significant relationship was found between the case study and NGSE-M scores ($N=15$). A Spearman's rho was performed because not all assumptions were present to run the parametric test. Spearman's *rho* for the NGSE-M and care study scores was $\rho= 0.214$, $p = 0.504$. There was no correlation between the NGSE-M scores and the case study scores (Appendix C – Table 3).

Hypothesis 3

There is a significant difference the NGSE-M scores between those attending an online workshop and those attending in person. Hotelling's T2 test was conducted to test the differences between the in-person and online workshop groups and the pre- and post-NGSE-M scores.

between-group differences. Hotelling's T2 was used to analyze the differences between the in-person and the online workshops, pre- and post-NGSE-M scores. This is a multivariate analysis between and within groups. There was no significant difference in the NGSE-M scores regarding those that attended online or in person. The mean NGSE Pre-Score for those that met in person ($M = 27.20$, $SD = 5.89$, $N = 5$) was not significantly different from those attending the workshop online ($M = 30.79$, $SD = 5.12$, $N = 52$), $t(55) = -3.588$, $p = 0.145$. The mean NGSE Post-Score for those that met in person ($M = 33.67$, $SD = 4.97$, $N = 6$) was not significantly different from those attending the workshop online ($M = 35.41$, $SD = 3.64$, $N = 54$), $t(58) = -1.741$, $p = 0.288$ (Appendix C – Table 4).

Hypothesis 4

Is there a significant difference in the case study rubric scores between those attending online and in person? There was not enough data in each group to answer this question. There was one participant from the in-person group to share their case study with the researcher and 12 from the online group.

Internal Consistency

A post hoc analysis of the NGSE-M scale was performed using Cronbach's alpha. The Cronbach's alpha was considered statistically significant at a $p < 0.05$. Cronbach's alpha was strong with $\alpha = 0.873$. This Cronbach's alpha shows strong internal consistency of the NGSE-M (Appendix C – Table 5).

Description of Sample

There were 276 responses for the pre-survey, with 237 complete (85.9% completion rate). A total of 60 participants completed the post-survey, with 57 complete (95% completion

rate). Duplicates were discovered and eliminated from the sample, resulting in 226 usable pre-surveys and 57 post-surveys.

Demographics

The demographics of participants were collected in the pre-survey. While there were 226 participants who completed the prequestionnaire, only 60 participants completed both the pre- and post-survey. There were 220 who identified as female, two who identified as male, and one who identified as non-binary. For highest education, six held a Baccalaureate degree, 146 a Master's degree, and 74 a Doctorate. Approximately 90% of participants reported their institution was accredited ($n=204$). Only 22% held certification by the National League for Nursing ($n=50$). Approximately 48% of participants reported experience writing NGN unfolding case studies ($n=109$).

Incidental Findings

During the post-survey, the participants were asked to evaluate what they enjoyed and disliked about the workshop. There were mainly positive comments, including "I learned a lot" and "the helpful ideas and guidance for each type of question." Some of the main themes included liking the examples shared during the presentation and on the template provided for everyone. Another theme was being able to get immediate feedback during the presentation and being able to work on it during the workshop. Also, one-on-one attention was used when needed with the hands-on approach during the workshop.

There were a few negative things mentioned, including too much downtime when the participants were working on their case study, and distractions from others talking during the online sessions when participants were trying to concentrate on their work. A few participants

wished they had more time to complete the case study. A common theme from participants was that two hours were too short for creating an unfolding case study.

Summary

The results showed a significant difference when participants attended the workshop for NGN, which increased preparedness and confidence measured by the NGSE-M. For those who shared their case study with the researcher, 13 out of the 15 scored above 80%. Because the number of participants who shared their case studies for grading was too low, research questions 2, 3, and 4 did not have enough data to answer these questions. For hypothesis 1, there was shown to be a significant difference from the pre-scores to the post-scores. Hypothesis 2 showed no correlations between the NGSE-M and case study scores. Regarding hypothesis 3 and 4, there was not enough data to test for a significant difference between the NGSE-M scores or the case study rubric scores between those attending an online workshop or those attending in person.

Chapter 5: Discussion

Practice Inquiry and Purpose Discussion

Discussion of the findings will be discussed, including the incidentals found. An overview of the demographic characteristics of the participants will be explained. Observations and limitations of this project will be addressed. The impact on the Doctor of Nursing Practice degree will include how this topic furthers the area of nursing and how it translates into evidence-informed practice. The theoretical framework for this project will be explained.

Discussion of Findings

Moran et al.'s (2021) study found a lack of confidence and unpreparedness in nursing faculty in writing NCLEX-style questions. This current study found that the confidence and unpreparedness in the pre-questionnaire to be lower than the post questionnaire by evidence in the NGSE-M question "Compared to other people's abilities in case study writing, I can write NGN case studies and test questions very well" (Chen et al., 2001, p. 2). The pre-questionnaire mean for the question "I am confident that I can perform effectively on most tasks, including writing case studies and test questions" was 2.87. After attending one of the workshops on how to write NGN case studies and questions, prelicensure nursing faculty reported improved feelings of preparedness and confidence regarding with a mean score of 3.92 out of a score of 5.

Not enough participants shared their case study with the researcher to compare case study rubric scores with the NGSE-M pre and post-scores. Overall, the post-questionnaire scores were higher than the pre-questionnaire scores. Caputi and Siegel wrote about concerns for NGNs with angst, anxiety, and fear overwhelming nursing faculty (Caputi, 2019a, 2020; Siegel, 2019). When looking at the NGSE-M pre-scores, the mean suggests that most participants found

NGN challenges something they could overcome and could perform the task of creating NGN material (Appendix C - Table 6).

Participants reported positives of this workshop, including hands-on attention, immediate feedback, shared examples, and helpful resources, supported by Abdulghanie et al.'s (2021) findings that workshops allow hands-on evaluation and working with others in the same field. Johnson et al. (2020), Young et al. (2020), Klement et al. (2020), and Heydari et al. (2019) received positive feedback regarding the use of a workshop which aligns with the evaluations of this study. However, Klement et al. (2020) also found some negatives that align with this study in terms of time limits and wishing for more networking opportunities.

Demographic Characteristics

The majority of the participants were female, with only two identifying as male and one as non-binary. According to the NLN's faculty census survey from 2021, 91.3% of faculty are female, 8.4% are male, and 0.3% are transgender, genderqueer, gender non-binary, or other/unknown (National League for Nursing [NLN], n.d.). The majority of those that participated were in the age groups of 35 to 44 years old at 29.2%, 45 to 54 years old at 26.1%, and 55 to 64 years old at 27%. According to NLN's census for 2021, 1.6% of nurse educators are under 30, 28.4% are between 30 and 45, 50.3 % are between 46 and 60, and 19.8% are 61 years old and older (NLN, n.d.). This data aligns with the participants of this study. Most participants identified as Caucasian (81%). NLN's census by Race reflects the same information, with 76.8% of Nurse Educators being identified as white non-Hispanic (NLN, n.d.).

Observations and Limitations

There was a lot of interest when promoting this study on social media, and the time slots filled up. However, when it came to the workshop sessions, the average attendance size was

three to four people out of the fifteen max seats offered. This benefit allowed for small personal groups that got a lot of attention from the researcher. This study took place from August to October during the school year, resulting in several participants cancelling due to a scheduling conflict. Others who signed up for a time slot did not show up nor cancel for the session.

Some participants did not want to create a case study during the workshop but took notes and listened to the presentation. Others participated but did not share their case study or did not get far in the case study. This is why the case study participation rubric grades were minimal. There were two options, in-person or online. The majority of the participants were online. The hope is if this is done again, offering it during the summer break is a better time frame for most educators. In the future, this project should be done in a personal setting with three to four hours to give the most hands-on attention to all participants.

Impact on the Doctor of Nursing Practice Degree

April 1, 2023, begins the start of the NGN for prelicensure nursing graduates. By conducting these workshops, it became evident that many nursing educators were unprepared or had not even started getting ready for this change. Offering workshops allowed education on NGN and unfolding case studies, networking opportunities, and learning how other educators were handling the change to NGN. During these workshops, there were some great conversations about what educators were doing to prepare their students for NGN.

Sustainability Plan

During the implementation process, the researcher started a Google© folder with resources that were either created by the researcher or available online for free to the public. One goal is to record the presentation without any participants. This will be available for those that would prefer a visual reference that takes them through the steps of creating unfolding case

studies. Another possibility is to start including an NGN case study and test question writing workshop during new faculty orientation.

The pre-survey recognized that 72 participants held a doctorate degree out of 224 responses. Which is not even half of the participates, more DNP prepared nurses need to get involved in test writing to help prepare the future of nursing. As DNP prepared nurses the expectation needs to focus on test writing for NGN to provoke clinical judgment.

Application to Theoretical Framework

The workshops were made to follow along, geared for the auditory, visual, and kinesthetic learners in a comfortable and nurturing environment. This workshop was created with the framework of Bandura's social learning theory by observing the examples provided, creating case studies, and interacting with the presenter and peers. The Adventist framework was incorporated by providing a safe, comfortable environment where others could come together and share their knowledge and experiences in this subject matter.

Evidence-Informed Practice

It has been shown that workshops are suitable mediums to gather and learn complex subject matter. Workshops allow for discussion, along with trial and error. They also allow for networking and sharing of ideas. There are conferences for all types of areas for educators. However, workshops that deal with one area that can be mastered and focused on the need to be as popular as professional development conferences. One theme from the workshops themselves is that networking is essential to discuss the good, the bad, and the challenges everyone faces in nursing education. By discussing nursing education topics in workshops, excellent ideas circulated throughout the masses by word of mouth.

Implications for Future DNP Projects

Once NCSBN has launched NGN to students, future projects include those aiming to help students develop critical thinking skills and allowing educators to rework their teaching methods to help students. More studies exploring the use of workshops and unfolding case studies using the in-person method would be warranted. The dissemination plan for this project includes writing and submitting a manuscript to a nursing education journal for publication and presenting findings at a future nurse educator conference. The findings from this study were shared at the Adventist Nurse Educator Conference in Kettering, OH on July 17, 2023.

Conclusion

The primary purpose of this study was to look at how NCSBN is changing the NCLEX to NGN and how nursing educators can prepare by learning how to create unfolding case studies and new question types. The research from NCBSN revealed new nursing graduates lack critical thinking skills and that the current NCLEX lacks testing on critical thinking. The NGN will now be able to test a student's critical thinking on unfolding case studies and NGN standalone questions. Conducting workshops allows educators to learn skills and glean new and creative ideas from networking.

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Appendix A: Institutional Review Board Approval

SOUTHERN ADVENTIST UNIVERSITY — INSTITUTIONAL REVIEW BOARD



July 21, 2022

Principal Investigator: Rachel Loukota

Research Project: Faculty Preparedness for Next Generation NCLEX

IRB Tracking Number: 2022-2023-001

Dear Rachel,

The Institutional Review Board has examined your research study proposal, **Faculty Preparedness for Next Generation NCLEX**, with supporting documents at the IRB committee level and it is a delight to inform you has approved your research request as expedited. We wish you the very best as you move forward with this study and look forward to reading your findings when your study is completed.

As you move forward with your study, if there is a need to make minor changes to this research, before making those changes please notify us by completing and submitting a FORM B (Certification of Modification, Annual Review, Research Termination, or Research Completion). Please submit all applications to irb@southern.edu. If substantial changes are planned, you, as the principal investigator, should submit a new IRB FORM A application.

Many blessing to you as you move forward. Please let us know if there is anything additional, we can do to assist you with this research study.

Always in His service,

Robert Overstreet

Robert Overstreet, Ph.D.

IRB Chair

Southern Adventist University

423-236-2285

robertoverstreet@southern.edu

"I applied my mind to **study** and to explore by wisdom all that is done under the heavens..." - Ecclesiastes 2:13

"Research is to see what everyone else has seen and to think what nobody else has thought." - Albert Szent-Gyorgyi

Appendix B: Informed Consent

Introduction:

My name is Rachel Loukota. I am a doctoral student at Southern Adventist University. I am conducting a research study on undergraduate nursing faculty regarding their preparedness and confidence in making unfolding case studies for the Next Generation NCLEX (NGN) through a virtual hands-on workshop or in-person workshops. I am completing this research as part of my doctoral degree. Your participation is completely voluntary. I am seeking your consent to involve you and your information in this study. Reasons you might *not* want to participate in the study include time constraints. Reasons you might want to participate in the study include learning about the NGN, learning how to write case studies and create NGN test questions, and connecting with other educators facing similar frustrations/challenges. An alternative to this study is simply not participating. I am here to address your questions or concerns during the informed consent process.

PRIVATE INFORMATION

Certain private information may be collected about you in this study. I will make the following effort to protect your private information; you will assign yourself a 4-digit code that will be your identifier on all data collected. Only the researcher will have this information that will be stored on a password-protected computer in an excel spreadsheet. Even with this effort, there is a chance that your private information may be accidentally released. The chance is small but does exist. You should consider this when deciding whether to participate.

Activities:

If you participate in this research, you will be asked to:

1. Complete an initial survey.
2. Schedule your workshop using the Calendly link at the end of the initial survey.
3. Attend the workshop.
 - a. Create your own unfolding case study along with NGN-type questions. You will work together with other attendees in virtual break-out rooms.
 - b. Complete the end-of-workshop survey.

Eligibility:

You are eligible to participate in this research if you are:

1. Over 18 years of age,
2. An undergraduate nursing faculty member who teaches prelicensure RN students

You are not eligible to participate in this research if you:

1. A faculty member who does not or does not plan on teaching NGN style content
2. Those who plan to retire from nurse education in the Summer 2023.

I hope to include a minimum of 45 people in this research.

Risks:

There are minimal risks in this study. Some possible risks include being identified by someone you know during the workshop, anxiety from learning a new concept, fatigue, muscle cramps, eye strain, and a sore lower back.

To decrease the impact of these risks, you can: stop participation at any time, or use an alias during the workshop. Breaks will also be encouraged to stretch.

Benefits:

The potential benefits to others are: learning how to create an unfolding case study and NGN style question to help learners prepare to take NGN, working in groups with other educators to develop NGN content.

Confidentiality:

The information you provide will be kept confidential to the extent allowable by law. Some steps I will take to keep your identity confidential are: You will choose a 4-digit code that will be used for all surveys/evaluations and assignments. The code will be the only link to the surveys and templates.

The people who will have access to your information are: myself, and my DNP Project Chair. The Institutional Review Board may also review my research and view your information.

I will secure your information with these steps: locking the computer file with a password.

I will keep your data for 7 years. Then, I will delete electronic data and destroy paper data.

Contact Information:

If you have questions for me, you can contact me at: Rloukota@southern.edu; 301-520-8828

My DNP Project Chair name is Dr. Andrew Richards. He works at Southern Adventist University and is supervising me on the research. You can contact him at: arichards@southern.edu; 423-236-2971

If you contact us, you will be giving us information like your phone number or email address. This information will not be linked to your responses if the study is anonymous.

If you have questions about your rights in the research, or if a problem has occurred, or if you are injured during your participation, please contact the Institutional Review Board at: irb@southern.edu or 423-236-2285.

Voluntary Participation:

Your participation is voluntary. If you decide not to participate, or if you stop participation after you start, there will be no penalty to you. You will not lose any benefit to which you are otherwise entitled.

Future Research

Any information or specimens collected from you during this research may **not** be used for other research in the future, even if identifying information is removed.

Experimental Intervention:

This workshop has not been tested before. The purpose of this study is to test it. You should know that there are other workshops on NGN test development available to you that have been tested. Some benefits to these are: They are provided by known educators in this field of nursing education. If you are interested in these workshops instead, please let me know.

New Findings:

Sometimes during a study, we learn new information. This information may come from our research or from other researchers. If new information might relate to your willingness to participate, I will give you that information as soon as possible.

Signature:

A signature indicates your understanding of this consent form. You will be given a copy of the form for your information.

Participant Signature

Printed Name

Date

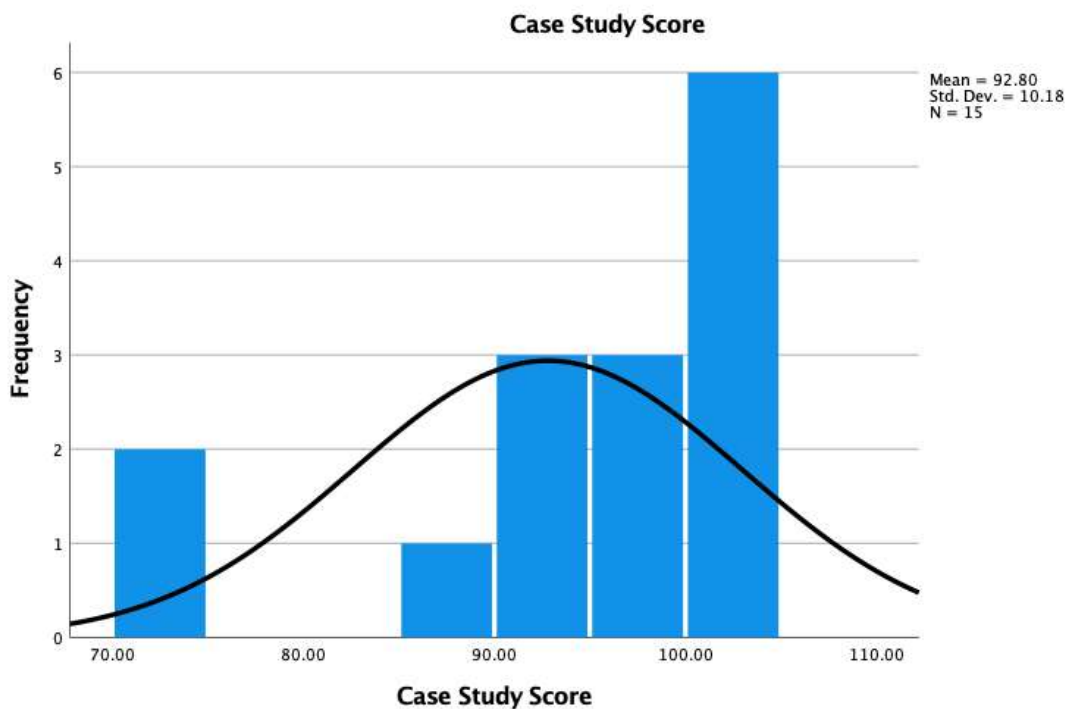
Researcher Signature

Printed Name

Date

Appendix C: Evidence Tables

Evidence Review Table 1



Evidence Review Table 2

Paired Samples Statistics

	Mean	N	Std. Deviation	Std. Error Mean
Pair 1 NGSE Pre Total Score	30.47	57	5.234	.693
NGSE Post Total Score	35.33	57	3.823	.506

Paired Samples Correlations

	N	Correlation	Significance One-Sided p	Two-Sided p
Pair 1 NGSE Pre Total Score & NGSE Post Total Score	57	.103	.224	.448

Paired Samples Test

	Mean	Std. Deviation	Paired Differences		t	df	Significance	
			Std. Error Mean	95% Confidence Interval of the Difference Lower Upper			One-Sided p	Two-Sided p
Pair 1 NGSE Pre Total Score - NGSE Post Total Score	-4.860	6.157	.816	-6.493 -3.226	-5.959	56	<.001	<.001

Paired Samples Effect Sizes

	Cohen's d	Standardizer ^a	Point Estimate	95% Confidence Interval	
				Lower	Upper
Pair 1 NGSE Pre Total Score - NGSE Post Total Score		6.157	-.789	-1.084	-.489
	Hedges' correction	6.241	-.779	-1.070	-.482

a. The denominator used in estimating the effect sizes.
Cohen's d uses the sample standard deviation of the mean difference.
Hedges' correction uses the sample standard deviation of the mean difference, plus a correction factor.

Evidence Review Table 3

Nonparametric Correlations

			Case Study Score	NGSE Post Total Score
Spearman's rho	Case Study Score	Correlation Coefficient	1.000	.214
		Sig. (2-tailed)	.	.504
		N	15	12
	NGSE Post Total Score	Correlation Coefficient	.214	1.000
		Sig. (2-tailed)	.504	.
		N	12	60

Evidence Review Table 4

Group Statistics					
Please select which type of workshop you have attended.					
		N	Mean	Std. Deviation	Std. Error Mean
NGSE Pre Total Score	In-Person	5	27.20	5.891	2.634
	Zoom	52	30.79	5.119	.710
NGSE Post Total Score	In-Person	6	33.67	4.967	2.028
	Zoom	54	35.41	3.642	.496

Independent Samples Test											
Levene's Test for Equality of Variances				t-test for Equality of Means				95% Confidence Interval of the Difference			
		F	Sig.	t	df	One-Sided p	Two-Sided p	Mean Difference	Std. Error Difference	Lower	Upper
NGSE Pre Total Score	Equal variances assumed	.102	.751	-1.480	55	.072	.145	-3.588	2.425	-8.449	1.272
	Equal variances not assumed			-1.315	4.600	.125	.250	-3.588	2.728	-10.789	3.612
NGSE Post Total Score	Equal variances assumed	2.445	.123	-1.072	58	.144	.288	-1.741	1.624	-4.992	1.511
	Equal variances not assumed			-.834	5.613	.219	.438	-1.741	2.087	-6.935	3.453

Evidence Review Table 5

Reliability

Scale: ALL VARIABLES

Case Processing Summary

		N	%
Cases	Valid	223	98.7
	Excluded ^a	3	1.3
	Total	226	100.0

a. Listwise deletion based on all variables in the procedure.

Reliability Statistics

Cronbach's Alpha	N of Items
.873	8

Evidence Review Table 6

	Left Anchor				Right Anchor
	Strongly disagree	Disagree	Neutral	Agree	Strongly agree
I will be able to achieve most of the goals I have set for creating an unfolding case study and test questions.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
When facing the task of Next Generation NCLEX (NGN) style case studies and test questions, I am certain that I will accomplish them.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
In general, I think that I can obtain outcomes that are important to me.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I believe I can succeed at most any endeavor to which I set my mind.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I will be able to successfully overcome many challenges regarding the creation of NGN case studies and test questions.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I am confident that I can perform effectively on most tasks, including writing case studies and test questions.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Compared to other people's abilities in case study writing, I can write NGN case studies and test questions very well.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Even when things are tough, I can perform quite well.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Descriptive Statistics: Pre-Scores

	N	Minimum	Maximum	Mean	Std. Deviation
New General Self-Efficacy (Modified) Scale	223	1	5	3.77	.895
New General Self-Efficacy (Modified) Scale	223	1	5	3.79	.761
New General Self-Efficacy (Modified) Scale	223	1	5	4.14	.656
New General Self-Efficacy (Modified) Scale	223	1	5	4.31	.677
New General Self-Efficacy (Modified) Scale	223	1	5	4.00	.688
New General Self-Efficacy (Modified) Scale	223	1	5	3.95	.778
New General Self-Efficacy (Modified) Scale	223	1	5	2.87	.957
New General Self-Efficacy (Modified) Scale	223	1	5	4.16	.613
NGSE Pre Total Score	223	8	40	31.04	4.438
Valid N (listwise)	223				

Appendix D: Scholarly Project EOP SLO Synthesis

Cultural Competence

This project was promoted using Facebook media sites, reaching nationwide. The importance of cultural accuracy was reaffirmed while teaching the process of unfolding case studies. It means adding cultural information to enhance the case study without adding it for no purpose. Each workshop was given in a kind and compassionate manner, with patience and guidance.

Evidence-based Practice

This project found that attending the workshop on how to write NGN case studies and questions that prelicensure nursing faculty report improved feelings of preparedness and confidence. Participants stated that the workshop's interactive hands-on and personal attention was a positive factor. There is room for this project to improve and be done again. If this project is done again, having it in person and allowing more time would improve it.

Health Promotion

The idea of NGN is a source of great stress. The workshop is a way to find stress-relieving ideas for the NGN unfolding case studies. The more emphasis is placed on a topic, the more physical ailments will develop, including headaches. During the workshops, breaks were encouraged along with the intake of water.

Patient-centered Care

We are preparing stronger nursing students by preparing nursing faculty to educate using NGN methods. The purpose of NGN is to reduce medical errors from new graduate nurses who do not have strong critical thinking skills. The goal of NGN is to test if the student can think critically before they go out and work with patients.

Quality and Safety

There is no risk to patients in this study. This study focuses on educators strengthening students to reduce medication errors in clinical practice. In the long run, this study ensures nursing students are prepared for nursing practice by increasing their critical thinking skills. The case studies are produced to enhance a student's ability to take information and understand what is relevant versus not relevant to the immediate care priority.

Informatics and Innovation

In the age of informatics, this workshop was as successful as it was because of offering it online. Because of this medium, the project reached across the nation to get participants from all over and in all types of nursing programs working with prelicensure nursing students. Facebook educator groups were one method used to recruit participants. Another recruiting method used was email and word of mouth. Using google docs to create and share all documents made the workshop documents easy to share and edit.

Teamwork and Collaboration

Each workshop included a conversation between the researcher and the participants and between the participants to promote learning and sharing experiences. Tools, resources, and ideas were shared among all during the workshops. Participants also stated that they would share information learned with their colleagues.

Professionalism

This study used the Adventist framework to provide a safe, comfortable, and nurturing environment. The moral ethics of "leaving no man behind" ensured no participant felt stupid or confused. Caring and compassion were present during every workshop.