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Integration of Learning Activities for Improved Performance on the NCLEX-RN exam

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This is to certify that the doctoral study by

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has been found to be complete and satisfactory in all respects,
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Abstract

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by

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MEd, Bloomsburg University, 1994

BS, State University of New York at Oneonta, 1993

Project Study Submitted in Partial Fulfillment

of the Requirements for the Degree of

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Abstract

An institute of higher education located in the United States was unable to maintain the required first-time pass rate, on the National Council Licensure Examination for Registered Nurses (NCLEX-RN) exam, by nursing graduates, as defined by their State Board of Nursing and accreditation body. Failure to meet these requirements resulted in a corrective action plan and fewer licensed nurses able to enter practice. The purpose of this study was to identify curricular changes to the associate nursing program to improve the first time pass rate by their nursing graduates. Benner's theory of skill acquisition was used as the conceptual framework to examine the perceived skill level needed to pass the NCLEX-RN exam. The guiding research question for this study explored the perceptions of nursing educators about the integration of learning activities, between clinical and didactic courses to prepare students for the NCLEX-RN exam. A descriptive qualitative design was used and 11 adjunct and full time nursed educators were interviewed. Thematic data analysis identified 5 themes that included retaining programmatic accreditation, barriers to success on the NCLEX-RN exam, the gap between nursing theory and clinical application, skill development in novice nurses and the integration of simulation education in the current nursing curriculum. This final theme led to create a faculty development project based on best practices in simulation education. Consequently, positive social change will occur with the increased number of first time nursing graduates who pass the NCLEX-RN exam and are better prepared to enter professional practice while delivering quality patient care.

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Dedication

I dedicate my doctoral study to my family and friends. Without the love and support of my wonderful husband and children, this would never have been possible. Helping me understand statistics, proofreading my documents, and allowing me to write for hours when needed are just a few of the never ending examples of their love and support. I truly could not have done this without you!

My parents taught me the value of an education at a young age and always supported my educational endeavors. Their support and encouragement continued throughout my doctoral studies when my father would inquire how I was doing and if I did my homework. My brother and sister were always available to listen to my frustrations or successes as I reached various milestones. My Aunt was with me in the beginning when I felt overwhelmed and unsure if I could be successful as a doctoral student. Her support provided the foundation needed to successfully complete this degree.

My friends would always inquire on my progress and encourage me to keep going. They were with me to celebrate receiving IRB approval and will be with me to celebrate earning this degree.

Every time I took one step back, my family and friends were there to encourage me to keep going and helped me to take two steps forward. I thank you all for helping me achieve this dream.

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Thank you to my committee members who were generous with their time and expertise. A special thank you to Dr. Kriesta Watson, who became my chair while I was pursuing IRB approval. Your insights and feedback helped me reach milestones faster than expected. I felt you were committed to my success from our first phone meeting and every step of the way since. Thank you to Dr. Emily Green, who served as my methodology expert and Dr. Marilyn Robb, my URR evaluator. You both ensured the highest quality work on this doctoral study.

Finally, I would like to thank Wilhof College administrators, the division of nursing, and the nurse educators who supported and participated in this study. Everyone's commitment to the success of our nursing students was evident throughout this project and made the work involved a rewarding experience for me.

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Section 1: The Problem

Introduction

The National Council Licensure Examination for Registered Nurses (NCLEX-RN) is the final assessment required for prelicensure nursing graduates before they can enter the field of nursing. This assessment measures the minimum knowledge, skills, and abilities required to deliver safe, effective patient care as an entry-level nurse (Romeo, 2013; Trofino, 2013; Williams, Doyoung, Dickison, & Woo, 2014). The healthcare field is rapidly changing and the NCLEX-RN exam provides a standardized assessment for all nursing graduates.

Because there is no standardized curriculum for nursing education programs, first-time pass rates by nursing graduates is a visible measure of a nursing program's quality and success (Simon, McGinniss, & Krauss, 2013; Trofino, 2013). Nursing education programs have a responsibility to equip first-time nursing graduates with the skills and knowledge needed to pass the NCLEX-RN exam. Within the state of Pennsylvania, students who do not pass the NCLEX-RN exam cannot practice nursing (Pennsylvania Department of State, 2015).

The mission of nursing education is to prepare students to be licensed professional nurses. State boards of nursing and accreditation bodies use the first-time pass rates on the NCLEX-RN exam as one metric to evaluate a nursing education program. Approximately, 16,000 of every 100,000 (16%) nursing graduates, who attempt the NCLEX-RN exam each year, do not meet the standards (Trofino, 2013). This indicates a

national issue for all nursing education programs, because students who do not pass the licensure exam cannot practice nursing (Hyland, 2012). The Accreditation Commission for Education in Nursing (ACEN) requires that an institution's pass rate, by first-time nursing graduates, be above the national mean for a 3-year period (ACEN, 2015). This requirement places pressure on the granting institution to prepare students for the NCLEX-RN exam. A high failure rate by first-time nursing graduates on the NCLEX-RN exam can jeopardize an institution's standing with their accreditation body and their state board of nursing (Trofino, 2013).

Definition of the Problem

The associate degree in nursing (ASN) at Wilhof College (pseudonym) has accreditation through ACEN. This accreditation body requires institutions granting associate nursing degrees to demonstrate evidence of quality through six standards outlined in their accreditation manual (ACEN, 2015). Standard 6 of ACEN 2015 Standards and Criteria for Associate Programs assesses a nursing program's ability to achieve their program and student learning outcomes (ACEN, 2015). Section 4.1 of Standard 6 requires a "program's three-year mean for the licensure exam pass rate be at or above the national mean for the same three-year period" (ACEN, 2015, p.6). Full ACEN accreditation serves as notification to stakeholders of the academic quality of an institution's nursing program (Ellis & Halstead, 2012).

Results for the NCLEX-RN exam, by first-time nursing graduates, are reported for the last 5 years (2010-2014) of data (Pennsylvania Department of State, 2015).

Wilhof College's first-time nursing graduates exceeded the national pass rate mean of 80% in 2010 (91.67%), 2011 (94.44%), 2012 (96.00%), and 2013 (87.15%). Between October 1, 2013 and September 30, 2014, Wilhof College's NCLEX-RN pass rate for first-time test-takers was at 78.33%. After Wilhof College's ASN first-time pass rate by nursing graduates dropped below the 3-year mean, the associate program had their status downgraded to grant accreditation with conditions by ACEN (personal conversation with Dean of Nursing, October 2014).

Several factors can contribute to poor performance on the NCLEX-RN exam; but, changes to exam rigor had the biggest impact nationally. The standard for passing the NCLEX-RN exam became more rigorous on April 1, 2013 and this contributed to a decrease in the national passing rate for first-time nursing test takers (National Council of State Boards of Nursing [NCSBN], 2016). The 2016 NCSBN Environment Scan (2016) reported a 90.34% pass rate in 2012, dropping to 83.05% percent in 2013, and decreasing again in 2014 to 81.78% (Table 1). By September 2015, NCSBN reported the national average improved to 85.49%.

Table 1

First-Time Pass Rates, U.S. Educated

Year	RN first-time pass rate
2012	90.34
2103	83.05
2014	81.78

Note. Source: NCLEX statistics from NCSBN, retrieved from https://www.ncsbn.org/exam-statistics-and-publications.htm

There is no proven model for addressing poor performance by first-time nursing graduates on the NCLEX-RN exam. The theory-practice gap, disconnect between the theoretical knowledge and clinical application in nursing education by students, is one explanation for poor performance by first-time nursing graduates (Flood & Robinia, 2014). Nursing education's theoretical curriculum contains knowledge and comprehension level objectives, while the NCLEX-RN exam requires higher order thinking skills. Didion, Kozy, Koffel, and Oneail (2013) confirmed that a gap existed between the skills needed in the clinical environment and the knowledge learned in the didactic classes.

Hatlevik (2012) showed that sharing knowledge between clinical and didactic nurse educators resulted in an improvement by first-time nursing graduates on the NCLEX-RN exam. I expanded on Hatlevik's research by examining nursing educators' perceptions on the integration of learning activities between clinical and didactic courses, not just on the sharing knowledge between faculty members. There is justification in both the literature and by the stakeholders at Wilhof College to pursue this research study.

Rationale

Evidence of the Problem at the Local Level

Currently there is no purposeful engagement among nursing faculty members at Wilhof College to share knowledge or learning activities between clinical and didactic courses. The integration of learning activities between clinical and didactic curriculums

is an area for improvement within Wilhof College's ASN program (personal conversation, Dean of Nursing, November 2014). Development sessions for nursing educators on teaching strategies that bridge clinical and didactic courses are required for the integration of learning activities to occur.

Because of the poor performance by nursing students on the NCLEX-RN exam in Spring 2014, various Wilhof College stakeholders are investigating options for the long-term success of nursing graduates on the NCLEX-RN exam. Wilhof College's ASN curriculum must provide for the integration of theory and application within all learning environments, so that graduates can analyze, apply, and evaluate healthcare scenarios needed to pass the NCLEX-RN exam (Lavin & Rosario-Sim, 2013). With the support of the Dean of Nursing and the Vice-President of Academic Affairs (personal conversation Dean of Nursing & Vice-President of Academic Affairs, October 13, 2014), the purpose of this study was to examine the perceptions of nursing educators on the integration of learning activities between clinical and didactic courses for the improved performance by first-time nursing graduates on the NCLEX-RN exam.

Evidence of the Problem From the Professional Literature

Estimates showed that the Registered Nursing (RN) workforce will grow from 2.71 million to 3.24 million by 2022 (American Association of Colleges of Nursing [AACN], 2014). This increase of 526,800 or 19%, combined with the anticipated need to replace 525,000 RN positions in the same period, could create 1.05 million job openings for RNs by 2022. Beyond the need to add or replace over 1 million RN positions by

2022, the NCSBN estimated 55% of the RN workforce was above the age of 50 years in 2013 (AACN, 2014). Based on this demographic, the Health Resources and Services Administration projects over 1 million nurses will reach retirement age within 10 to 15 years. Combined with the addition and replacement of RNs within the next 6 years, 4 to 9 years after that the health industry will need to replace a potential 1 million RNs who will have retired.

The anticipated need for RNs in the years to come supports the need for Wilhof College to examine ways their nursing education program can improve their nursing graduates' success on the NCLEX-RN exam. There is a great deal of research on the topic of successfully passing the NCLEX-RN exam by first-time nursing graduates, specifically in the areas of theory-practice gap, preadmission criteria, and progression criteria. However, this research has resulted in no single proven approach to improving nursing graduates' performance (de Swardt, du Toit, & Botha, 2012). Serembus (2016) recommended institutions examine their nursing programs from admission to progression to graduation as part of a continuous improvement plan (CIP). Scholastic Aptitude Test scores, prenursing grade point average, and critical thinking scores are factors Serembus recommended as part of an institution's admission criteria for a prelicensure nursing education program. The progression component of a CIP recommends looking at the nursing curriculum, teaching strategies, and academic policies allowing nursing students to progress in their program. Serembus recommended using an NCLEX-RN predictor exam prior to graduation to identify students not likely to pass the exam. This will allow

administrators time to provide remediation before a nursing graduate sits for the exam. These recommendations and others discussed in the review of literature is why Wilhof College is investigating this topic from multiple areas of expertise.

Wilhof College is looking at this problem from many perspectives; but, the purpose of this study is to examine nurse educators' perceptions on integrating learning activities between the clinical and didactic courses, for the improved performance by nursing graduates on the NCLEX-RN exam. Flood and Robinia (2014) found that the coordination between clinical and didactic learning environments leads to improved student learning and nursing practice.

Definitions

Accreditation Commission for Education in Nursing (ACEN): Accreditation Commission for Education in Nursing is responsible for the specialized accreditation of nursing education programs (ACEN, 2014).

ATI Nursing Education: ATI Nursing Education is an educational company that offers online testing products to prepare nursing students for the NCEX-RN exam (ATI Nursing Education, 2017).

Board of Nursing (BON): Organization that protects the health, safety and welfare of the citizens within their state through the licensure and regulation of professional nursing (Pennsylvania Department of State, 2015).

Clinical classes: Application-based courses facilitated within simulation learning or a healthcare environment (Flood & Robinia, 2014).

Didactic classes: Theory based courses taught within a traditional brick and mortar classroom (Flood & Robinia, 2014).

National Council Licensure Exam Registered Nurse (NCLEX –RN): An exam to assess entry-level nurses' competencies against current practice (NCSBN, 2014).

NCLEX-RN pass rate: "The proportion of students from a program who pass the NCLEX-RN on their first attempt" (Spurlock, 2013, p.4).

Prelicensure nursing education program: Students within a nursing education program that upon graduation are eligible to take the NLEX-RN exam (Wilhof College, 2015).

*Simulation: "*A technique, not a technology, to replace or amplify real experiences that evoke or replicate substantial aspects of the real world in fully interactive manner" (Alexander et al., 2015, p.40).

Significance

Failure to pass the NCLEX-RN exam by nursing graduates on their first attempt is a significant problem for the students, the college or university, and the healthcare industry. Students who fail the NCLEX-RN exam can experience feelings of inadequacy, embarrassment, anxiety, loss of self-esteem, and guilt (Roa, Shipman, Hooten, & Carter, 2011; Yeom, 2013). These psychosocial feelings can contribute to a nursing graduate's ability to pass subsequent NCLEX-RN exam attempts (Roa et al., 2011). In addition to the emotional impact of failing the NCLEX-RN exam, nursing graduates also experience the financial hardship of losing the salary that would have come with an RN position. To

practice nursing in the United States, nursing graduates must pass the NCLEX-RN exam to earn their RN license (Trofino, 2013). The loss of this income may have an impact on nursing graduates' ability to pay on their student loans.

A college or university offering a prelicensure nursing education program, with ACEN accreditation, must meet ACEN's required pass rate for first-time test takers on the NCLEX-RN exam. "The Accreditation Commission for Education in Nursing requires programs to demonstrate a 3-year mean for the licensure pass rate for first-time NCLEX-RN takers that is at or above the national mean for the same 3-year period" (Taylor, Loftin, & Reyes, 2014, p. 337). Failure to meet this requirement results in negative impacts on the nursing program's status level with both the accreditation body and the state board of nursing. External perceptions of the nursing education program is also harmed by changes in accreditation status and failure to achieve acceptable pass rates by first-time test takers on the NCLEX-RN exam.

Because Wilhof College could not meet ACEN's requirement in 2014, their accreditation status changed to accreditation with conditions. This status mandates that Wilhof College submit a follow-up report addressing changes made to improve their first-time pass rate on the NCLEX-RN exam by nursing graduates (ACEN, 2015). According to the ACEN Accreditation Manual (2015), an institution can only be on accreditation with conditions status for a maximum of two years. Failure to meet compliance for all six ACEN standards results in loss of accreditation.

First-time NCLEX-RN exam rates serve as one measure of quality of a nursing education program and its ability to prepare students for entry into the profession of nursing (Hadenfeldt, 2012). In addition to the accreditation consequences, decreases in first-time pass rates by nursing graduates on the NCELX-RN exam affect a nursing education program's reputation, recruitment of students, and the ability to acquire grants and government funding (Trofino, 2013). According to Taylor et al. (2014), it is not possible to quantify the time, energy, and fiscal resources needed to counter the negative impact of public notification surrounding a decrease in a nursing program's first-time pass rate by nursing graduates.

The final stakeholder affected by a low pass rate on the NCLEX-RN exam by Wilhof College nursing graduates, are the health systems expecting to hire these students. With the anticipated need for RNs in the next 6 to 9 years, passing of the NCLEX-RN exam is crucial by first-time nursing graduates (Yeom, 2013). Health systems must use temporary nursing staff or pay overtime to existing RNs to cover the shortage cause by nursing graduates who did not pass the NCLEX-RN exam on their first attempt. This can result in increased expenses for the health system and a higher patient-nurse ratio. The significance of this study is to examine the perceptions of nursing educators, on the integration of learning activities between the clinical and didactic classes, for the improved performance by first-time nursing graduates on the NCLEX-RN exam. The outcomes from this study will benefit the students at Wilhof College and the health systems that hire them.

Guiding/Research Question

Students enroll in a nursing education program to become licensed professional nurses. To demonstrate the required competencies to enter the field of nursing, recent graduates must pass the NCLEX-RN exam after completing their academic program. The NCSBN conducts a practice analysis every 3 years to ensure the exam assesses the current knowledge and skill requirements for entry-level nurses. Written at the analysis, synthesis, and evaluation levels, the NCLEX-RN test questions require higher order, critical thinking skills by students.

Research conducted in the areas of admission criteria, curriculum mapping with the NCLEX-RN test analysis, teaching strategies, progression policies, and the use of NCLEX-RN predictor exams are all variables examined for potential correlation to success on the NCLEX-RN exam. Research examining how to bridge the theory-practice gap occurring between a student's theoretical knowledge gained in the classroom and their expectation of application in the clinical environment, has shown potential for improvement on the NCLEX-RN exam by first-time nursing graduates (Flood & Robinia, 2014).

Despite all the research on improving first-time nursing graduate performance on the NCLEX-RN exam, there is no proven method to ensure success on the licensure exam (de Swardt et al., 2012). There are enough positive findings in the research to warrant further investigation at local sites to determine which variables may result in improved performance by that institution's first-time nursing graduates on the NCLEX-

RN exam. The guiding research question for this study is: What are the perceptions of nursing educators about the integration of learning activities, between clinical and didactic courses, for the improved performance by first-time nursing graduates on the NCLEX-RN exam?

Review of the Literature

The two major databases used for this review of literature were Cumulative Index to Nursing and Allied Health (CINHAL) and Academic Search Complete, using the following key words: *NCLEX, nursing, education, accreditation, curriculum alignment,* and *theory-practice gap.* The search resulted in over 40 articles relevant to this doctoral study. However, there is limited research on nursing educator perceptions on the integration of learning activities between clinical and didactic courses. I determined I reached saturation when no new searches using a combination of the above key words resulted in peer-reviewed articles pertaining to improving student performance on the NCLEX-RN exam within the last 5 years.

To prepare for this study, the literature review begins with a complete overview of Benner's theory of skill acquisition. Through explanations for each of the five levels of Benner's theory are included, as this serves as the conceptual framework for the study. Anticipating the potential cause of failure on the NCLEX-RN exam by first-time nursing graduates is a result of a gap in applying theoretical knowledge to the clinical environment; included is a comprehensive summary on theory-practice gap.

Comprehensive overviews on the factors relating to nursing students, nursing educators, nursing curriculum, accreditation, state BON and their impact on the NCLEX-RN exam are included. This critical analysis of research in the area of improved performance on the NCLEX-RN exam provides the foundation needed to examine the perceptions of nursing educators at Wilhof College, on the integration of learning activities, between clinical and didactic courses.

Conceptual Framework

Benner's (1984) theory of skill acquisition from novice to expert serves as the conceptual framework for this study. Realizing that nurses develop through the same five levels of skill acquisition through increased education and experience, Benner generalized the Dreyfus model of skill acquisition from chess players and pilots to nurses. Benner correlated the transition nurses go through in each stage of Dreyfus's model to their reliance from knowledge to experience as they develop within their profession.

There are five levels of proficiency within Dreyfus's model of skill acquisition: novice, advanced beginner, competent, proficient, and expert (Benner, 1984). Decreased reliance on theoretical concepts, with an increased use of knowledge from prior experiences, is one element of growth in Dreyfus's skill development. Viewing clinical environments from a holistic perspective of needs, instead of a task completion perspective, is the other element of transition in skill development for nurses.

Levels of Proficiency

For each of Dreyfus's five levels of skill acquisition, Benner (1984) described the characteristics and behaviors as they relate to the profession of nursing. Experiences gained in the clinical environment allow nurses to advance through the five levels of skills acquisition (Mennella, 2016). Each level builds upon the prior competencies as nurses gain knowledge, skills, perceptions, intuition, wisdom, and experiences (Kaminski, 2010). Benner estimated it can take up to five years of experience for a nurse to progress from one skill level to the next and notes not all nursing professionals will achieve expert status.

Level I: Novice. The first level of proficiency is novice, these individuals possess no experience with the skill they are to perform and have learned general guidelines for performing nursing tasks (Benner, 1984; Mennella, 2016). They have only received instruction, either from nursing faculty or supervisor, on the concepts and theories related to the situations they will experience in the clinical environment (Mennella, 2016). For nurses, this level focuses on facts and task-oriented outcomes, such as patient assessment, intake of weight, temperature, blood pressure, and pulse (Benner, 1984). The focus of nursing education is the rules and guidelines to follow within the clinical environment. The challenge arises when novice nurses need to make an exception to a process, but lack the experience and rules to make those adjustments. Instructional feedback and self-observation will help to improve the novice to the advanced beginner level (Kaminski, 2010).

Level II: Advanced beginner. As nurses transition from novice to advanced beginner, they demonstrate marginally accepted performance in clinical situations (Mennella, 2016). This is a result of experiences gained in actual patient care, which allowed nurses to demonstrate their knowledge gained through recurring situations. Increased experience allows the advanced beginner nurse to identify key aspects of a patient situation (Benner, 1984). Benner (1984) defined these aspects as meaningful components to a situation that require nurses to prioritize tasks. Advanced beginner nurses still need support from faculty members or mentors on adjusting performance based on the need of the situation.

Level III: Competent. The third phase of Benner's (1984) model is a competent nurse with fewer than three years' experience and the ability to develop a clinical plan. With specific experience in the same patient care environment or specialty, the competent nurse can develop patient care plans based on conscious, abstract, and critical thinking skills developed over this period of time (Benner, 1984; Mennella, 2016). This plan allows them to identify the potential aspects to be alert for when working with a patient. The speed and flexibility to address the different aspects of a patient situation is what differentiates the competent level from the proficient level of nursing. While at this level, the competent nurse begins developing long-term professional development goals (Mennella, 2016).

Level IV: Proficient. At Level IV, a nurse begins to perceive a patient situation as a whole, rather than predefined aspects (Benner, 1984). This is demonstrated through

a proficient nurses' improved decision-making, confidence in skills, judgment, and abilities (Mennella, 2016). Their prior experiences prepare them to modify plans in accordance with the greatest needs of the patient (Benner, 1984). Decision-making requires less time because a proficient nurse does not need to consider every option, but can focus on the most effective choice. This is a result of their ability to identify relevant and irrelevant information specific to patient care (Mennella, 2016).

Level V: Expert. At Level V, nurses no longer rely on rules or guidelines, but on their vast background of experiences (Benner, 1984). They have an intuitive grasp of a patient condition and operate from a deep understanding of the situation. They are fluid, flexible, and highly proficient in their decision-making. The challenge for others is that an expert nurse often has trouble articulating how and why they perform in these situations. Prestigious positions and/or higher salary compensation is often associated with a nurse at the expert level (Mennella, 2016). Attaining expert status does not indicate the end of professional development for a nurse, as there is a need to keep up to date with new evidence in their field (Lester, 2005). Table 2 is a summary of Benner's model of skills acquisition by knowledge, standards of work, autonomy, coping with complexities, and perception of context for each of the five stages.

Table 2

Novice-to-Expert Scale

Stage	Knowledge	Standard of Work	Autonomy	Coping with complexity	Perception of context
Novice	Minimal knowledge without connecting it to practice	Unlikely to be satisfactory unless closely supervised	Needs close supervision	Little or no conception of dealing with complexity	Tens to see actions in isolation
Advanced Beginner	Working knowledge of key aspects of practice	Straightforward tasks likely to be completed at an acceptable standard	Able to achieve some steps using own judgement,	Appreciate complex situations but only to achieve partial resolution	Sees actions as a series of steps
Competent	Good working and background knowledge of area of practice	Fit for purpose, though may lack refinement	Able to achieve most tasks using own judgement	Copes with complex situations through deliberate analysis and planning	Sees actions at least partly in terms of longer-term goals
Proficient	Depth of understanding of discipline and area of practice	Fully acceptable standard achieved routinely	Able to take responsibilit y for own work	Deals with complex situations holistically	Sees overall picture and how individual actions fit within it
Expert	Vast knowledge of discipline	Easily achieved	Able to take responsibilit y for going beyond existing standards	Holistic grasp of complex situations	Sees overall picture and alternative approaches

Adapted from Lester, S. (2005). Novice to expert: the Dreyfus model of skill acquisition. *Stan Lester Developments. Retrieved on December*, *1*, 2012

Wilhof College

At Wilhof College, the ASN nursing students begin their academic program at the novice level. They have limited, to no prior experience as a nurse in a clinical setting

prior to starting the program. ASN nursing students begin their clinical exposure within their first semester of classes (Wilhof College, 2015). Using the research on Benner's (1984) skills acquisition model and the findings from this study, Wilhof College has the potential to develop the skills of nursing graduates to align more closely with the advance beginner level. Purposeful integration of learning activities, to bridge the theory-practice gap between clinical and didactic courses within Wilhof College's ASN program could support this growth. The purpose of this study was to examine the nursing educators' perceptions on the integration of learning activities as a viable option.

Theory-Practice Gap

The theory-practice gap is the "discrepancy between (1) what student nurses are taught in the classroom setting and the theoretical aspects of nursing and (2) what they experience on clinical placement" (Dadgaran, Parvizy, & Peyrovi, 2012, p.1713). The theory-practice gap first came into nursing research in the early 1990s when nursing education moved from the hospital setting and into higher education (Gardner, Rolfe, & Ghroum, 2013). This geographical separation created the first chasm between theory and nursing application. As nursing education continued to develop in higher education, the geographical separation between didactic and clinical faculty persisted. Nurses, students, educators, and clinical managers perceive the theory-practice gap differently.

Student perceptions. The geographic separation between theoretical and clinical course work, contributes to the lack of experience nursing students have in applying theoretical knowledge clinical application (Pijl-Zieber, Barton, Awosoga, & Konkin,

2015). The theory-practice gap is most prevalent among nursing students, who given their novice status, are governed by the theories of nursing and not by critical thinking and reasoning skills (Scully, 2011). The theory-practice gap leads to confusion, stress, and anxiety for students because of their inability to apply in practice what they learned in theory (Chuan & Barnett, 2012; Dadgaran et al., 2012).

Better patient outcomes occur when students understand the theory behind practice, so they can react to unforeseen situations (Wilkinson, Smallidge, Boyd, & Giblin, 2015). Students can experience a lack of confidence when dealing with challenging clinical situations, because of the theory-practice gap. Without purposeful integration of learning activities between the clinical and didactic courses, students experience fragmented learning in their nursing education program (Flood & Robinia, 2014).

Nursing students emphasized the importance of bridging the theory-practice gap between didactic and clinical nursing educators, describing their desired outcome as a rhythmic relationship between the theory materials and the practical training (Saifan, AbuRuz, & Masa'deh, 2015). Students in this study found it challenging to link their theoretical nursing information with clinical practice, some indicating they thought theoretical education and clinical practice were two separate components of their program. Saifan et al., (2015) suggested cooperation and communication between the theory and clinical nurse educators would help in bridging the gap.

Nursing educators and nurse managers. Numminen et al. (2014) quantitatively determined that nursing educators' assessments of novice nurses' competencies were significantly higher than nursing managers' assessments. Numminen et al. suggested this variance might be a result of the different perceptions nursing educators have, compared to nursing managers, on the expectations of a novice nurse. Nursing educators may assess students against the requirements needed to pass the NCLEX-RN exam, while nursing mangers evaluate novice competencies based on the level needed to succeed in the clinical environment. Consensus between the two groups was in the areas of core nursing tasks. Noteworthy differences were related to developmental and evaluation tasks, coaching and mentoring activities, and the use of evidence-based knowledge. These deficits align with the characteristics associated with Benner's (1984) novice stage in skill acquisition. Numminen et al. (2014) recommended cooperation between nursing education and clinical practice to bridge the gap between theory and practice.

Regardless of whether a nursing education program is preparing students for the NCLEX-RN exam or the skills needed for entry into nursing practice, current nursing curriculum does not provide enough opportunities for students to apply independently theoretical principles to clinical situations (Schub, 2015). The lack of opportunities within the current nursing education curriculum, to apply theory to clinical practice, does not have a simple solution. Wilkinson et al., (2015) stated that "a gap also exists in the research identifying learning methods to reduce the theory-practice gap and improve student's ability to relate classroom learning to clinical practice" (p. 331). The gap in

nursing education, which contributes to the theory-practice gap, continues after nursing graduates pass the NCLEX-RN exam and begin practicing as professional nurses (Pijl-Zieber et al., 2015). Newly licensed nurses lack the clinical experience to put into practice what they learned in their education program (Freeling & Parker, 2015).

Students

In addition to research on the theory-practice gap, other researchers have examined the impact individual, cognitive, and academic factors play on a nurse graduate's success on the NCLEX-RN exam. As part of Serembus's (2016) recommended continuous improvement plan, colleges and universities must look to research to help determine which predictive factors will help in determining success within their nursing education program and on the NCLEX-RN exam. Successful completion of the requirements for a prelicensure nursing program is the first step for nursing students, in reaching the end goal of success on the NCLEX-RN exam.

Individual factors. Research on individual metrics correlating to success on the NCLEX-RN exam have provided varying results. English as a first language consistently delivers a positive correlation with passing the NCLEX-RN exam (Sears, Othman, & Mahoney, 2015). Test anxiety, the fears associated with failing examinations or an entire academic program, is a common barrier among nursing students that can affect their success on the NCLEX-RN exam (Elder, Jacobs, & Fast, 2015). Motivation is another factor that can impede a nursing student's success within in their academic program. Simon et al., (2013) determined that older nursing students were more mature and self-

directed in their learning, resulting in an increased probability for success on the NCLEX-RN exam.

Cognitive factors. Individual cognitive factors play a role in a nursing student's academic success and performance on the NCLEX-RN exam (Sears et al., 2015). Koestler (2015) determined the use of a boot camp for incoming nursing students successfully prepared them for the rigor of nursing school. Thomas and Baker (2011) found that students who completed a learning style assessment and could identify their learning style were more adaptive in their academic classes. Sears et al., (2015) determined that visual, writing, and oral learning styles, along with strong test-taking capabilities, have a positive correlation with success on the NCLEX-RN exam. Thomas and Baker also found that students who use strategic and deep learning approaches were more successful in their academic programs. One approach identified by the researchers were students who reviewed missed NCLEX-RN type questions, to determine key concepts for review, were more successful on the licensure exam.

Academic factors. Academic work completed prior to enrolling in a prelicensure nursing education program, as well as the academic success within a nursing education program, have been researched to identify possible correlations to success on the NCLEX-RN exam. Shaffer and McCabe (2013) determined higher preadmission grade point average (GPA) correlated to a greater chance of passing the NCLEX-RN exam. However, this finding does not correlate to passing the NCLEX-RN exam on the first attempt. The same positive correlation was determined between preadmission science

courses and passing the NCLEX-RN exam, but not necessarily on the first attempt. Repeated attempts at a science course prior to enrolling in a nursing education program correlated negatively with passing the NCELX-RN exam on the first attempt.

Once enrolled within a nursing education program, a student's overall nursing program GPA, specifically their GPA in science courses, and the grades earned in advanced medical-surgical and biology course have repeatedly correlated positively with success on the NCLEX-RN exam (Cox-Davenport & Phelan, 2015; Koestler, 2015; Sears et al., 2015). Elder et al. (2015) confirmed similar findings, but their correlation was with a student's overall G.P.A. and along with science courses, positively correlating with success on the NCLEX-RN exam.

Simon et al. (2013) examined both preadmission predictors, as well as those indicators within a nursing education program. It was determined that high academic performance in biology and chemistry, prior to enrollment, correlated with a higher success rate on the NCLEX-RN exam. Academic performance in these same two courses, within a nursing education program, along with a student's overall GPA were determined to be positive predictors of success on the NCLEX-RN exam. Many predictors correlate, either positively or negatively, with a nursing graduate's performance on the NCLEX-RN exam; however, none are guarantees of outcomes. Students, faculty members, and support services can change the trajectory of a nursing student's performance on the NCLEX-RN exam.

At-risk students. Identifying negative predictors of performance on the NCLEX-RN exam, either during the enrollment process or during a student's progression in their nursing program, allows remediation services for success. This becomes a partnership for success between the college or university and the student. Students who identify their strengths, weaknesses, and potential barriers to academic success each semester were more successful in their programs (Thomas & Baker, 2011). These students used self-evaluation results to build individualized intervention plans for academic success. Part of these plans include knowing what resources were available to them to be successful in their coursework and on the NCLEX-RN exam (Pennell-Sebekos, 2015). Koestler (2015) recommends that nursing students mentor and tutor one another for academic success.

Offering psychological counseling, test-taking strategies, and time management techniques for high-risk students experiencing test anxiety could help with academic success (Koestler, 2015). Offering specific remediation for students who perform poorly on examinations was another option recommended in this study to improve nursing students' success within their coursework. Sears et al., (2015) also concluded that nonacademic services such as stress management and mental health support offered to nursing students throughout their programs had positive academic outcomes.

Nurse Educators

Nurse educators have a responsibility in helping nursing students to be successful in their academic programs, as well as on the NCLEX-RN exam. Nurse educators

contribute to the success of nursing students by staying appraised of changes to the NCLEX-RN exam, adapting their teaching styles, and attending faculty development sessions (Elder et al., 2015).

NCLEX-RN exam. Success on the NCLEX-RN exam requires nursing graduates to possess more than just foundational nursing knowledge (Geist & Catlette, 2014). To answer the licensure questions correctly, nursing students must be able to apply formalized, generalized, information, specific to situations in the clinical environment (Scully, 2011). Nurse educators must stay current with the changes to the exam and modify their teaching accordingly prepare students for the licensure exam (Pennell-Sebekos, 2015). Nursing faculty must work to bridge the theory practice gap, by understanding the type of clinical questions that are on the NCLEX-RN exam.

Teaching approaches. Various researchers have examined different approaches used by nursing faculty, within their classes, to prepare students for academic and licensure success. One simple changed identified by Koestler (2015) was requiring mandatory attendance by nursing students in their capstone class. Thomas and Baker (2011) recommended the integration of computerized multiple-choice exams in the first semester of nursing school to acclimate students to the style of testing used in the NCLEX-RN exam. These computerized multiple-choice predictive testing models allow nursing faculty to identify high miss content areas, such as pharmacology and pathophysiology, within their coursework (Koestler, 2015).

However, Sears et al. (2015) noted that there is great variability in the research regarding student performance on these predictive testing models and success on the NCLEX-RN exam. Thomas and Baker (2011) recommended using the results from the predictive testing models to identify and differentiate areas of confusion that require further explanation by nursing students. They also recommended that nursing faculty use the test/retest model for high missed areas so students can take ownership of their learning and see documented improvements in areas of concern.

Faculty development. To prepare nursing students for the NCLEX-RN exam and the field of nursing, faculty must stay current in their teaching practices. The creation of test questions, that promote clinical decision-making and critical thinking, needed for academic and licensure success, is one area for faculty development (Hadenfeldt, 2012). Koestler (2015) also determined development sessions in the areas of simulation instruction, teaching critical thinking, online instruction, and scholarly writing would benefit nursing faculty. While these topics focus on specific classroom instruction, Carr (2011) recommended curriculum review, integrated applications, and programmatic assessment as possible faculty development offerings.

Nursing Education Curriculum

Prelicensure nursing education curriculum promotes excellence in nursing practice and success on the NCLEX-RN exam. Because of the large amounts of information within the curriculum and the limited amount of instruction time nursing faculty have with students; it is necessary that nursing educators prioritize the required

elements of the curriculum (Geist & Catlette, 2014). Sears et al., (2015) identified a need for nursing curriculum to focus on critical thinking, specifically in the areas of problem solving, decision-making, and diagnostic reasoning because of the high correlation with success on the NCLEX-RN exam. Freeling and Parker (2015) supported the contention that the most difficult adjustment for nursing students into their profession was in the area of critical thinking. Opportunities exist within nursing education curriculum to integrate learning activities focused on critical thinking.

Didactic classes. At one time, nursing didactic classes served as the means to lecture about theoretical information to students and the clinical environment allowed them to practice their skills. Changes to the NCLEX-RN exam now require didactic classes to integrate learning activities that promote critical thinking in clinical environments. Scully (2011) found that integrating the cognitive and affective dimensions of nursing skills in didactic classes, along with the manual dexterity requirements of the clinical setting, helps to reduce the theory-practice gap for students. This change allows students to understand the philosophy and research behind a skill beyond just rote memorization.

Problem-based learning activities. Problem-based learning activities are another tool used by didactic educators to bridge the theory-practice gap and to develop critical thinking skills in nursing students. These activities provide nursing students with an opportunity to cope with unexpected problems, adapt to change, reflect on learning, and develop critical thinking skills (Marañón & Pera, 2015). Improving critical thinking

skills increases the confidence levels of nursing students during clinical time, helping to connect nursing theory with application (Wilkinson et al., 2015).

Critical thinking is "defined as a process of purposeful, insightful judgment that involves the development and effective utilization of multiple dimensions of cognition to interpret and analyze a situation and arrive at and act on an appropriate conclusion or solution" (Schub, 2015, p.1). It is a key component for nursing practice and viewed as a learnable skill, resulting in an expected outcome within nursing education programs (Schub, 2015). There are numerous learning activities that can foster critical thinking, some being reflection, concept mapping, questioning, problem-based learning, and simulation (Burrell, 2014; Schub 2015).

Similar to simulation, problem based learning activities can be integrated into both didactic and clinical curriculums, potentially with the same objectives. Problem-based learning activities allow students to collaborate on actual problems within their field allowing them to discover various options for handling a situation (Schub, 2015). The process of discovery is what develops critical thinking skills in the students. These types of learning activities require nursing students to be active participants in their learning (Lyckhage & Pennbrant, 2014).

Simulation learning activities. Simulation is an effective pedagogy didactic nursing educators can use to integrate theory and practice within their curriculum. Bevan, Joy, Keeley, and Brown (2015) determined simulation enhanced the integration of knowledge and skills applied to patient care within a didactic curriculum. The use of a

high-fidelity simulator allowed nursing students to identify gaps in their knowledge in a safe learning environment (Schub, 2016). After completing simulated learning activities, students perceived an increase in their self-efficacy, helping to narrow the theory-practice gap (Robb, 2012). Skrable and Fitzsimmons (2014) reported that one prelicensure nursing education program increased their pass rate on the NCLEX-RN exam by 3.69% following the integration of simulation in the curriculum

Although the pedagogy of simulation can help bridge the theory-practice gap and prepare students for the NCLEX-RN exam, Alexander et al. (2015) recommended nursing education programs integrate this new learning activity slowly and purposefully into their curriculum. The recommendation for purposeful integration is to assure the use of simulation as an educational tool is used properly to achieve the desired curricular objectives. Nurse educators require development on the skills needed to successfully integrate simulation into their curriculum. Alexander et al. recommended faculty development on this use of simulation pedagogy in nursing education curriculum. Skrable and Fitzsimmons (2014) stated that "educators need to be properly trained in order to guide the simulation experience for effective learning" (p. 124). Debriefing is one example of a faculty development topic needed for the successful integration of simulation into a nursing education curriculum. Debriefing provides an opportunity for contextual learning by allowing nursing students to connect information obtained in their didactic class to the simulated learning experience (Gore & Thomson, 2016).

Use of simulation within nursing education curriculum provides an opportunity to support the development of nursing students from novice to advanced beginner, using Benner's (1984) skill acquisition model (Gore & Thomson, 2016). This potential growth in nursing students can occur if simulated learning activities adapt to students' increased theoretical knowledge as they progress in their program. Simulated clinical experiences allow nursing students to assess, plan, implement, and evaluate their nursing care in a safe learning environment. There is no clear plan for the quantity of simulation hours to include in a nursing education program (Alexander et al., 2015). This and the need for more research on the topic of faculty development on the use of simulation, supports the recommendation for a slow and purposeful adoption of simulation within a nursing education program.

Clinical learning environment. Clinical nursing educators play a key role in the use of simulation to bridge the theory-practice gap and to prepare students for the NCLEX-RN exam (Chuan & Barnett, 2012; Démeh & Rosengren, 2015; Scully, 2011). Marañón and Pera (2015) determined the theoretical knowledge within nursing education gave students an increased sense of security because they believed that nursing theory was necessary for clinical application. These findings support the purpose of this study, which is to examine the perceptions of nursing educators on the integration of learning activities between clinical and didactic courses.

Clinical educators. Clinical educators oversee nursing students in their application of patient care within various clinical settings. These instructors are RNs who

educate students on the knowledge, skills, working methods, ideas, and values of the nursing profession (Marañón & Pera, 2015). Many clinical instructors are professional nurses by trade, not educators, and may find the transition challenging if they do not have any prior teaching experience or instruction in educational theory (Weidman, 2013). Weidman correlated this transition to Benner's (1984) model of skill acquisition, where as a nursing professional they are proficient or expert, but as clinical educators, they are a novice. This premise supports the purpose of this study to examined nursing educator perceptions on the integration of learning activities between clinical and didactic courses. Figure 1 illustrates the relationship Cunningham, Wright, and Baird (2015) envision for key stakeholders within medical radiation education. Their findings do not support the generalization to nursing education, but the results from this study could support this model of collaboration among key participants within Wilhof College's associate nursing education program.

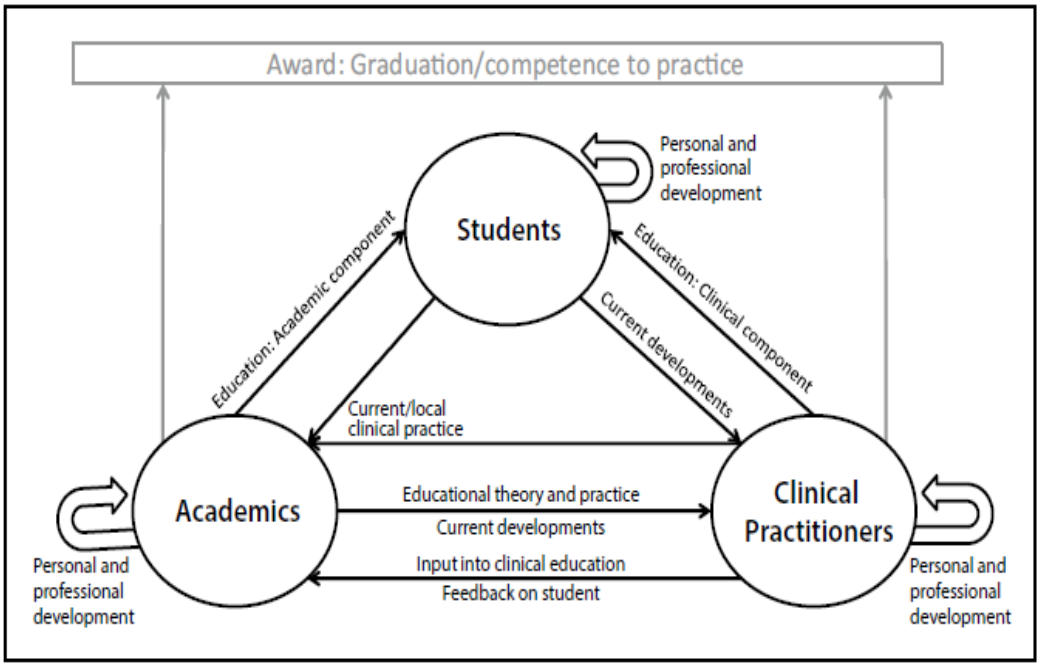

Figure 1. Major relationships and knowledge flow in relation to education of medical radiation professionals. ©2015, the American Society of Radiologic Technologists. All rights reserved. Reprinted with permission of the ASRT for educational purposes. Letter found in Appendix B.

Clinical curriculum. Didactic nursing curriculum use simulation to educate students on the theory behind the application of skills, focusing primarily on the why and secondarily on the how. While simulation is used in clinical curriculums to allow students the opportunity to apply critical thinking skills by adapting to various patient care situations. Wall, Andrus, and Morrison (2014) determined there was a lack of sufficient time allotted for students to practice their skills, engage in reflection over their learning, and develop their critical reasoning skills within the clinical curriculums they reviewed. Wall et al., recommended the increased use of simulation within the clinical education curriculum to address these areas. This recommendation would also support

the findings by Pijl-Zieber et al. (2015) who it was determined a lack of intentional pedagogy between the didactic and clinical curriculums resulted in students being unable to make the connection between the application of skills and theoretical nursing concepts.

> When students see the same learning strategies used in class and in clinical, the instructional learning will improve. Students will become more comfortable with the higher level processing activities and begin to form habits that facilitate not only success on the NCLEX-RN exam but also in practice. (Bristol, 2015, p. 152)

In addition to using simulation to bridge the theory-practice gap and to develop critical thinking skills in student nurses, Cunningham et al. (2015) recommended the following learning activities: skills labs, role playing, reflective diaries, journals, case-based learning, task-based learning, and specialized tutorials. Working together didactic and clinical faculty have the opportunity to support each other, while providing nursing students with a learning experience that will prepare them for the NCLEX-RN exam and the nursing profession.

Accreditation

Accreditation is defined as "the voluntary process by which a nongovernmental agency or organization appraises and grants accredited status to institutions and/or programs or services that meet predetermined structure, process, and outcome criteria" (American Nurses Credentialing Center's Commission on Accreditation, 2012, p. 2). The purpose of accreditation is to hold an institution accountable for adhering to an accrediting body's standards, providing evidence of outcomes in alignment with criteria,

and ensuring the public that the organization is functioning according to quality standards. National nursing accreditation is a voluntary, peer-reviewed process that nursing education programs opt to participate in to demonstrate their commitment to quality standards (Ellis & Halstead, 2012; Hooper & Thomas, 2014; Smyer & Colosimo, 2011). An institution's commitment to meeting ongoing accreditation standards conveys a dedication to self-assessment, continued growth, and improvement in the area of nursing education (Klein & Ingwerson, 2012; Spector & Woods, 2013).

The National League for Nursing Accrediting Commission (NLNAC) was established in 1949 to ensure competent nurses were in the workforce now works closely with NCSBN to develop standards for all nursing education programs that will ensure the safe practice of nursing for the public (Roa et al., 2001). Under the direction of the NCSBN, each state BON ensures quality-nursing care through oversight of nursing education programs, the NCLEX-RN, nursing practice, and disciplinary actions (NCSBN, 2016). State BON evaluates all aspects of an institution's nursing education program to ensure graduates will be safe and competent nurses (Hooper & Thomas, 2014).

ACEN accredits approximately 1,300 nursing education programs in the United States, including Wilhof College's associate nursing education program, with an additional 200 programs waiting for approval (Wood, 2013). ACEN has over 600 volunteers who assess and ensure that an institution's nursing curriculum engages in effective educational practice (Spector & Woods, 2013). ACEN reviews its standards

every 5 years to ensure alignment with current best practices in the field of nursing (Tanner, 2013). ACEN is the only national accreditation organization recognized by the U.S. Department of Education as a Title IV gatekeeper (NCSBN, 2016). This status allows students attending an institution with ACEN accreditation access to federal student aid.

In 2011, NCSBN recommended that state BON require national accreditation for all prelicensure nursing education programs by 2020 (NCSBN, 2016). The 2016 NCSBN Environmental Scan reported 13 BONs were requiring national accreditation for prelicensure nursing education programs within their states, with another seven states discussing the recommendation. The need for a compatibility between a state BON's requirements, with ACEN standards, can make this recommendation challenging (Hooper & Thomas, 2014). Using accreditation status as a criterion for maintaining state BON approval would help reduce the amount of administrative tasks for BON and the number of reports generated by nursing education program.

All institutions offering a prelicensure nursing education program must receive and maintain their state BON approval for their nursing graduates to sit for the NCLEX-RN exam (Klein & Ingwerson, 2012). Both accreditation bodies, including ACEN, and state BON use an institution's first-time pass rate on the NCLEX-RN exam as one metric of quality to assess a nursing education program. ACEN requires nursing education programs to demonstrate a 3-year mean by first-time nursing graduates on the NCLEX-RN exam (Taylor et al., 2014). If a nursing education program's three-year mean fails

below the national average, the institution can expect repercussions from ACEN, the state BON, and the public.

In the study done by Taylor et al., (2014) after their institution's first-time pass rate returned to 95% for 3 consecutive years, the nursing education program still felt the effects of being on warning status by their accreditors and state BON for dropping below the national average, by lower than expected applications into the program. Despite significant efforts by the marketing department, rumors within the community persisted that the program closed or would be closing soon. The first-time pass rate on the NCLEX-RN exam as a metric of quality for a nursing education program can have large consequences for institution unable to meet this national and state requirement.

The review of literature on the factors that contribute to a first-time nursing graduate's success on the NCLEX-RN exam reveals there is no perfect formula for every nursing education program to follow to ensure their students' success. Enrollment criteria designed to ensure success on the NCLEX-RN exam could contribute to a lack of diversity within the nursing education program (Taylor et al., 2014). Academically strong students could pass the NCLEX-RN exam even if a nursing education program's faculty, curriculum, or support services were below average. For these reasons, the purpose of this study is to examine one element of potential benefit to nursing graduates on the NCLEX-RN exam. I examined the perceptions of nursing educators on the integration of learning activities between clinical and didactic courses.

Implications

The mission of Wilhof College's associate nursing program is to prepare students for excellence in practice in the field of nursing. The state BON and ACEN accreditation are two means Wilhof College uses to ensure the quality of their nursing education program. These designations indicate to the public a high commitment to academic quality and public safety in the field of nursing. Because the first-time pass rate on the NCLEX-RN exam is one metric, for both the state BON and ACEN, in terms of a program's quality, it is imperative that Wilhof College maintains a high pass rate. I examined the perceptions of clinical and didactic nursing educators about the integration of learning activities between clinical and didactic classes to prepare students for the NCLEX-RN exam.

Freeling and Parker (2015) recommended the careful analysis and formulation of teaching strategies to address the theory-practice gap. Without strong pedagogy, the gap will widen and students will not learn from their clinical learning environments (Pijl-Zieber et al., 2015). Identifying learning activities that will bridge the theory-practice gap at Wilhof College should help to better prepare the ASN nursing students for the NCLEX-RN exam. The analysis of data from this study could result in the creation of faculty development sessions on learning activities such as simulation, problem-based learning, reflection, and critical thinking should educate the nursing faculty on integration options. The graduation of well skilled nursing students will result from a collaborative

learning process that supports the integration of theory and practice in the curriculum (Démeh & Rosengren, 2015).

Bevan et al. (2015) recommend further research on closing the theory-practice gap to improve patient care and to improve a student's readiness for the NCLEX-RN exam. Much of the research focuses on either clinical or didactic teaching strategies to bridge the theory-practice gap; I examined nursing educators' perceptions on the purposeful integration of learning activities between the clinical and didactic courses resulting in the creation of faculty development sessions. There is the potential for social change from this research in developing qualified nurses to serve the public, through the successful passing of the NCLEX-RN exam.

Summary

I addressed Wilhof College's problem of maintaining a pass rate above the national average on the NCLEX-RN exam by first-time nursing graduates. This is an important topic to investigate for the institution for several reasons: maintaining ACEN accreditation, maintaining state BON approval, and confidence by stakeholders that Wilhof College's ASN program is preparing students for the field of nursing. Using Benner's (1984) model as the conceptual framework allowed me to review the literature on how to prepare students for the advanced beginner level. A review of the literature supported the need to bridge the theory-practice gap from the student and faculty perspectives, as well as possible changes to an institution's nursing education curriculum. The purpose of this study was to examine the perceptions of nursing educators about the

integration of learning activities between clinical and didactic courses to prepare students for the NCLEX-RN exam. Section 2 Methodology is a rationale for why a qualitative study is the best approach for this research question, the sampling approach used to select participants, and the process for data collection and analysis.

Section 2: The Methodology

Introduction

The purpose of this study was to examine the perceptions of nursing educators at Wilhof College in regard to the integration of learning activities between clinical and didactic courses, for the improved performance by nursing graduates on the NCLEX-RN exam. The participants' knowledge and experiences at Wilhof College allowed for the examination of the following factors for this study: (a) Benner's (1984) model of skill acquisition, (b) the theory-practice gap within nursing education, (c) clinical and didactic curriculums, (d) the role of program accreditation, and (e) the NCLEX-RN exam. The results from this study may lead to curricular revisions within the associate nursing education program, the creation of faculty development sessions, and to greater engagement between didactic and clinical nursing educators.

Research Design and Approach

Design

Polgar and Thomas (2008) defined qualitative research as the "disciplined enquiry examining the personal meanings of individuals' experiences and actions in the context of their social environments" (p.84). Based on this definition, a qualitative research design best aligned with the purpose of this study, to examine the perceptions of nursing educators at Wilhof College, on the topic of integrating learning activities between clinical and didactic courses, for the improved performance by nursing graduates on the NCLEX-RN exam. In contrast to a quantitative design, which studies general

characteristics of larger populations, across specific variables, a qualitative design allows for the in-depth understanding of a topic from a smaller group of specific individuals (Polgar & Thomas, 2008). Qualitative research focuses on a local phenomenon, through the collection of interviews and observations, and then analyzed for common themes or patterns (Johnson & Christensen, 2008).

A quantitative research design often collects numerical data for analysis and presumes an opportunity exists to generalize the findings within the field of study (Johnson & Christensen, 2008). In a mixed method design both quantitative and qualitative data are both simultaneously or with one approach following the other, collected and analyzed (Creswell, 2012). Because I examined the specific perceptions of nursing educators at Wilhof College, there were no numerical data to collect on the research topic, and the findings are not transferable to other institutions; using a qualitative research method was the appropriate selection for this study.

Approach

I used a qualitative descriptive approach to allow for the analysis and reporting of the research topic as described by the participants. The outcome of qualitative descriptive study is a comprehensive summary of the research topic in the words and descriptions used by the participants (Sandelowski, 2000). Though influenced by phenomenological and ethnographical approaches to qualitative research, a qualitative descriptive approach primarily aligns with the tenets of naturalistic inquiry. This form of

inquiry focuses on examining a research topic without predetermined theories or assumptions.

A qualitative descriptive approach is less prescriptive than other research designs and therefore not often described in research method textbooks (Polit & Beck, 2014). There is also limited knowledge on the use of qualitative descriptive methodology in health research (Neergaard, Olesen, Andersen, & Sonderaard, 2009). The constraints of other research designs is one reason this approach is used in nursing research (Polit & Beck, 2014; Sandelowski, 2000). Neergaard et al. (2009) found a qualitative descriptive study the appropriate research method for gaining preliminary insight into a specific topic. A qualitative descriptive approach for this study allowed for the analysis and reporting of data, in the participants' own words, without the constraints of other design methods.

Setting, Population, and Sample

Setting

The site for this study was a nonprofit institute of higher education located in the northeast region of the United States. Wilhof College began as a nursing school in 1903, as part of a larger health system, to prepare women to work in the hospital. The college earned full regional accreditation in 2001 and has added 18 certifications and degrees at the associate, bachelor, and master levels in the fields of health science (Wilhof College Catalog, 2014b). Even with the addition of these programs, based on student enrollment, the ASN program is the largest at Wilhof College. In the fall of 2014, the overall student

population was 1,447, of whom 1,138 (78.6%) were associate nursing students (Wilhof College, 2014a).

Population and Sample

The targeted population for this study was the nursing educators within the didactic and clinical courses at Wilhof College. Purposeful sampling allowed the selection of participants based on their knowledge of the research topic (Polit & Beck, 2014). This was a suitable form of sampling for qualitative research, as it ensured no exclusion of a specific group from data collection (Johnson & Christensen, 2008). Sandelowski (2010) supported this sampling approach for use within a qualitative descriptive research design.

A maximum variation sampling strategy allowed for the selection of participants who possess varying perceptions on the research topic (Polgar & Thomas, 2008). This type of sampling strategy allows researchers to understand a phenomenon from the points of view of different people, in different settings and at different times (Walker, 2012). One benefit to using maximum variation is the diversity of perceptions by a small number of participants. This form of purposeful sampling is appropriate for a qualitative descriptive study, as long as the participants can provide rich information relevant to the research question (Neergaard et al., 2009; Sandelowski, 2000).

For this study, the use of maximum variation sampling ensured at least one nursing educator represents each of the didactic and clinical courses within the nursing education program at Wilhof College. Using any other sampling approach could have

resulted in underrepresentation of a nursing educator's perceptions on one or more didactic or clinical course within Wilhof College's nursing education program.

Selection of Participants

A purposive, maximum variation sampling approach identified nursing educators with in-depth knowledge of the research topic of integrating learning activities between clinical and didactic courses within the nursing education program at Wilhof College. These educators were ideal for this study for two reasons: (a) because of their direct working knowledge with nursing graduates who sit for the NCLEX-RN exam and (b) their knowledge of the clinical and didactic curriculums used to prepare the nursing students for the licensure exam.

The sample size for this study was 11 nursing educators at Wilhof College. This number of participants provided saturation of knowledge around the research topic of integrating learning activities. Though this is a relatively small sample size compared to a quantitative research design, it was appropriate for a descriptive qualitative study. There are no established rules for sample size within qualitative research; the informational needs of the study determine the appropriate sample size (Kemparaj & Chavan, 2013). Small sample sizes in qualitative research allow for in-depth examination of the research topic, rather than a surface exploration with a larger sample (Hoskins & Mariano, 2004).

For this study, the ideal composition of participants was a combination of full-time and adjunct ASN faculty members, representing each of the four clinical and

didactic courses within the 2-year program at Wilhof College. This composite of participants as sufficient to address the guiding research question presented in this proposal. It was important to include adjunct faculty in this study, as their primary professional role is as a registered nurse, not as an educator, which full-time nursing faculty consider themselves to be. The difference in primary professional status may provide differences in perceptions for this study. An interview with a full-time and adjunct faculty member from didactic and clinical course, across all four ASN semesters, will total 11 interviews (Table 3).

Table 3

Composition of Participants

Semester	Course ID	Classification	Full-time faculty	Adjunct faculty	Total faculty
1	NUR101	Didactic	1	1	2
	NUR111	Clinical	1	0	1
2	NUR102	Didactic	1	1	2
	NUR112	Clinical	1	1	2
3	NUR201	Didactic	1	0	1
	NUR211	Clinical	1	0	1
4	NUR202	Didactic	1	1	2
Total			7	4	11

Procedures

The first step in the selection of participants was meeting with the Dean of Nursing to explain the purpose and potential value derived from this study and to request permission to contact nursing educators within the ASN program. Upon approval, the Dean of Nursing also assisted in the maximum variation sampling process by identifying key nursing educators that align with the eight didactic and clinical courses outlined in Table 3. The recommendation included full-time and adjunct nursing educators within the ASN program.

The first communication to the recommended participants came in the form of an e-mail sent to their Wilhof College accounts. The overall content of the e-mail included an introduction of myself as a research student from Walden University, the topic of the

research study, their potential contribution to the study, the requirements to participate in the study, and the ethical treatment of participants within the study as recommend by Polgar and Thomas (2008). The e-mail message emphasized that their participation is voluntary, and though they are a potential participant, there are no consequences for declining the request. Information regarding being available for a 30-60 minute, audio-recorded, in-person interview and procedures for data security and participant anonymity. A draft copy of the request to participate e-mail is in Appendix C.

As the Dean of Education Innovation at Wilhof College, I have no academic programs, curriculum, or faculty who report to me on the organizational chart. The Education Innovation division provides development and support in areas of learner-centered teaching and learning, instructional design, online education, and simulation. This role has no supervisory, evaluative, or authority over the potential participants. The position of Dean of Education Innovation is an academic leadership position designed to support academic strategies. It is not a position of authority over faculty members, nor is it consider part of the executive leadership team. The Dean of Education Innovation has no role in nursing faculty task assignments, performance reviews, promotions, bonuses, salaries, grades, or any type of evaluation.

Even though there is no direct reporting, many faculty look at the dean position as one of authority at the College. To mitigate this influence, I explained how the role of researcher differs from my role of dean at Wilhof College. I continued to emphasize the voluntary nature of their participation and their ability to withdraw from the study at any

point. The e-mail also indicated there was minimal risk associated with participating in the study and the potential benefits were faculty development sessions around the integration of learning activities between clinical and didactic courses.

All nursing educators who participated in the study were required to complete an informed consent form. This document included the purpose of the study, how the data would be collected, how anonymity and privacy are maintained, any risks associated with the study, the potential benefits, and a participants' right to withdraw a commitment to participate at any time. A copy of the informed consent form is located in Appendix D.

The ethical treatment of participants within this study is a high priority. I was required to obtain IRB approval from Walden and Wilhof College's parent organization before collecting data for this study. After approval, potential participants received e-mails notifying them of their selection to participate voluntarily in this study, options for interview days and times, along with the informed consent form as an attachment. As recommended by Polgar and Thomas (2008), after receiving confirmation of a nursing educator's willingness to participate, I called each participant to schedule a day and time for the interview. This allowed me to begin building trust and a relationship with each participant by answering any questions they may have around the purpose of the study, what expectations of I had of them as participants, and how I handled the data after collection.

Data Collection Methods

Collection of qualitative data may derive from interviews, observations, important documents, and audiovisual materials (Malagon-Maldonado, 2014; Sandelowski, 2000). Qualitative descriptive researchers often use semistructured interviews with individual participants or focus groups (Sandelowski, 2000). Focus group interviews are most appropriate when trying to gain a broad insight into a research topic (Neergaard et al., 2009). The purpose of this study was to examine the individual nursing educator's perceptions on the integration of learning activities between clinical and didactic courses; therefore, an individual semistructured approach to data collection was appropriate.

Interviews

Interviews for qualitative research can be conducted either in person, over the phone, or through e-mail depending on the availability and location of the participants (Malagon-Maldonado, 2014). This approach is advantageous when observation of participants is not possible and historical information cannot available, while also providing the researcher with flexibility and control over the line of questioning. The limitations to this approach include filtered responses by participants, not collecting data in its natural setting, and the bias inflected by the researcher on the responses provided.

Qualitative interviews are either structured, semistructured, or unstructured in design (Ingham-Broomfield, 2015). With a structured interview, all questions are the same and presented in the exact order for each participant, with the semistructured approach key topics are explored but the questions can be modified or rearranged based

on the participant's responses, and finally an unstructured interview has no prescribed questions or format prior to the meeting (Polgar & Thomas, 2008). Interviews are the most common form of data collection within qualitative health research (Grossoehme, 2014). The semistructured interview approach uses an interview guide, created by the researcher, which includes specific topics pertinent to the interview (Bryman, 2008; Polit & Beck, 2014). For this reason, and to address the guiding research question of this study, a semistructured individual interview process was an appropriate data collection method.

Conducting the Interview

Prior to each interview, I e-mailed each participant and confirmed the date, time, and neutral location of the scheduled session. The use of a neutral location prevented any unintentional influence over the participants that my status as dean might hold at Wilhof College. The DropVox recording application recorded each interview session. The recordings automatically upload to a private web-based account that secures data through a username and password system. No identifying information related to the nurse educator was included in their recorded session.

At each interview session, a participant was given a unique code I used to identify the participants' employment status, full-time versus adjunct, and their primary course delivery, clinical versus didactic. This coding system maintained the confidentiality of the answers provided by each nursing educator. Notes taken during each session will

remain locked at my personal residence through the duration of the study and for 5 years following. Destroying all raw data will occur after 5 years.

I collected or provided each participant with a copy of the informed consent form to sign. I confirmed they have no questions and that they understand their right to withdraw from the study at any time. There is no anticipated harm to nursing educators by participating in this study. I followed Wildemuth's (2009) recommended progression for interviewing:

1. Introduction: Begin with an introduction that includes the purpose of the study, maintaining anonymity, requesting permission to record the session, and answering participant questions.
2. Warm-up: Use this time to build a rapport with the participant and to prepare for the interview.
3. Interview guide: Main portion of the interview examining the participant's perceptions on research topics listed on the interview guide, found in Appendix E.
4. Cool-off: Inquire if there is anything else the nurse educator would like to share relevant to the topics discussed and the need for transcript review and possible follow-up interviews.
5. Closure: Thank the nurse educator for their participation in the study.

Immediately following each session, I summarized the interview and noted any nonverbal communicators expressed by the nursing educator. Within 24-hours of each

interview, I sent the recorded interview for transcription. I selected Rev.com for this service because of their high accuracy rating, their nondisclosure policy, and fast turnaround of transcriptions. By receiving these transcriptions within 24-hours of submission, the inductive process of data analysis can occur while subsequent interviews continue to occur.

Researcher's Role

I began at Wilhof College in 2014 as the Director of Faculty Development. After 2 months, I became the Dean of Education Innovation and currently am still serving in that role. I have been working on this research study since starting at Wilhof College. During my brief tenure as the Director of Faculty Development, I conducted classroom observations and facilitated various faculty development sessions resulting in strong working relationships with faculty members in all academic programs. In my current role as dean, I am a resource to faculty in areas of pedagogy, academic technology, and instructional design. Both positions have prepared me well for conducting a qualitative study using nursing educators as participants.

I anticipated a willingness to participate in this study by nursing educators because of the credibility earned by building relationships with all faculty members at Wilhof College and the division of nursing's commitment to improving nursing graduates' performance on the NCELX-RN exam. As I have no direct experience as an RN, or in nursing education, or with the NCLEX-RN exam, any potential bias through either data collection or analysis was minimal.

Data Analysis

A qualitative research design encompasses content analysis which requires deep examination of large volumes of written data to address the guiding research question (Boswell & Cannon, 2017). Through the inductive approach of collecting and analyzing data, a researcher identifies emerging patterns, categories, and themes, which allows for adjustments to subsequent interviews (Vaismoradi, Turunen, & Bondas, 2013). Content analysis is the recommended approach for a qualitative descriptive study (Sandelowski, 2000).

To begin the process of data analysis, I employed the use of Rev.com, a web-based transcription service, for the accurate transcription of audio-recorded interviews. From the submission of an audio recording, this service was able to provide a 24-hour turn-around time on verbatim transcripts. This was essential to the iterative process involved with qualitative content analysis. Concurrent data collection and analysis required me to listen to each interview recording, read over both my hand-written notes and the verbatim transcripts, and then, if necessary, make adjustments in preparation for the next interview. My hand written notes contained the date, the unique identifier, and the pseudonym assigned to each participant. The alphabetically, randomly selected pseudonyms include names of both genders.

Through this iterative process of data collection and analysis, I followed Bryman's (2008) recommended steps for coding. The first recommended step is to begin coding as soon as possible. Listening to the audio recordings of each session within 24-

hours of the interview met this recommendation. While listening to the recording I would make notes about elements of a response that I thought were important. I would then compare the audio notes against the notes taken during the interview and any overlap between the two was marked as potentially significant. The reinforcement, or diminishment, of emerging themes occurred throughout the ongoing data collection process.

Each interview was analyzed individually and then in reflection of prior sessions, often resulting in repeated reading of transcripts and listening to audio recordings. This is common with the inductive process, as the researcher is required to immerse themselves in the data, in order to identify categories and themes (Sandelowski, 2000). Breaks between interviews provided time to regain perspective before returning to data analysis.

Following data collection and beginning coding, Bryman's (2008) second recommended step is to review codes for reoccurring words or themes. In this step, categories emerged from coding of different words and phrases that represented the same meaning. Closely linked codes were marked with colored pencils to identify emerging categories. Themes not aligned with existing categories warranted the creation of new ones. Reflection and analysis derived five primary categories, each with their respective themes. Final review of interview transcripts and notes ensured no words or phrases were missed during the initial coding process. Though many use and recommend a

qualitative software application, I found the manual process allowed for consistency in the data analysis of this study.

Evidence of Quality

Lincoln and Guba (1985) identified four criteria for evaluating qualitative research: credibility, transferability, dependability, and confirmability. There are several ways to demonstrate these criteria within a qualitative study, but Boswell and Cannon (2017) reminded researchers to apply the appropriate criteria for the topic under investigation. Using one method for each criteria provides evidence of quality for this study.

Credibility refers to the adequate representation of the data collected (Wildemuth, 2009). Triangulation of sources examines the consistency of different data sources (Boswell & Cannon, 2017) and is the method used to establish credibility for this study. Collecting data from nursing educators, with different viewpoints, clinical versus didactic, full-time versus adjunct, met this requirement. To reinforce the credibility of the data, any discrepant information was included in the findings.

Transferability, similar to generalizability in a quantitative study, refers to the extent a study's findings are transferrable to another setting (Kemparaj & Chavan, 2013). All prelicensure nursing education programs must prepare their nursing students for the same NCLEX-RN exam; therefore, findings pertaining to nursing curriculum will have a certain amount of transferability. Transferability of other findings may result due to the

commonalities among all institutes of higher education offering prelicensure nursing programs.

Within qualitative research, dependability is the stability of the findings over time and conditions (Kemparaj & Chavan, 2013). Creating an audit trail by documenting each step and process executed throughout this study, dependability for the findings is established. Finally, Kemparaj and Chavan (2013) referred to confirmability as the accuracy, relevance, or meaning of the data reported on within the study. Raw data in the form of audio-recorded interviews, interview notes, coding processes, and the findings from this study serve as evidence for confirmability.

The descriptive qualitative design allows for data collection, through semi structured interviews, that answers the guiding research question of what are the perceptions of nursing educators about the integration of learning activities, between clinical and didactic courses, for the improved performance by first-time nursing graduates on the NCLEX-RN exam. Using content analysis categories and themes will derive insight on areas for improvement at Wilhof College.

Data Analysis Results

The results of this study are presented according to Sandelowski and Leeman's (2012) recommendation to translate qualitative data analysis into the language of implementation. The authors described three possible approaches to presenting qualitative health research findings: (a) translating findings into thematic sentences, (b) translating findings into the language of intervention, and (c) translating findings into the

language of implementation. Translating the findings from this study, into a language of implementation, is appropriate because it aligns with Sandelowski's (2000) qualitative descriptive approach selected for this study.

Sandelowski and Leeman (2012) recommended researchers "show how their findings might contribute to the knowledge of context required effectively to implement new interventions or practices" (p.1409). The guiding research question examined nurse educators' perceptions on the integration of learning activities between clinical and didactic courses for the improved performance on the NCLEX-RN exam. The thematic categories identified, from the perceptions shared, could lead to actionable items for implementation within the nursing curriculum. Presenting the findings, to the intended audience in this format, will support the possibility for change at Wilhof College.

The aim of this study was to examine the perceptions of nurse educators, about (a) Accreditation, (b) NCLEX-RN exam (c) theory-practice Gap (d) Benner's (1984) model of skill acquisition, and (e) Nursing Education Curriculum. The results from this study may lead to curricular revisions within the associate nursing education program, the creation of faculty development sessions, or greater engagement between didactic and clinical nursing educators.

The site for this study was a nonprofit institute of higher education located in the northeast region of the United States. The targeted population for this study was nursing educators within the didactic and clinical courses at the specified college. Purposeful sampling allowed the selection of 11 participants based on their knowledge of the

research topic (Polit & Beck, 2014). Ten of the participants provided demographic information regarding their ethnicity, age, years of professional nursing experience, and total number of years as a nurse educator, and of those how many years at Wilhof College.

All 11 participants are female and of the 10 respondents, nine identified themselves as White/non-Hispanic as their ethnicity. The age range of 46-55 was mode with 40% (4/10) selecting this as their age range. In descending order, 30% (3/10) selected 36-45, 20% (2/10) selected 56-65, and only one respondent (10%) selected 25-35 as their age range. The years of professional nursing experience ranged from 16 through 41 years, with a mean of 24.7 years. Two through 38 years is the range for both years of total teaching experience and years of teaching at Wilhof College. The median for total years of teaching is eight, with a mean of 10.4 years, while the median for years at Wilhof College is four and the mean is 8.2 years. Listed in Table 4 is the composition of nurse educators that participated in the study and their assigned pseudonyms.

Table 4

Composition of Participant With Associated Pseudonym

Semester	Course ID	Classification	Faculty Type	Pseudonym
1	NUR101	Didactic	Full-time	Arlene
			Adjunct	Betty
1	NUR111	Clinical	Full-time	Charles
2	NUR102	Didactic	Full-time	Dale
			Adjunct	Elena
2	NUR112	Clinical	Full-time	Francis
			Adjunct	Gale
3	NUR201	Didactic	Full-time	Haley
3	NUR211	Clinical	Full-time	Ivan
4	NUR202	Didactic	Full-time	Juliet
			Adjunct	Kyle

Eleven questions posed to each of the participants, along with follow-up inquires, resulted in the findings of this study. The guiding research question for this study examines nurse educators' perception on the integration of learning activities between clinical and didactic courses, for the improved performance by nursing students, on the NCLEX-RN exam. The 11 questions asked during the interviews provide context to the learning environment where the research question is explored.

Interview questions one through three, relate to accreditation and provide insight into the value nurse educators feel full, voluntary programmatic accreditation has for the institution, the ASN program, the faculty, and the students. Interview question four, explored the systemic and student barriers current Wilhof College students have with the NCLEX-RN exam. Continuing the exploration of barriers to success, question five

inquired whether the theory-practice gap is a factor to a nurse graduates' success on the NCLEX-RN exam.

As the conceptual model for this study, interview question six asked participants what level of Benner's (1984) Model of Skill Acquisition did they feel current nursing students were graduating at and what level did they feel they should be at to be successful on the NCLEX-RN exam. Finally, interview questions seven through 10, explored the current ASN curriculum and opportunities to integrate learning activities between clinical and didactic courses. The thematic analysis conducted on the responses provided results in the findings in this section.

Accreditation

ACEN accreditation is a voluntary process for nursing education programs for the intended purposes of quality improvement (ACEN, 2014). The benefits of ACEN accreditation include: (a) awareness of areas needing improvement, (b) student recruitment, (c) federal and state funding for students, and (d) educational quality of nursing program (ACEN, 2017). The perceptions of Wilhof College nurse educators about the significance of having ACEN accreditation and the impact in of change in status is the first thematic category.

Accreditation Interview Question 1: What significance does ACEN accreditation have on students, faculty and college?

The significance of ACEN accreditation for Wilhof College nursing students comprises four themes: (a) standardizes education/ensures program quality, (b) facilitates

higher educational opportunities, (c) enables financial aid, and (d) promotes a competitive school environment.

For nurse educators and administration/college, respondents felt that ACEN accreditation reinforces program efficacy and may give faculty the opportunity to negotiate needed student resources.

Theme 1.1: Standardizes education/ensures program quality. Respondents felt that ACEN accreditation affects students in a variety of ways. Participants reported that it provides students with the knowledge that their education will be equivalent to other nursing institutions that have the same accreditation. Arlene said:

> Anytime you have an accreditation like that, it's going to give you a baseline. This is where everybody else is. You want to be right along with them. I think that has a huge impact for students because, that's going to speak to them coming here versus going somewhere else.

Betty asserted that it is similar to "a contract [and implies that we are meeting the] same standards that all the other schools are meeting. It holds us all to a higher level of what's good and what's not in education."

Theme 1.2: Facilitates higher educational opportunities. Francis stated, "I think accreditation for the student [is] based on what they want to do in advanced learning." Kyle affirmed this point by stating, "If they want to transfer their graduate credits, of course, then it becomes a really big deal."

Theme 1.3: Enables financial aid. Arlene reported, “Accreditation has a significant impact on financial aid for students; without it, some financial aid is not available.” Charles agreed by stating that “students benefit from being able to get those [financial aid] funds.”

Theme 1.4: Reinforces program efficacy. From a faculty and college perspective, Dale noted, “it helps us from becoming stagnant.” Francis posited that ACEN accreditation sets “expectations or objectives to make sure that we're all on the same page.” This assertion dovetails with Haley’s premise that “when we're putting together whatever, we know the guidelines we're supposed to be following.”

Theme 1.5: Promotes negotiations between faculty and administration. One of the key themes that emerged from the interviews was about an impetus to negotiate resources between faculty and administration. Kyle suggested the power may be derived by faculty from the very fact that accreditation is paramount to the survival of the college. Kyle offered:

Accreditation is a powerful tool for faculty to gain what they want from an administration that may be combative. Money, space, courses that [faculty] want to have that the administration may not support, that's where I see it really helps faculty.

Table 5 displays the five themes and associated frequency of responses derived from faculty interviews about the significance of ACEN accreditation has on students, faculty

members, and the college. The student and faculty/administration groups are highly related and combined into one table.

Table 5

Thematic Response to Significance of Accreditation by Participants

Type	Themes	Number of Responses (n)
Theme – Student		
1	Provides Standardized Education/ Program Quality	5
2	Facilitates Additional Educational Opportunities	5
3	Enables Financial Aid	4
Theme - Faculty/ Administration		
4	Reinforces program Efficacy	3
5	Promotes Negotiation between Faculty and Administration about needed resources	1

Accreditation Interview Question 2: Are you aware that the ASN accreditation status, through ACEN, changed to accreditation with conditions because of the spring 2014 NCLEX-RN exam scores?

All participants reported that they were, in one way or another, made aware of the change in accreditation. Francis said, “Yes, I am aware of that because we as faculty were very involved in figuring out, as far as reviewing the curriculum, figuring out why the students weren't being successful, changing the curriculum.” Gale said; “Yes, that there was in a staff meeting.” Elena stated “Oh my yes, oh my yes. I hate to say it but I wasn't

surprised. There was a wide spread feeling, among faculty that we had been admitting students who [had] reading comprehension [problems]."

Accreditation Interview Question 3: What impact did this change in status have for students, faculty, and Wilhof College?

The category of impact on the change in accreditation status derived six themes, two on the impact to students and four on the impact to faculty, administration, and Wilhof College. Based on responses gleaned from participants about the impact accreditation status change has had on students, two themes surfaced: (a) generated student anxiety and (b) changed student coursework. Increased rigor and use of online educational products are they two subthemes associated with changes in student coursework. Respondents felt that the change in ACEN accreditation affected nurse educators and administration/college in four distinct areas. These areas include: (a) mobilized faculty/administration to change, (b) inspired collaboration and discussion, (c) increased nurse educators/administration anxiety, and (d) affected school reputation. A single subtheme (obtaining quality faculty) emerged from Theme 6.

> **Theme 3.1: Generated student anxiety**. During the interview sessions, four participants felt that the change in accreditation negatively affected nursing students by way of increased anxiety. For example, Charles stated, "it made students second guess the college that they chose and the quality of the program they were in." Francis said, "From the student perspective, it caused a lot of anxiety." Ivan said:

> For students, it was panic and the uncertainty as to whether or not it was a good program and if they should stay at the program, I think just that uncertainty of what the future held for them was upsetting.

Juliet said that the change created "uncertainty for students, fear, and concern about their current enrolled students."

Theme 3.2: Changed student coursework. Two participants felt that the change in accreditation status directly affected coursework rigor and coursework content. For example, Juliet believed that the change in status "created a lot of changes ultimately for students in program requirements and incorporation of assignments in ATI products." Gale said that there has been a "change with some of the precourses like anatomy and physiology."

Theme 3.3: Mobilized faculty/administration to change. Three participants stated that the change in ACEN accreditation status mobilized faculty and administration to make changes to the ASN curriculum. For example, Gale said, "it seemed like [the change in accreditation] mobilized a lot of positive change or an evaluation of the way things were being done and how we can improve to make things better." Ivan felt that it made the faculty and the administration "look at what needed to change." Haley said that it "really gave us that time to take a look at what are we doing" so that we can make the necessary changes.

Theme 3.4: Inspired collaboration and discussion. Two participants described how collaboration and discussion reverberated through the school and faculty.

> Arlene said, “There was a lot of collaboration and ongoing discussions on who was covering what, and how you were covering it.” Dale said, “It also started some maybe needed conversations” between faculty and administration.

Part of the collaboration and discussion included the curricular changes already made, while reflection focused on what coursework to deliver and when in the sequencing it should be included, rather than how it was delivered. Reflection did not seem to include faculty behavior—more of a mechanical perspective rather than a personnel review. For example, Dale said, “I think that's what this accreditation status change made everybody do, is go back and really look at the education from every angle.” Haley said, “It was a good thing because it really gave us that time to take a look at what are we doing.”

> **Theme 3.5: Increased faculty/administration anxiety**. Two participants reported that the change in ACEN accreditation increased faculty anxiety. Kyle stated:
>
> Well, you're not meeting a national average and you're not preparing students. They hit a bar and that's a frightening thing to see because you've taken all their money and you've educated them, and now they can't pass that licensure exam. That is, I think, a horrible feeling for an educator.

Elena said that the change in accreditation made them scurry to find remedies for the situation. Students with below average academic skills generated more anxiety than concern over the quality and rigor of coursework. Elena continued, “I think it's very hard

to remediate reading comprehension skills. To me if I had to pick one thing that students did poorly, that's what it would be."

Theme 3.6: Affected school reputation. Two participants recounted that the degradation in ACEN accreditation status had the ability to harm Wilhof College's reputation. For example, Betty said, "When you have a lapse in reputation it has a trickle down affect where you lose people to other institutions that have a better reputation. You're feeling it financially." Juliet said that accreditation status change has a "negative impact to the perception of the college."

Table 6 presents the six themes and frequency counts associated with participants' feelings about the impact that the accreditation status change has had on students and faculty/administration.

Table 6

Thematic Response to Impact on Students and Faculty/Administration on Change in Accreditation Status

Type	Themes	Number of Responses (n)
Impact on Student Themes		
1	Generated Student Anxiety	5
2	Changed Student Course Work	2
2.1	Increased Rigor	1
2.2	Increased use of Online Educational Products (ATI)	1
Faculty/College		
3	Mobilized Faculty/Administration to Change	3
4	Inspired Collaboration/Discussion	2
4.1	Promoted Reflection	2
5	Faculty/Administration Anxiety	2
6	Affected School Reputation	2
6.1	More Difficult to Obtain Quality faculty	2

NCLEX-RN Exam

NCLEX-RN Interview Question 4: What are the barriers to Wilhof College first-time nursing graduates' success on the NCLEX-RN exam?

Based on responses from 11 faculty members about barriers and contributing factors that affected student success on NCLEX-RN exam, nine themes emerged. These

nine themes fall into two categories: (a) student barriers and (b) systemic barriers. Three themes (low function student, education-life balance, and entitled student) were associated with student barriers while four themes (admission standards, student testing strategies, new faculty orientation, and change in the NCLEX-RN exam) are associated with systemic barriers.

Theme 4.1: Low functioning students. Hailey felt that some students were not synthesizing the information sufficiently to successfully pass the NCLEX-RN exam. She stated:

> [Students] must learn how to answer questions, how to answer those NCLEX-RN questions. It's a matter of being able to be a critical thinker. They're focused on knowledge, but must learn to take it a step further.

Ivan also mentioned that the ability of some student might be substandard:

> I think one of the barriers is related to the students that are admitted to the program. When we look at student accommodation, English as a second language students, students from a high school or preadmission standpoint, GPAs are on the low side. Certainly, that's a challenge when they come into the program, with the structure of the program and the intensity of the program.

Elena stated that some students might not be prepared to take on the challenges of the program given their inability to comprehend fully the English language. Their inability to fluently converse in English lowers their ability to process critically the information. Elena commented:

> I really feel we've been admitting students who had lower performance scores. I have two students now who are struggling and it's their- English as a second language. I can't imagine how they're doing this.

Also mentioned, are the current admission standards as a possible factor to low student performance. Kyle remarked:

> The students aren't at the top of the class either, we have some students who are really low functioning. I think they met the minimum, maybe. Some of them that I talk to, I just wonder, "How did you get in?" I wonder about the admission standards. You have to expect a higher failure rate when you don't take in the highest [quality] student.

Theme 4.2: Education-life balance. The knowledge, skills, and competencies required to enter the field of nursing and to pass the NCLEX-RN exam, require high-levels of academic rigor within nursing education programs. This rigor can pose a challenge for nursing students who try to balance work and personal responsibilities with their coursework. Juliet shared:

> I think a lot of people work really hard to balance all they have going on. They just have too much going on. Students try to do too much and they think that they should be able to work a full-time job, have children in their home, and go to school full-time or nearly close to full-time in both of those things.

Ivan also felt that some students were trying to take on too much work given their schedules, “I think another barrier is the schedules of the students; the work life balance

around schedules." Students are trying to work full time jobs and come to school—the busy schedule may be too much for some students.

Theme 4.3: Student apathy. Overcoming learned behaviors from primary and secondary education also contributes to the barriers of success for students. Francis stated:

> I think some of the biggest barriers that we're seeing with students across the board is their lack of ownership in their education and their engagement in their education. No Child Left Behind Act has taught children that regardless of their effort they will succeed. They don't need to be accountable.

Juliet noted that some students do not come prepared for class. Either they are not taking it seriously or they lack the motivation necessary to do the work. She commented:

> The general preparedness of the student, either coming into the program or moving through it is [causing them to struggle in class]. Their ability to truly dig in and do what needs to be done [due to apathy or low motivation] is affecting their progress. I think there's always students who could work harder and aren't as motivated.

Theme 4.4: Admission standards. Several faculty members mentioned low admission standards as a barrier to success. The low admissions standards also contributed to the problem of excessive class size and overworked or overtasked faculty. For example, Kyle stated:

Although they have an eight to one ratio in clinical, I think their class sizes are really big here, and the faculty are stretched. When you don't have small classes and you have faculty that are working 16 days in a row, doing two weekends, doing all during the week, you can only spread peanut butter so thin. I see that as a barrier. I think what this college would see if they took their contact hours down to 18 max, 15 max, they would see faculty that could then reinvest in their students. Right now, faculty is stretched so thin, they can't reinvest in their students.

Theme 4.5: Student testing strategy. Two faculty members reported that student-testing strategies might have contributed to the reduction in pass rate on the NCLEX. For example, Arlene said, "testing in class is paper and pencil while the NCLEX is computerized, so there's a disconnect." Gale said:

I think one of the things that we're looking at is the tests the students take are on Scantron sheets [paper and pencil] and [not on a computer]. So, the test taking strategies [that the school uses] may have been a barrier to success on the NCLEX because that's not how the NCLEX is tested.

Theme 4.6: New faculty orientation. Dale felt that inadequacies in new faculty orientation contributed to the barriers of success for nursing students. Dale made the point that it may not be due to lack of teaching or academic knowledge, but rather their experience at the school and knowledge of how to use the services of the College to benefit their students. Dale said:

I will tell you that there were quite a few of us that were newly hired into the college for the academic year 2013-2014. Did that alter the type of education that was given? If you had nine new faculty members coming in; One, can you support nine new faculty members with orientation, with mentoring, bringing them all on, getting them all up to speed?

Theme 4.7: Change in the NCLEX. Betty said that the changes in the NCLEX-RN exam contributed to the reduction of students' scores. She also felt that several other schools experienced a similar decline in NCLEX scores. Betty stated:

Yeah, they changed the NCLEX blueprint and everybody's scores took a dive. What we were really surprised is that, that particular year, for some reason, we didn't take as big of a hit as other people did. We like to think we did something right.

Table 7 presents the nine themes, frequency counts, and contributing factors related to student and systemic barriers to poor performance on the NCLEX exam.

Table 7

Thematic Response to Factors that Relate to Barriers that Affected Student Performance on the NCLEX-RN Exam

Barrier Type	Themes	Number of Responses (n)	Contributing factors
Student Barriers	Low functioning Students	4	Reading Comprehension
	Education-Life Balance	3	
	Student Apathy	1	Student Motivation
Systemic Barriers	Admission standards	5	Increased Class Sizes
	Student Testing Strategy	2	Exam Alignment
	New Faculty Hiring	1	Inexperienced Faculty
	Change in the NCLEX	1	

Theory-Practice Gap

The transition of nursing education from the clinical environments to institutes of higher education has supported the theory of a gap between what nursing students are learning and their ability to apply the knowledge to patient care (Saifan et al., 2015).

Theory-Practice Gap Interview Question 5: Dadgaran et al., (2012) defined the theory-practice gap as the discrepancy between the theoretical aspects of nursing, taught in the classroom, and what students experience in the clinical learning environment. Based on this definition, do you feel the concept occurs within the ASN curriculum at Wilhof College? If so, is this problem a contributing factor on first-time nursing graduates' success on the NCLEX-RN exam?

The 11 nursing educators who participated in this study shared their perceptions on whether the theory-practice gap contributes to student performance on the NCLEX-RN exam. Table 8 presents the three themes and frequency counts related to the theory-practice gap between the theoretical aspects of nursing taught in the classroom and what students experience in the clinical learning environment.

Table 8

Thematic Response to the Theory-Practice Gap

Theme	Frequency
No	2
Depends	4
Yes	5

Five participants agreed that there was a theory practice gap while four participants felt that it depends on the situation and two participants felt that no gap existed. For example, Charles said:

> I'm saying yes, solely looking at it from my semester and specifically the pediatrics. Sometimes there is not a correlation between clinical and theory for the sheer fact that we can't guarantee that people are going to have, we can't say,

> nobody can have an appendectomy until week three of the pediatric rotation, and that's just not the way life works.

Dale remarked:

> I would say yes and no. I think yes, from the point of, everything that is taught in the classroom in that week and then you go into clinical; I can't always bring every one of those concepts into the clinical setting at that very moment.

Kyle felt that there is no theory-practice gap in the curriculum as it applies to the NCLEX exam process. Kyle commented:

> I don't think so when it comes to NCLEX. I call this kind of the "grey area" the theory that's taught is for the ideal [while] he clinical is more the reality, but the NCLEX then tests back on that ideal.

Interview questions proceeded from theory-practice gap within nursing education to Benner's Model of Skill Acquisition.

Benner's (1984) Model of Skill Acquisition

Participants identified which level of Benner's (1984) model of skill acquisition, nursing students are currently at upon graduation and then what level they feel nursing graduates need to be at to pass the NCLEX-RN exam.

Benner's Model Interview Question 6: After reviewing the handout on Benner's Model of Skill Acquisition for nurses, what level do Wilhof College ASN nursing students graduate? What level do you believe they should be at to pass the NCLEX-RN exam?

Table 9 displays the reported levels for each specified category. Most participants felt that students graduated at the advanced beginner-emerging competent level and should be at the competent level. A minority group of faculty felt that students graduated at the advanced beginner level and should be at the advanced beginner level. Eight faculty felt that students were not graduating at the level that they should be at while three faculty felt that students were graduating at the level that they should be for success on the NCLEX-RN exam.

Table 9

Thematic Response to Benner's Model of Skill Acquisition

What level do Students Graduate	What Level Should They Graduate	Frequency
Below Novice	Novice	1
Novice/Advanced beginner.	Advanced Beginner	1
Advanced beginner	Advanced Beginner	3
Advanced beginner-Emerging Competent	Competent	4
Advanced beginner-Emerging Competent	Competent-Emerging Proficient	1
Competent	Proficient	1

Nursing Education Curriculum

Prelicensure nursing education curriculum has two purposes: (a) prepare students to pass the NCLEX-RN exam and (b) prepare them for entry into professional practice. The unique design of a nursing education's curriculum can determine how successful the program is at achieving these goals. Wilhof College's nursing educators who participated in this study shared their perceptions about any barriers they felt hindered the program's ability to be successful in these areas.

Curriculum Interview Question 7: Are there barriers within the ASN curriculum that prevent students from successfully passing the NCLEX-RN exam?

The 11 participants in this study did not specifically identify barriers within the curriculum that prevent students from successfully passing the NCLEX-RN exam. However, the insights shared during the interview are worth noting as they relate to the college and the students within the program. College-related barriers included lack of/low quality student services and school testing strategy. While low-functioning, apathy, and education-life balance were themes related to students.

Theme 7.1: Lack of/low quality service. Three faculty members believed that some students are not receiving the help that they may need. Two of the three respondents specifically mentioned a lack of a nurse tutor. For example, Kyle mentioned, "Academic Success Center should be staffed by NCLEX-RN experts; it was shocking to me what the center didn't know and didn't do. I was pretty shocked, no nursing tutoring." Ivan remarked:

> I think other barriers still relate to some of the outside resources that we utilize, as far as student services, support. I think just that we're not necessarily providing services for those students, who we know are high risk students.

Halie said that "There's no place they can go to actually have somebody spend a great deal of time with them. We don't have a nurse tutor to help struggling students." Francis commented:

> Support services. The ones that interact, like the Center for Learning Success, the Center for Excellence, security, our food service department, and all of those things are centered around our traditional students and not on our nontraditional students.

Theme 7.2: Testing strategy. The last theme (testing strategy) emerged from one interview, which reinforced the need to align current nursing curriculum testing approaches with the format used the NCLEX-RN exam. For example, Gale commented that the College's testing strategy, paper and pencil, does not align with how students take the NCLEX-RN exam. Gale felt that this remained a significant barrier for students.

Theme 7.3: Low functioning student. Betty remarked that students do not attempt to learn the material; rather, they are simply memorizing information to get through the tests. She noted that students focus on points received for an assignment rather than the concepts behind the activity. Betty commented:

> You can give them the toolbox, but they don't open it. You can encourage, you can teach, you can do everything you can to engage and there's going to be some students who are just not going to do it. They expect the information to be given to them and that's all well and good. I could do that, I could give them the information, but they still have to retain it to be able to apply it at the level that NCLEX is going to test them.

Charles inferred that some students did not have the requisite skills needed for a college environment or the academic rigor in the nursing education program. Charles said, "[Some student's] lack the ability to adapt to a new scenario."

Theme 7.4: Student apathy. Arlene remarked, "We have a lot of students that who, as long as they do the bare minimum, and get that bare minimum, scraped by, they think that's okay." Juliet said that students do not put in the time they need to do well in the program. This could be due to education-life balance or because they just expect to get through the program from doing the bare minimum.

Theme 7.5: Education-life balance. Elena believed that some students "have unrealistic expectations based on culture, but many of them are working full time and commuting." They are trying to do too much given the schedule that they have shouldered. Table 10 summarizes the student and systemic barriers identified by participants in Interview Question 7.

Table 10

Thematic Response to Current Barriers to Passing the NCLEX-RN Exam

Type	Theme	Frequency
College	Lack of/Low Quality Services	3
	Testing Strategy	1
Student	Low Functioning	4
	Student Apathy	2
	Education-Life Balance	1

Curriculum Interview Question 8: Are there learning activities integrated between clinical and didactic courses?

Participants described the current learning activities integrated between clinical and didactic courses at the college. In total, participants described eight learning activities and simulation was the primary tool used between clinical and didactic courses. Charles said:

> Yes, for pediatrics, as I've said, is the simulation. For OB, we incorporate learning activities in the classroom. For example, stages of labor. We make them do charades. They have to act out a stage of labor, so that gets them thinking about what they might see in the clinical setting, not just reading about it, but actually watching someone act it out. Role-playing.

Dale remarked:

> Yes. We, here use SIM more as a learning opportunity, not necessarily as a grading opportunity. I think students, a lot of times they'll tell you they learned better when they're in the situation. Here we've put them in the situation and allowed them to go with it. I do see simulation does help that way.

Gale pointed out that they attempt to integrate in didactic courses as well as clinical courses. She mentioned:

> We do that in theory and practice. In theory, we incorporate SIMS. In clinical, I think that happens in the post-conference session where students can reflect on their day, "This is what we did. This is what I saw but I'm not sure why they did that" and tying up some of those loose ends for them. I think that post-conference is very important to allow them to debrief and settle their thoughts and understand what they were seeing and doing. Not just checking it off their list but understanding why it was on their list to begin with.

Halie remarked:

> We purchased a much larger product with ATI (online educational product). Along with doing that, it gave us a wealth of resources. We will assign different activities that yes, again, we're doing it in theory, so we're going to deal with that this week in clinical. It might be different case studies. I know the students are really finding that very useful.

Halie also commented on the use of their new textbook, which incorporates interactive activities. Halie said, “We're using a new textbook by Ward and Hisley, the textbook has

a lot of interactive activities that students can do." Table 11 illustrates the frequency with the learning activities currently integrated within the nursing education program.

Table 11

Thematic Response to Current Learning Activities Integrated Between Clinical and Didactic Courses

Theme	Frequency
Simulation	5
Care Plans	1
Case Studies	1
Lab Modules	1
ATI Products	1
Post Conference	1
Textbook Activities	1
Role Playing	1

Curriculum Interview Question 9: **Are there opportunities to integrate purposefully learning activities between the clinical and didactic courses?**

Three themes emerged from participants' responses shared about possible opportunities to integrate learning activities between the clinical and didactic courses. These themes were simulation, minisimulation, and lab modules. All but two participants seemingly agreed that there were opportunities and most felt that simulation or some derivative thereof was, perhaps, the most effective method to bridge the gap between theory and practice.

Theme 9.1: Simulation. There was much support from the nurse educators

around the opportunity to integrate simulation into the current curriculum. Kyle assumed:

> I think SIM is really the way to do it. Most of the time one can fabricate, or create, that high level of cognitive ability with SIM that you can't guarantee in clinical. Sometimes it happens in clinical, you have that eureka moment where they start to put it all together, but as soon as you're doing that, someone's calling you because their patient need meds.

Juliet believed, "Yes, SIMS; opportunity for SIMS where high risk is involved but low clinical exposure [is received]." Charles supported this statement by sharing: "I think simulation is one of the best ways to stimulate learning and initiate cognitive processing of material." Dale felt:

> It would be great to be able to have more simulation with smaller groups. When you are in clinical, you can't always guarantee that everyone is going to see a preeclampsia patient or a hemorrhage patient or even a real vaginal birth. You can't guarantee that but you could simulate it and you can have smaller groups so you don't have that outlier.

Ivan concurred:

> I think one area, now that we have the new campus and as we increase the resources, taking a classroom up into the skills lab or SIM lab setting and doing an instruction right in that clinical environment. Yeah, and that's specific to

certain concepts that are taught, which lend themselves more to that environment than others.

Theme 9.2: Mini simulations. Francis felt that miniSIMS could provide an important filler between what is expected and what is desired of students. She focused her point on student readiness where a miniSIM could provide the necessary information that students may not be getting during formal class. Francis commented, "MiniSIMS [could provide the] formal connectivity between [observed student performance] and expectations.

Theme 9.3: Lab modules. Elena, Gale, and Ivan recommended lab modules, used to integrate learning activities between clinical and didactic courses. Elena felt the integration of labs could fill the theory-practice gap within the curriculum. Ivan conveyed a similar message:

I think one area, now that we have the new campus and as we increase the resources, taking a classroom up into the skills lab or SIM lab setting and doing an instruction right in that clinical environment.

Table 12 displays the three themes and related frequency associated with each. Simulation garnered the majority of responses from participants. Participants felt that simulation could easily integrate into current coursework to bridge the gap between clinical and didactic courses.

Table 12

Thematic Response to Current Opportunities to Integrate Activities between Clinical and Didactic Courses

Theme	Frequency
Simulation	5
Mini Simulations	1
Lab Modules	3

Curriculum Interview Question 10: What learning activities could be integrated between the two types of courses to improve students' application of theoretical knowledge in the clinical learning environment?

To improve student application of theoretical knowledge in the clinical environment, participants recommended five main themes related to the integration of learning activities. These themes were simulation, ATI modules, hybrid theory, math and science, and minisimulation. Six of the 11 nurse educators supported the integration of simulation, for the improved application of theoretical knowledge. Two participants also felt that ATI Modules would improve nursing students' application of theory, while one participant each recommended hybrid theory, math and science, and mini simulations.

Theme 10.1: Simulation. About 54% (6/11) of the participants felt that more simulation would improve students' application of theoretical knowledge in the clinical learning environment. For example, Charles believed that "more simulation courses and more clinical time [is needed] if possible." Gale recommended, "More SIM with smaller groups to increase the accountability for

all students." While Juliet stated, "There may be [an] opportunity to use more SIM. It could be some type of trajectory through the program between SIM and then the clinical to maybe bridge that [gap]."

Theme 10.2: ATI modules. Two faculty members stated that adding ATI modules would support the integration of theory and application. ATI is an online educational product that nursing education programs can integrate into their curriculum to help prepare students for the NCLEX-RN exam (ATI Nursing Education, 2017). For example, Ivan commented, "I think some of the ATI modules could be used to do that." Kyle remarked:

Integrate ATI further into the curriculum. Curriculum should emphasize the importance and the value of ATI. Create a culture shift towards further buy-in of ATI. [That is,] change the perception of faculty and students that the ATI program is not a punishment tool but a value-added tool.

Theme 10.3: Hybrid theory. Arlene suggested that a hybrid course would help to integrate the didactic and clinical courses.

I don't know how you would do it but I think there's always the possibility. We developed, and it wasn't utilized this past year, but we developed a hybrid theory course for nursing 101 that could be taken in summer one. So students had the option of taking the hybrid course in summer one.

Theme 10.4: Math and science. Halie felt that math and science sources might be the best method to support student integration of material. She felt,

"Additional science and math courses, they're not bringing that information forward. Perhaps integrate into semester one."

Theme 10.5: Minisimulations. Francis suggested that students should participate in a minisimulation session to better integrate material between didactic and clinical courses. Specifically, she stated, "a one credit course that all incoming students had to take regarding the difference of a nursing education versus a regular college education."

Table 13 displays the five themes and related frequency of potential learning activities for integration between clinical and didactic courses. Simulation yielded the majority of responses from participants while two participants felt that ATI Modules were an additional possibility. One participant each recommended the last three themes.

Table 13

Thematic Response to What Learning Activities Could be integrated to Improve Application of Theoretical Knowledge in the Clinical Learning Environment

Item	Theme	Frequency
1	Simulation	6
2	ATI Modules	2
3	Hybrid Theory	1
4	Math and Science	1
5	MiniSIM	1

A qualitative descriptive approach guided the methodology of this study. The presentation of findings supports the intended audiences' understanding of the guiding

research question as it applies to Wilhof College. Table 14 displays a summary of the five thematic categories and themes identified from the data collected and coded.

Table 14

Emerging Thematic Categories

Thematic Category 1: Accreditation *Interview questions 1-3*		
Significance: • Standardizes Education/Ensures Program Quality • Facilitates Higher Educational Opportunities • Enables Financial Aid • Reinforces Program Efficacy • Promotes Negotiations between Faculty and Administration		Change in Status: • Generated Student Anxiety • Changed Student Coursework • Mobilized Faculty/Administration to Change • Inspired Collaboration and Discussion • Increased Faculty/Administration Anxiety
Thematic Category 2: NCLEX-RN Exam Success *Interview question 4*		
Student Barriers: • Low Functioning Students • Education-Life Balance • Student Apathy		Systemic Barriers: • Admission Standards • Student Testing Strategy • New Faculty Orientation • Change in the NCLEX-RN exam
Thematic Category 3: Theory-Practice Gap *Interview question 5*		
• Not a Factor • Possible Factor • Definitely a Factor		
Thematic Category 4: Benner's (1984) Model of Skill Acquisition *Interview question 6*		
• Skill Level at Graduation • Skill Level for Success on NCLEX-RN exam		
Thematic Category 5: Nursing Education *Interview questions 7-10*		
Student Barriers: • Low Functioning Student • Student Apathy Systemic Barriers: • Admission Standards	Opportunities to Integrate: • Simulation • MiniSimulation • Lab Modules	Learning Activities: • Simulation • Online Educational Products • Hybrid Theory • MiniSimulation

Conclusion

The purpose of this descriptive case study was to examine the guiding research question: What are nursing educators' perceptions on the integration of learning activities, between clinical and didactic courses, for the improved performance on the NCLEX-RN exam? Reflecting back on the initial problem that warranted this research study, maintaining a 3-year pass rate by first-time nurse graduates on the NCLEX-RN exam, that is above the state BON mean, in order to maintain ACEN accreditation status, the findings revealed in this section provide opportunities to address this concern. Content analysis identified the following five categories, along with their corresponding themes: (a) accreditation, (b) barriers to student success, (c) theory-practice gap, (d) Benner's (1984) Model of Skill Acquisition, and (e) nursing education. These categories provide an in-depth understanding on areas of importance and opportunities for improvement within Wilhof College's associate nursing education program.

Beginning with accreditation, almost half (5) of the nursing educators found ACEN accreditation provides standardization in the quality of nursing education. That same number felt accreditation provides additional educational opportunities and financial aid for our students. The change in Wilhof College's ASN accreditation status did prompt positive change within the nursing education program; noted are the concerns over student, faculty, and administration anxiety pertaining to the potential decline in the school's reputation. Since ACEN accreditation is voluntary, these finding support the

decision to maintain full accreditation, by ensuring nursing graduates are successful on their first attempt on the NCLEX-RN exam.

According to the nursing educators interviewed, the two types of barriers that contribute to success on the NCLEX-RN exam are systemic and the students themselves. For student barriers, the largest frequency of responses aligned with low functioning academic abilities (reading comprehension) and their school-life balance. These issues combined with the systemic barriers of admissions standards and testing strategies potentially affect a nurse graduate's success on their first NCLEX-RN exam. Further examination of these themes provide for opportunities for change and improvement.

The findings on whether the theory-practice gap contributes to a nurse graduate's success on the NCLEX-RN exam was ambiguous. Approximately half of the participants (5) felt it could be a contributing factor, while the rest were either unsure or did not think so. The participants who felt the theory-practice gap is a factor contributing to success on the NCLEX-RN exam are the same respondents who felt students were not graduating at the appropriate level of skill acquisition, based on Benner's (1984) model.

Referring to Benner's model of skill acquisition (Table 2), participants identified what level they felt current ASN nursing students are graduating at and what level they feel nurse graduates should be at for success on the NCLEX-RN exam. Four of the 11 (36%) participants felt students are graduating at the advance beginner/emerging competent level, but need to be fully functioning at the competent level for success on the licensure exam. A nurse graduate at the fully competent level can achieve most tasks

using their own judgment and can handle complex situations through analysis and planning. Nurses at the advanced beginner level lack this higher level of cognitive ability. This finding provides an opportunity to develop Wilhof College nursing students to the level of fully competent at the time of graduation. Improving nursing graduates' skill level at graduation could potentially improve their performance on the NCLEX-RN exam and their entry into the field of nursing. It is important to restate that two of the objectives for Wilhof College's ASN program is successful performance on the NCLEX-RN exam and smooth transition into the field of nursing by their graduates.

Examining the current nursing education curriculum for barriers to success on the NCLEX-RN exam and opportunities for the integration of learning activities is the last area explored with the participants in the study. Some aspect of the current nursing education curriculum contains simulation as revealed by close to half of the participants (45%). Individual participants mentioned care plans, case studies, lab modules, ATI products, post conference, textbook activities, or role-playing integrated between clinical and didactic courses. Finally, it was determined that over half of the participants (55%) felt that simulation could be further integrated into the current nursing curriculum to improve the application of theoretical knowledge in the clinical environment, while bridging the theory-practice gap, and potentially improving a nursing student's skill acquisition level.

At Wilhof College, there is a hierarchy of responsibility within the nursing division for the ASN curriculum (personal conversation with Dean of Nursing, January

2017). A course coordinator oversees the curriculum for each didactic course. A nurse educator who has duel administration and teaching responsibility holds this position. Their administration responsibilities include the continuous improvement of their curriculum in context to the other three didactic courses, all working towards the ASN's programmatic objectives. The course coordinators report to the chair of the ASN program who is responsible for ensuring the curriculum and delivery methods work towards meeting the program's and institutional learning objectives. Finally, the overall ASN program is the responsibility of the Dean of Nursing.

Based on the findings from this study, and understanding this framework, it is my recommendation for a faculty development project that educates faculty on the benefits of integrating more simulation into their curriculum. Drafting a faculty development program that educates nursing faculty on the benefits of increased use of simulation to achieve their goals of preparing nursing graduates for success on the NCLEX-RN exam and entry into practice will garner the changes to the ASN curriculum that are needed. A curriculum plan would not be an appropriate project, as the integration of simulation must occur over the four semesters of the ASN program, not in one specific point of the program. Educating the nursing faculty will also make the changes in ASN curriculum a partnership and not a top-down directive. For this study, a policy change project would have required interviewing administrators for the data collection. Since it was nursing faculty perceptions that derived these results, a project that guides change with them, and not to them, has an increased chance for sustainable success.

Section 3: The Project

Introduction

The National Council of State Board of Nursing (NCSBN) oversees the assessment of competencies through the NCLEX-RN exam (NCSBN, 2015). The NCLEX-RN exam assesses a nursing graduate's ability to apply theoretical concepts and clinical application through licensure questions written at the application or higher level of Bloom's taxonomy. Passing the NCLEX-RN exam ensures graduates possess the requisite competencies to deliver safe patient care (Lane & Mitchell, 2013; Moxley, Maturin, & Rakstang, 2017). NCSBN creates the NCLEX-RN Test Plan as a concise summary of the content and scope of the licensure exam (Moxley et al., 2017). This organizational framework provides an overview of the content distribution on the NCLEX-RN exam.

In conjunction with the NCLEX-RN Test Plan, teaching strategies that utilize higher levels of Bloom's taxonomy are needed to facilitate the application of theoretical knowledge into clinical application, for students. As an instructional strategy, simulation allows nursing students to practice the application of specific knowledge, while thinking through their decision-making process in a safe learning environment (Lane & Mitchell, 2013). Simulation education bridges classroom learning with real-life clinical experiences as a tested on the NLCEX-RN exam (Moxley et al., 2017; Society for Simulation Healthcare, 2017).

The Study Project

Nurse educators are responsible for preparing nursing students for the NCLEX-RN exam and entry into the field of nursing. Findings from this study, supported by the literature, indicates the use of simulation as an effective instructional strategy to accomplish these objectives. The use of simulation, as a tool to teach basic nursing procedures, began in the 1950s (Robinson & Dearmon, 2013). Since that time, there has been a steady increase in nursing programs that have integrated simulation into their curriculum, as a means of preparing graduates for entry into practice (Lane & Mitchell, 2013). This assimilation requires nurse educators to have the knowledge and ability to develop and assess simulation scenarios, while also knowing how to integrate the scenarios into their curriculum.

The development of a valid and reliable simulation experience requires a considerable amount of time and level of expertise by nursing educators (Rizzolo, Kardong-Edgren, Oermann, & Jeffries, 2015). Galloway (2009) stated that the use of simulation as an instructional strategy required faculty to have the knowledge base needed to utilize technology. Again in 2012, research showed the use of simulation as an area of critical growth for nursing education and required faculty development to be successful (McNeill, Parker, Nadeu, Pelayo, & Cook, 2012). Since the findings of this study indicated the use of simulation as an instructional tool in preparing students for the NCLEX-RN exam and entry into the field of nursing, designing and implementing a quality professional development program for nursing educators is required.

Description and Goals

According to this study's findings, the increased use of simulation in the associate nursing curriculum has the potential to develop nursing students' high order thinking skills for improved performance on the NCLEX-RN exam. Participants were aware of the poor performance by graduates in 2013 on the NCLEX-RN exam and the possible effects to the College, the ASN program and the students as a result of those outcomes. In addition to other programmatic changes, the nurse educators interviewed felt the integration of simulation would assist in improving nursing graduates' performance on the NCLEX-RN exam.

A faculty development program, utilizing best practices in the field of nursing, education, and simulation, will empower nurse educators to design simulations based on the educational student needs. The goal of the faculty development program would be to educate participants on utilizing the International Nursing Association for Clinical Simulation and Learning's (INACSL) best practices for simulation. Using INACSL's *Standards of Best Practice: Simulation's* 11 criteria as the framework for this faculty development program will lead to the purposeful design of simulation scenarios that meet identified objectives and outcomes (INACSL Standards Committee, 2016b).

Rationale

Benner, Sutphen, Leonard, and Day (2010) recommended faculty development, within and across nursing programs, for the development of pedagogies and curriculum, which support effective teaching and learning. For educators, in nursing education and

other disciplines, to strive beyond effective teaching and learning, they must commit to the continuous improvement of their knowledge, skills, and abilities. Benner et al., (2010) supported this conviction by stating, "In any field, excellent teaching requires critical reflection, continuous learning, the capacity to change and to question change, and ongoing development" (p. 213). However, many colleges and universities do not have the resources to support faculty development opportunities (Cheng et al., 2016). The costs associated with workshops, conferences, simulation educator courses, or advanced training in simulation education results in few educators formally trained in the use of simulation.

Lane and Mitchell (2013) developed a three-step train-the-trainer model to prepare nurse educators to use simulation effectively. This model utilizes a scaffold approach that minimizes the inherent costs associated with faculty development by having participants who successfully complete the program instruct, support, and mentor the next cohort group. This type of train-the-trainer model reinforces new knowledge and application of best practices through the development of subsequent participants. The researchers recommend combining in-person training, with online instruction, that culminates into a retreat dedicated to the creation of simulation scenarios. Institutions that prioritize the development of their nurse educators, in the design and delivery simulation scenarios, will graduate nursing students who are better prepared for the rapidly changing health care environment (Lane & Mitchell, 2013).

Review of Literature

The purpose of the literature review was to discover research and articles identifying best practices in simulation for the development of nurse educators. The search terms used for the literature review include *nursing, education, simulation design, learning theories, pedagogy, and faculty development* within the electronic databases of CINAHL Complete, OVID, EBSCO, and Academic Search Complete. Over 30 articles were identified as being relevant to the use of faculty development for the integration of simulation in a prelicensure nursing program.

Through the comprehensive review of the literature, it was determined that Benner's (1984) model of skill acquisition, Kolb's experiential learning theory (Benner et al., 2010), and Knowles's adult learning principles related to simulation (Doerr & Murray, 2008) establish a solid foundation for the creation of a faculty development program for nurse educators. Researchers Thomas et al. (2015) reinforced this determination using Benner's (1984) model of skill acquisition for developing nursing educators in the field of simulation education.

The intended nurse educators for the faculty development program designed for this study are at the novice level of Benner's (1984) model of skill acquisition in the development and integration of simulation scenarios. The successful completion of this faculty development program will develop their knowledge and skill sets from the novice stage to advanced beginner. Nurse educators who successfully complete the program

will continue their knowledge and skill development as they lead future faculty development programs through the train-the trainer framework (Lane & Mitchell, 2013).

Benner's Model of Skill Acquisition

Benner's (1984) novice-to-expert model is the conceptual framework for this study and the creation of a faculty development program, focused on simulation education, for nurse educators at Wilhof College. Thomas et al. (2015) used Benner's model as their framework for faculty development in simulation. The authors determined there was a correlation between the development of nurse educators and registered nurses in regard to their acquisition of knowledge and their application of best practices in simulation. The different skill and knowledge sets needed for each profession explains the shift in status when transitioning from the clinical environment to academia (Summers, 2017). Benner (2001) defined a novice nurse educator as "an RN with no experience in nursing education or teaching and initially lacks the understanding of the role of nursing education" (Weidman, 2013, p.103). This definition applied to perioperative nurses who self-identified as experts in their clinical role, but as novice nurse educators (Mower, 2017). They felt this shift in status was a result of minimal formal or informal training for their role as educator. Table 15 shows the levels of Benner's skill acquisition in the development of nurse educators (Dale et al., 2013; Thomas et al., 2015).

Table 15

Benner's Model for Nurse Educators

Characteristics in Benner's stage	Characteristics in Simulation Educator Role
Level 1 Novice	• Governed by rules • Lacks experience to make modifications • Learning simulation methodology and concepts
Level 2 Advance Beginner	• Participate in writing and running simulations • Demonstrates acceptable skill performance • Relies heavily on scripted simulation scenario
Level 3 Competent	• Prioritizes outcomes of a scenario • Adapts scenarios based on prior experiences • Adapts facilitation level of scenario based on the needs of student participants
Levels 4 & 5 Proficient/Expert	• Can almost automatically prioritize simulation scenario elements to the needs of the student participants • Can quickly recognize deviations in a simulation scenario and readjust or incorporate into debriefing

Nordquist and Sundberg (2015) determined that nurse educators are often clinical experts in their field, but drop to novice-level when asked to integrate simulation education into their curriculum. They found the lack of experience using the technical equipment associated with simulation as one factor that contributes to the descent. Being at the novice-level of Benner's model results in resistance by many nurse educators to integrate simulation into their teaching strategies. In 2016, LaFond and Blood noted that clinical expertise was not enough for a nurse educator to be effective in using simulation.

Min and O'Rourke (2017) support the correlation between the development of clinical nurses and nurse educators using Benner's model of skill acquisition. Their study found 70 percent of nurse educators identified their level of simulation knowledge as

either novice or beginner resulting in 23 percent of the nurse educator participants rarely using simulation to teach students. Benander (2012) believes that an educator who is an expert in their field benefits from experiencing novice-learning opportunities. These experiences provide insights on novice learning strategies that as an expert in the field may have forgotten as an educator. Novice learning strategies, revisited by the nurse educator, experiencing the faculty development program as a novice student, will have the opportunity to incorporate these learning strategies into their curriculum, in an attempt to develop further their students.

Novice nurse educators experience stress from the expectation of apply nursing education principles and theory when not being properly prepared for the role (Weidman, 2013).The transition period for novice-level nurse educators to advance beginner-level is often one-year (Brown & Sorrell, 2017). During this period, nurse educators can increase their knowledge and ability to apply simulation to their teaching strategies (Benner et al., 2010). Dale et al. (2013) determined the use of Benner's model of skill acquisition as an objective measure for the evaluation of clinical nurses as nurse educators. Based on these findings, Benner's model of skill acquisition is the conceptual model used for the faculty development program developed for the nurse educators at Wilhof College.

Kolb's Experiential Learning Theory

Kolb's experiential learning theory is the recommended approach for faculty development in the areas of simulation education and adult learning (Benander, 2012; Benner et al., 2010). Through experiential learning "knowledge is created through the

transformation of experiences" (Kolb, 1984, p. 41). Experiential learning allows the nurse educators participating in the faculty development program to create new knowledge through the training experiences. The expectation is that the nurse educators participating in a faculty development program, focused on simulation, will look for opportunities to apply the knowledge and skills acquired in their curriculum (Benander, 2012). Nurse educators in Beal and Riley's (2015) study acknowledged they use teaching strategies utilized during their nursing education programs, but realize that approach is not appropriate for the new generation of nursing students. Teaching requires more than lecturing about diseases and patient-care (Brown & Sorrell, 2017), active learning strategies contextualize theories and overcome many barriers in nursing education (McPherson & MacDonald, 2017).

Kolb's experiential learning theory encompasses four stages: (a) concrete experience, (b) reflective observation, (c) abstract conceptualization, and (d) active experimentation (Doerr & Murray, 2008). Simulation-based education utilizes experiential learning theories in an attempt to bridge the theory-practice gap in nursing education (Benner et al., 2010). Concrete experiences are achieved through authentic patient scenarios that require students to apply theoretical concepts learned in class (Strickland & March, 2015). The debriefing process that occurs following a simulated experience achieves the reflective observation component of experiential learning. Areas identified for improvement utilize abstract conceptualization when students discuss their clinical decision-making processes and determine alternative approaches to patient care

in the future. Finally, active experimentation allows students to repeat a simulated experience utilizing the new knowledge acquired through debriefing. Students involved in hands-on experiences, related to theoretical content taught in the classroom, can increase their skill level on Benner's (1984) novice to expert model (Strickland & March, 2015).

Experiential learning theory was the foundation for the faculty development module created by Katoue, Iblagh, Somerville, and Ker (2015), resulting in new simulation-based learning being put into practice after reflection by the faculty. The intended nurse educators for this faculty development program are novices in simulation education in relationship to Benner's (1984) model of skill acquisition. However, as adult learners they bring years of clinical nursing experience to the training sessions. The intended outcome from this faculty development program, focused on simulation education, is for nurse educators to create new knowledge related to the creation and integration of simulation scenarios.

Adult Learning Principles

The creation of the faculty development program, focused on simulation education, took into consideration adult learning theories because of the intended target audience. The integration of adult learning theories into a faculty development program results in new information better understood and retained by participants (Mower, 2017). The curriculum for the faculty development program includes adult learning theories to educate nursing faculty on the application of these theories in the creation of their

simulation scenarios. The intended participants in the faculty development program are nurse educators with years of professional nursing experiences. The simulation scenarios developed as an outcome of the faculty development program are for the prelicensure, associate degree-nursing curriculum. Though this population is a novice in the field of nursing, the majority of students are over the age of 18 and are adult learners (Wilhof College, 2014).

Nurse educators, viewed as adult learners, bring diversity in their life experiences, their educational backgrounds, and their personalities to each faculty development session (Lawler, 2003). The faculty development program, focused on simulation education, considered these factors in the design of the program. Lawler and King (2000) recommended six adult learning principles to guide the creation of a professional development program: (a) create a climate of respect, (b) encourage active participation, (c) build on experience, (d) employ collaborative inquiry, (e) learn for action, and (f) and empower participants. The design of the faculty development program for this study integrates Lawler and King's adult learning principles, along Kolb's experiential learning theory, and the unique characteristics of adult learners.

Doerr and Murray (2008) recommended three specific ways Knowles's adult learning principles can be applied in the development of simulation scenarios. The first is recognizing that adult learners bring prior learning experiences to simulation scenarios and they use those experiences in their clinical decision-making. The development program curriculum includes a lesson on integrating this principle in the design of

simulation scenarios. The second principle is the influence adult learners have on how they are educated and assessed in relationship to their specific educational needs. Creators of simulation scenarios must consider this adult learning principle when designing the scenario, but also need to remember if a scenario is either too easy or too hard for participants there will be a negative effect on their motivation (Doerr & Murray, 2008). An appropriate level of difficulty results in greater learning and retention.

The third recommended applied principle is the relevancy participants in the faculty development program perceive of the activities and intended outcomes to their growth and development. Relevancy plays a factor in achieving desired simulation scenario objectives. If adult learners participating in a simulation scenario perceive relevance to their personal and professional goals, there is a greater opportunity to achieve the intended outcomes (Gravani, 2012). Finally, adult learners expect to have input and collaboration on the evaluation of their learning experiences. Creators of simulation scenarios integrate opportunities for collaboration between nursing students and simulation facilitators in the design of a scenario's prebriefing session (INACSL, 2016e).

Realizing the intended audience for the faculty development program are nurse educators, who are experts in the field of nursing, but novices in the area of simulation education, justifies the use of Benner's (1984) model of skill acquisition as the theoretical framework for this project. Adult learning theories (Doerr & Murray, 2008; Lawler & King, 2000; Lawler, 2003) and Kolb's (1984) experiential learning theory apply to the

creation of the faculty development program and the intended design of simulation scenarios, resulting from the faculty development program, since both participants are adult learners.

Associate Nursing Curriculum

After exploring adult learning theories and principles required for a successful faculty development program, the next area of literature review was the need for simulation education within associate nursing programs' curriculum. Talcott, O'Donnell, and Burns (2013) revealed simulation education as an emerging technology within nursing education curriculum. Research conducted by Taplay, Jack, Baxter, Eva, and Martin (2015) identified a seven-phase process for the integration of simulation education into nursing curriculum. These phases include: (a) securing resources, (b) nursing leaders working in tandem, (c) getting it out of the box, (d) learning about simulation and its potential for teaching, (e) trialing the equipment, (f) finding a fit, and (g) integrating into the curriculum. These phases are not sequential and often are iterative, based on the specific needs of nursing educators. The findings from this doctoral study, and the evidence in research, support the development of nurse educators in the creation of SIM scenarios to bridge the theory practice gap in their curriculum.

Learning outcomes that are achieved through simulation education are hindered by nursing educators not properly trained on the use, development, and integration of scenarios within their curriculum (Taplay et al., 2015). Research has shown the programmatic shift in associate nursing curriculum to include more simulation scenarios

(Lavoie & Clarke, 2017). The challenge is determining evidence of need within an institution's associate nursing program (Sosa & Sethares, 2015). Research on the theory-practice gap in nursing education has shown the need for increased integration of simulation within prelicensure nursing programs (Katoue et al., 2015). In addition to research at the national level, institutes of higher education that use predictive licensure assessments can determine specific areas of need for students within their programs (Zweighaft, 2013).

National need: Theory-practice gap. In 1990, George Miller closely aligned the dimensions of clinical practice with Bloom's taxonomy (Glavin, 2008). Referenced as Miller's triangle, the four levels of performance progression begin with knows, knows-how, shows-how, and does. The basic levels of knows and knows-how correlate to the cognitive domain of Bloom's taxonomy. Performance level of shows-how falls within the psychomotor domain, followed by the does performance level aligning with the affective domain. Glavin notes that there is often a gap between the theoretical ability to explain a competency at the *knows-how* level, with a student's ability to demonstrate a skill in the *shows-how* level.

Katoue et al. (2015) identified this same theory-practice gap in the use of simulation education by health care providers. The findings determined the need for development of educators' confidence and competencies in the use of simulation education, as a teaching strategy. Nurse educators must be prepared to assess student competencies beyond the knowledge level of understanding. "As health care has become

more complex, tests of knowledge are no longer sufficient because they cannot demonstrate the ability of the learner to operate at the shows-how level" (Glavin, 2008, p.73). Following the completion of a faculty development program, focused on simulation education, nurse educators indicated an increase in self-efficacy related to teaching and learning, and specifically in the creation and deployment of simulation scenarios (Allvin et al., 2017; Halstead et al., 2011).

Institutional need: Predictive licensure assessments. Standardized predictive licensure assessments provide nursing education administrators and faculty members with insight on areas of improvement for student success on the NCLEX-RN exam (Sosa & Sethares, 2015). Health Education Systems, Inc. (HESI) and the Assessment Technologies Institute (ATI) Comprehensive Assessment and Review Program (CARP) are the leaders in predictive licensure assessments (Chen & Bennett, 2016). Standardized assessments, such as these, assess course and program level performances as a measure of knowledge transfer (Robinson & Dearmon, 2013). Predictive assessment tools identify potential learning needs of nursing students for remediation prior to graduation and the NCLEX-RN exam (Zweighaft, 2013).

Increasing demands for entry-level competencies for nurses result in changes to the content of the NCLEX-RN exam every three years (Sosa & Sethares, 2015). These changes can have a negative impact on student performance on the NCLEX-RN exam requiring nursing educators to modify their curriculum to align with the updated NCLEX-RN test plan (NCSBN, 2015). Predictive licensure exams assist nursing educators to

identify gaps in competencies as continual changes and improvements occur. The completion of a faculty development program, focused on simulation education, would empower nurse educators to correct knowledge and competency gaps in their students, using a different educational strategy.

Institutional need: Simulated learning experiences. Findings from this study indicated simulation scenarios as a potential teaching strategy to bridge the theory-practice gap between clinical and didactic classes at Wilhof College. These findings also align with the literature review on using simulation to bridge the theory-practice gap in nursing education (Glavin, 2008). There was a statistically significant difference in the knowledge gained from lecture and simulation activities compared to nursing students who only received lecture (Zinsmaster & Vliem, 2016). A faculty development program, focused on simulation education, would provide nurse educators with the knowledge, skills, and abilities to create and integrate simulation scenarios into the didactic curriculum.

Need for Faculty Development

Faculty development bridges the gap between expert-level clinical nurses and novice-level nurse educators (Gardner, 2014; National League of Nursing [NLN], 2015). Nurse educators in Weidman's (2013) study indicated they transitioned from the clinical environment to academia because they felt they had expert knowledge to share through teaching. Many clinical nurses have also engaged in teaching because of the shortage of nurse educators (Sebastian & Delaney, 2013).

Nurse educator shortage. A shortage of qualified nurse educators creates a challenge, for administrators of nursing education programs, to hire and retain qualified nursing faculty members (Reese & Ketner, 2017; Weidman, 2013). Technology, retirement, compensation, low satisfaction, and clinical nurses not trained as educators contribute to the national shortage of nursing faculty (Crocetti, 2014; Oprescu, McAllister, Duncan, & Jones, 2017; Talcott, O'Donnell, & Burns, 2013). The shortage of qualified nurse educators resulted in 68, 938 qualified applicants denied entry into nurse education programs (Brown & Sorrell, 2017). This shortage will continue for the next decade as current nursing educators retire and clinical nurses lack the skills needed to teach (Hinderer, Jarosinski, Seldomridge, & Reid, 2016).

Ideally, nursing program administrators would hire nurse educators, who are interested in teaching, possess the knowledge and skills to be able to teach, and have experience in the specialty needed for their program (Beal & Riley, 2015). However, with a vacancy rate of 7.1 percent, administrators hire clinical nurse experts who possess no didactic or clinical teaching experience (Beal & Riley, 2015; Jeffers & Mariani, 2017; Mann & De Gagne, 2017). To ensure achievement of quality learning experiences and educational outcomes, expert-level clinical nurses, trained in educational theory and application, are needed to meet the demands of incoming nursing students (Oprescu et al., 2017).

Nurse educator training. A recommendation for greater clinical specialization by the American Nurses Association in 1969 resulted in a paradigm shift where graduate

nursing programs no longer focused on nursing education or administration, but on improved patient care through the advancement of nursing theory and science (Schoening, 2013). Because of this shift, graduate prepared nurses lack educational theory knowledge and teaching experience (Crocetti, 2014; Hande, Beuscher, Allison, & Phillippi, 2017; Jeffers & Mariani, 2017). Without the proper preparation for teaching, expert-level clinical nurses find the transition to academia very challenging because they are required to use skills not needed in the clinical environment (Weidman, 2013). By investing time and resources into a well-designed faculty development program, administrators prepare nurse educators for the changing needs of students (Beal & Riley, 2015).

Though the promotion of excellence in preparing healthcare professionals is a high priority in healthcare (Bigbee, Rainwater, & Butani, 2016), many institutes of higher education lack a formal orientation or mentoring program for new nurse educators (Mann & De Gagne, 2017). Without a formal program, new nurse educators rely on trial and error, on-the-job training, and asking questions of their colleagues to improve their teaching abilities. Faculty development is a well-documented approach to transition clinical nurses into nurse educators with the different skill sets needed in the classroom (Gardner, 2014; Koto-Shimada, Yanagisawa, Boonyanurak, & Fujita, 2016).

Schoening (2013) identified four transitional phases nurses progress through on their journey to becoming nurse educators: (a) anticipation/expectation, (b) disorientation, (c) information seeking, and (d) identity formation. The

anticipation/expectation phase occurs when a clinical nurse decides to make the transition to nurse educator and is motivated by the chance to make a difference in their profession. Phase 2, disorientation, occurs soon after a new nurse educator begins their first class. Many feel unprepared for the change in relationship styles that occur between nurse-patient and now faculty-student. Though they are considered content experts in the field of nursing, those not properly trained through graduate nursing programs or a well-developed new hire orientation, realize as educators they are at the novice-level in correlation to Benner's (1984) model of skill acquisition (Gardner, 2014).

The realization of being a novice educators moves many new nursing faculty into the information-seeking phase of Schoening's (2013) transition model. In this phase, novice educators will seek out support and instruction on how to move beyond the novice-level of a nurse educator. Many new nurse educators need training on pedagogy, adult learning theories, teaching strategies, simulation education, and other key components required to facilitate nursing curriculum. Without a faculty development program to develop these skills sets, new nurse educators often teach in the same manner they were taught and are often strongly influenced by their preferred learning style, not those of the students in the class (Beal & Riley, 2015; Gardner, 2014).

Dougherty (2014) determined that faculty in the orthopedic faculty development program required extrinsic motivation for their participation. This contradicts Schoening's (2013) information seeking phase, where it was determined that new nurse educators will seek out the resources they need to improve their level of teaching

competency. Regardless of the motivation, Koffel and Reidt (2015) determined that effective nurse educators needed to feel as confident in their ability to teach a nursing concept, as they are in delivering care on the concept.

A faculty development program has the ability to bridge the gap between what a new nurse educator knows and how they can effectively teach the concept to their students. To bridge this gap, faculty development programs need to include activities that specifically meet the needs of their new nurse educators (Brashers, Owen, & Haizlip, 2015). Successful faculty development programs combine experiential learning, with appropriate opportunities for reflective practice, to ensure progress towards outcomes and objectives (Hall & Zierler, 2015). Hall and Zierler (2015) determined that small group learning provided more value to the participants, than large group lecture, in their study of a faculty development program focused on interprofessional education.

Evans, Raziz, and Cook (2013) recommended a train-the-trainer or a mentoring approach for on-going faculty development and support. Legare and Armstrong (2017) concurred that mentoring, socialization, enculturation, and professional development are methods to support clinical nurses on their transition to nurse educators. Participants in Brown and Sorrell's (2017) research noted that a structured program for guiding novice educators was needed at their facility. A faculty development program has the ability to create new knowledge and reinforce best practices by participants, as was found in Resse and Ketner's (2017) study. In their research, 94 percent of the participants found a

structured faculty development program improved the delivery of nursing education through the reinforcement of best practices.

In addition to faculty development programs focused on new nurse educators, experienced nurse educators also require on-going development in both in the fields of nursing and education to stay current with advances in these areas (Koto-Shimada et al, 2016). Both full-time and adjunct nurse educators require on-going faculty development addressing changes in learning environments (Beal & Riley, 2015). Koffel and Reidt (2015) found that participants in a faculty development workshop, focused on evidence-based practice (EBP), improved not only their EBP skills in the clinical environment, but also their ability to teach the topic. Faculty development programs that develop nurse educators who think of themselves first as an educator, and secondly as a nurse, will have reached stage four, identity formation in Schoening's (2013) transition model.

Faculty development: Simulation education. The development of trained nurse educators in the field of simulation is essential as the use of simulation expands in nursing education programs (Beroz, 2017). The development of nurse educators is in three areas: (a) the use of simulation technology, (b) the understanding of simulation pedagogy, and (c) the integration of simulation into nursing curriculum. Talcott, O'Donnell, and Burns (2013) determined that nursing educators are not confident in the use of simulation technology, nor are they using it as often as research indicates is beneficial to nursing students. These findings are supported by Bigbee, Rainwater, and Butani (2016) whose research ranked simulation technology ninth overall for faculty

development topics. In addition to developing the technological skills in nurse educators, there is a need to develop specific simulation skills such as facilitating a debriefing session, writing clinical simulation scenarios, and integrating scenarios into nursing curriculum (Oprescu et al., 2017; Taibi & Kardong-Edgren, 2014).

Because many nurse educators lack the specialized knowledge and techniques needed to integrate simulation into their curriculum, Herrington and Schneidereith (2017) support the findings that indicate faculty development is an ongoing need. Rutherford-Hemming, Lioce, Jefferies, and Sittner (2016) stated that "faculty development in designing, implementing, and evaluating clinical simulations still remain a major concern in nursing education" (p. 3). The successful integration of simulation-based education into nursing curriculum is a challenge for many nurse educators without some form of structured training and development (Katoue et al., 2015; Lemoine, Chauvin, Broussard, & Oberleitner, 2015).

A faculty development program, focused on simulation education, has the potential to develop nurse educators' knowledge, skill, and attitudes related to the design and integration of simulation scenarios (Lemoine et al., 2015). The significant amount of time required to develop a simulation scenario, supports the need for a faculty development program for the effective and consistent creation and integration of simulation education into a nursing program's curriculum (Lavoie & Clarke, 2017; Lemoine et al., 2015). Some nurse educators are currently receiving training from

simulation vendors, who are not pedagogical experts on the use of simulation-based education in a prelicensure nursing curriculum (Jones, Reese, & Shelton, 2014).

It is becoming the expectation that healthcare educators can develop, integrate, and assess simulated clinical student performances within their programs (Lane & Mitchell, 2013). A statewide assessment of simulation-based education in Louisiana identified the need for faculty development as the highest priority in the educating of health professionals (Lemoine et al., 2015). Well-designed presentations, workshops, consortiums, online modules, or any combination of these options, focused on simulation education, are possible faculty development methods (Rutherford-Hemming et al., 2016).

Faculty Development Framework

As simulation education developed as a teaching strategy, Jeffries developed a framework for the design, implementation, and evaluation of simulation scenarios in 2005 (Groom, Henderson, & Sittner, 2014). This framework consists of five constructs: educational practices, teachers, students, simulation design characteristics, and outcomes. The 11 standards for best practice in simulation design by INACSL further defined Jeffries's simulation design construct. The NLN supports both the Jeffries Simulation Framework and INACSL's *Standards for Best Practice: Simulation* in the use of nursing education.

LaFond and Blood's (2016) research validated the need for nursing professional development using INACSL's Standard V: Facilitator. This standard recommends simulation education through formal coursework, professional development, and a

mentorship program for new nurse educators. LaFond and Blood utilized Jeffries's Simulation Framework as the conceptual model for their research. Of the 16 total participants, 10 implemented simulation scenarios into nurse residency programs, seven increased their use of simulation, and six have collaborated with other study participants to deliver simulation training to others.

The faculty development program designed for this study utilizes the Jeffries's framework construct of simulation design characteristics as defined by INACSL. In 2011, the INACSL published *Standards of Best Practice: Simulation* for use in all health care disciplines, not just nursing (Rutherford-Hemming, Lioce, & Durham, 2015). Revisions made to some of the original standards occurred in 2013, along with the addition of guidelines to provide examples of evidence-based practice for the implementation of each criteria. These standards incorporate principles from instructional design, adult learning, evaluation, education, simulation pedagogy and clinical standards of care (INACSL Standards Committee, 2016b). Review of the standards occur every three years to ensure relevancy to health care practice.

As recommended by the NLN for simulation guidelines and quality measures, INACSL'S *Standards of Best Practice: Simulation* serves as the framework for the faculty development program designed for this study (INACSL, 2016b). These guidelines are considered the most comprehensive for strategic planning, research, faculty development, and integration of simulation-based education into nursing curriculum (Rutherford-Hemming et al., 2015; Sittner, 2016). INACSL's *Standards of*

Best Practice: Simulation 11 criteria are based on, and supported by research, for their effectiveness in simulation education and provided the framework for the curriculum created for the faculty development program (Min & O'Rourke, 2017).

Needs assessment. Simulation education provides an opportunity for nursing educators to fill a gap in knowledge or application for their curriculum for improved learning by their students (INACSL Standards Committee, 2016b). Criterion one requires a needs analysis be completed to guide the development of objectives and desired outcomes. Also known as a gap analysis, this form of assessment is an effective strategy to determine deficiencies in nursing curriculums (Mager, Beauvais, & Kazer, 2017). This information can come from a root cause investigation, an organizational analysis, outcome data analysis from predictive licensure assessments, or changes in accreditation standards. The findings from needs analysis can result in simulation scenarios that bridge didactic and clinical classes, standardize clinical experiences, address competencies, improve quality of care and patient safety, and promote clinical practice. The faculty development project will address criteria one by having nurse educators identify curricular areas of improvement from results by students on their predictive licensure assessments. Student performances, while engaging in simulation scenarios, may identify additional gaps in curricular outcomes (Rodgers, Peterson, Ponce, White, & Porterfield, 2015). These additional gaps would require discussions among the nurse educators as to whether modifications to the simulation scenario or within the didactic curriculum should occur (Rojas, Parker, Schams, & McNeill, 2017).

Measurable objectives. Objectives are the foundation in the development of a simulation scenario and can either be broad and align with nursing programmatic goals, requirements from governing bodies, or clinical expectations, or specific and reflect the desired outcomes of the nursing program for the students within the simulation experience (INACSL Standards Committee, 2016b). INACSL recommends using Bloom's Taxonomy as the framework for creating learning objectives for simulation scenarios (INACSL Standards Committee, 2016d). These objectives can be at the cognitive, psychomotor, or affective domain level depending on the desired outcome of the scenario. The faculty development curriculum contains a learning activity for nurse educators on the creation of objectives for simulation scenarios.

Once desired outcomes and domain level are determined, INACSL Standards Committee (2016b) recommends constructing specific, measurable, achievable, realistic, and time-phased objectives. It is necessary to train simulation designers on how to write objectives in this format. Since the best practices in simulation design criteria three through eleven, depend on concise, measurable objectives to guide their creation, the development of nurse educators in this skill is imperative.

Simulation structure. The identified needs in criteria one, the broad and specific objectives written in criteria two, along with the resources that are available, the desired formative or summative assessment, and the targeted nursing student population determine the format of the simulation scenario (INACSL Standards Committee, 2016b). Within criterion three, the modality of the simulated experience is determined. Options

include simulated clinical immersion, in situ simulation, computer-assisted simulation, virtual reality, procedural simulation, or hybrid simulation. Determination around the use of standardized patients, manikins, haptic devices, avatars, or partial task trainers is included within criterion three. To help inform Wilhof College's nurse educators about the specific options they have within the Center for Excellence in Practice, the faculty development program curriculum includes the coordinator of simulation operations as a guest speaker.

Simulation scenario. Designing a simulation scenario requires decisions made in criteria one through three to be considered; the needs, the objectives, the resources, the modality, and the type of patient selected (INACSL Standards Committee, 2016b). The next step in the creation of a simulation scenario is to evaluate framework constructed in criteria one through three against the typical 60-minute time allotment for a simulation experience to determine if the desired outcomes and objectives are achievable. A typical simulation experience begins with a 15-minute prebriefing session, then 15 minutes for the simulation experience, followed by 20-30 minutes for debriefing (Park et al., 2013). If the desired outcomes and objectives cannot be met within the 60-minute time period, they are adjusted and the simulation scenario is revised.

Criteria four is where the expertise of the nurse educators is capitalized on in the development of the simulation scenario. Years of experience in the nursing profession allows nurse educators to integrate real-world elements into the patient case study, but their experience through the faculty development program as a novice learner of

simulation education, provides the opportunity to help their novice nursing students' problem-solve more like an expert (Benander, 2013).

During the prebriefing phase of a simulation scenario, nursing students receive information pertaining to the patient case and the intended outcomes and objectives for the experience (INACSL Standards Committee, 2016b). This information provides the starting point for the simulation scenario. The skills and decision-making abilities of the nursing students determine the clinical progression of the scenario. The need to advance the simulation experience determines the level of engagement by the nurse educator. Nurse educators use a standard script to ensure relative consistency within repeating simulation sessions, but variations occur when there is a need for clinical progression of the simulation experience. Too much variation in reoccurring simulation experiences affects the validity and/or reliability of the simulation experience for participants. Formative and summative evaluations require nursing students, participating in the simulation scenario, to demonstrate critical competencies.

Level of realism. Simulation allows nursing students to apply theoretical knowledge to patient-care in a safe learning environment. The quality of a participant's clinical-decision making, within a simulated learning experience, is determined by the level of realism the experience provides. To that end, the physical, conceptual, and psychological aspects of fidelity are determined within criterion five. Allvin et al. (2017) found novice simulation educators fascinated by all the technical options associated with simulation-based education, but with increased simulation experience, fidelity choices

better aligned with scenario objectives. A faculty development program helps educate nursing faculty on the appropriate alignment of technology with desired outcomes.

The physical factors include the appropriateness of the patient selected and the environment created for the simulation scenario. The conceptual element refers to the realism of the patient case history presented in the prebriefing session. INACSL recommends simulation designers have simulation scenarios reviewed by subject matter experts to ensure the highest level of realism is included in the case design.

Facilitative approach. Determining the level of engagement by the nurse educator/facilitator considers the level of difficulty of the objective(s) and level of knowledge and experience of the nursing students participating in the simulation experience (INACSL Standards Committee, 2016b). There is an inverse relationship between the level of engagement by the nurse educator and the nursing students' knowledge and experience. INACSL recommends nurse educators/facilitators have formal training in simulation-based pedagogy. "Facilitation of a simulation-based experience requires a facilitator who has education, skill, and ability to guide, support, and seek out ways to assist participants in achieving expected outcomes" (INACSL Standards Committee, 2016c, p.16). Jones, Reese, and Shelton (2014) who recommend all educators involved in the facilitation of simulation-based education should complete some type of formal training support INACSL's recommendation. LaFond and Blood (2016) stated all facilitators of simulation-based education should have formal training

because of the key role they play in students' achieving the learning objectives of the scenario.

To support the nurse educators, as facilitators of simulation-based education, the faculty development program includes a section on the fundamentals of simulation pedagogy (LaFond & Blood, 2016). Because without proper training on the level of involvement in simulation scenarios, novice facilitators try to control, the simulation process and guide the progress of the scenario (Allvin et al., 2017). With more education and experience, nurse educators were more confident in the simulation process.

Prebriefing. A prebriefing, with nursing students, facilitated by the nurse educator, sets the stage for the simulation experience (INACSL Standards Committee, 2016b). During this meeting, nursing students receive information pertaining to the objectives, the environment, the type of patient, and the type of assessment included in their simulation experience in an effort to make them feel more comfortable with the simulation experience (Rodgers et al., 2015). During the prebriefing establishing ground rules that create an environment of integrity, trust, and respect is critical to the success of the simulated experience (INACSL Standards Committee, 2016b).

INACSL recommends a standardized process for prebriefings to ensure a consistent learning environment for all nursing educators and students. The faculty development program allocates time for nurse educators to work on the prebriefing elements for their scenario. As recommended by Allvin et al. (2017), communication

regarding the importance of the objectives associated with the simulation scenario occur through all stages of the process, most especially during the prebrief.

Debriefing. Cheng et al. (2015) defined debriefing as a "discussion between two or more individuals in which aspects of a performance are explored and analyzed with the aim of gaining insight that impacts the quality of future clinical practice" (p. 217). INACSL Standards Committee (2016a) recommends integrating a debriefing session, with a trained nurse educator, into all simulation-based experiences to provide feedback in an effort to enrich the learning experience. Rojas et al., (2017) felt debriefing provided students the maximum benefit of learning from the simulation scenario. Debriefing provides an opportunity for facilitators to teach critical thinking in context to the objectives covered in the simulation experience (Park et al., 2013). The development of nurse educators on proper debriefing techniques has the potential to not only benefit simulation education, but didactic classroom instruction as well. The NLN (2015) and INACSL, believe that debriefing across nursing curriculum "has the potential to transform nursing education and holds great promise in educating nurses to be the reflective practitioners necessary in today's health care system" (p.349). The systematic review of student performance in the simulation scenarios, during debriefing, provides the opportunity to teach critical thinking skills (Rogers et al., 2015). As a key instructional strategy, proper debriefing techniques require training and development.

Reflection activities, used in debriefing sessions, allow students to assimilate new insights gained from the simulation experience with preexisting knowledge. These

reflective activities align with Kolb's (1984) experiential learning theory, where students have the opportunity to create new meaning from the simulation experience (Forneris & Fey, 2016). Students' expertise level with reflection determines the level of engagement by the nurse educator (Park et al., 2013). Increased comfort with reflection allows debriefing sessions to move from facilitator–guided instruction to a peer-debriefing model. In a peer-debriefing model, students observe simulation experiences, critically evaluate their peers' performance, and then provide feedback. Park et al. (2013) recommend incorporating a written activity into either model of debriefing to provide nursing students with the ability to reflect on their performance after the conclusion of the simulation experience.

The INACSL Standards Committee (2016a) recommends nurse educators who facilitate debriefing sessions complete an initial training course, as well as ongoing continuing education to maintain best practices in simulation debriefing. The faculty development program requires nurse educators to review these various teaching strategies, in conjunction with simulation debriefing to provide a safe and consistent debriefing experience for students (Roja et al., 2017).

Simulation evaluation. As described in criterion four, the type of evaluation for a simulation scenario are determined during the design phase (INACSL Standards Committee, 2016b). The prebriefing session informs nursing students of the type of evaluation associated with their simulation scenario. Data collected and analyzed from

the evaluation processes provides insight into areas of improvement either in the prebriefing session, the simulation scenario, or the debriefing process.

Simulation scenarios can assess formative, summative, or high-stakes outcomes (Rutherford-Hemming et al., 2015). Novice nurse educators, in the use of simulation as a teaching strategy, should begin with formative assessments and work up to summative and high-stakes. Formative assessments allow nurse educators to evaluate students' progress in attaining a goal or competency and allows for constructive feedback. Since the nurse educators for the intended faculty development program are at Benner's (1984) novice level of skill acquisition associated with the creation and integration of simulation-based education, the training guides participants towards formative assessments if possible.

Preparation materials. After the design of the simulation scenario, the level of preparation required of nursing students is determined (INACSL Standards Committee, 2016b). The faculty development program allocates time for the clinical and didactic nurse educators to come to consensus on the required resources and activities nursing students must complete in preparation for the simulation scenario. Preparatory activities establish an expected baseline of knowledge from the participants prior to engaging in a simulation scenario (Curl, Smith, Chisholm, McGee, & Das, 2016). It is critical nursing students possess the requisite knowledge, skills, attitude, and behaviors required for a successful simulation experience, prior to engaging in the simulation scenario (INACSL Standards Committee, 2016b). Various large group, small group, and peer feedback

activities, within the faculty development program, provide nurse educators with feedback on the requisite knowledge, skills, attitude, and behavior in relationship to the intended simulation scenario objectives and scenario design.

Simulation pilot. INACSL Standards Committee (2016b) recommends testing newly designed simulation scenarios before integrating them into a program's curriculum. Testing new simulation scenarios should include subject matter experts related to the simulation objectives, simulation participants who have similar knowledge and skill sets as the target population for the simulation scenario, and the clinical and didactic nursing educators associated with the simulation outcomes and objectives. These stakeholders can identify any confusing, missing, or underdeveloped areas within the scenario that would prevent successfully achieving the intended outcomes and objectives, as well as testing the evaluation tools integrated in the simulation scenario.

The final week of the faculty development program requires the nurse educators to pilot their simulation scenario. This group exercise allows for analyzing of the scenario and facilitation to ensure all clinical clues are included in order for students to achieve the desired objectives (Rutherford-Hemming et al., 2015). The pilot also allows nurse educators to experience the simulation from the perspective of a student, which is beneficial in helping nursing students apply the learning achieved from the simulation experience into other clinical situations (Benander, 2012).

The 11 criteria and guidelines included in INACSL's *Standards for Best Practice: Simulation* (2016a, b, c, d) provide a framework for the curriculum required in a faculty

development program that focuses on simulation-based education. These standards, along with the numerous recommendations in research (Allvin et al., 2017; Halstead et al., 2011; Lemoine et al., 2015; Rogers et al., 2015; Rutherford-Hemming et al., 2015; Rutherford-Hemming et al., 2016), for structured faculty development for the improved creation and integration of simulation scenarios in nursing curriculum the proposed faculty development program can be found in Appendix A.

Project Description

Purpose

The purpose of a faculty development program, focused on simulation education, is to prepare nurse educators for developing simulated learning experiences needed within the ASN curriculum at Wilhof College. This faculty development program is one facet of an institutional effort to support nursing students in their preparation for the NCLEX-RN exam and entry into the field of nursing. The objective of the faculty development program is to develop nurse educators' competencies in the design of simulation scenarios. Participating in this faculty development program will provide nurse educators with a theoretical understanding of best practices in simulation design, along with the application of creating and piloting simulation scenarios. Adult learning theories and experiential learning principles serve as the foundation for the development program. The content used for the educational modules are based on the findings from this study and peer-reviewed journal articles on nursing education, simulation, and faculty development.

Resources, Support, and Barriers

Resources. Wilhof College currently has over 20,000 square feet of simulated learning space in the Center for Excellence in Practice (CEP) (personal conversation with the Director, Center for Excellence in Practice, January 2017). This space includes a multi-patient suite, a home healthcare suit, an operating room, various other health science labs, and dedicated prebriefing and debriefing rooms. The CEP also has audio/video recording capabilities for all simulated learning experiences. Dedicated rooms for prebriefing and debriefing provide nursing students with time to prepare and reflect on their simulation scenarios. The CEP has low, medium, and high fidelity manikins to support varying learning objectives, along with access to standardized patient actors.

In addition to the physical space and inventory of manikins, the CEP staffs a dedicated director to oversee all learning experiences within the space and a coordinator of simulation operations who is responsible for the optimal usage of technology and equipment needed to meet learning outcomes and objectives. Two master-prepared registered nurses are on staff as simulation educators to support faculty in the development and deployment of simulated learning experiences. These simulation nurse educators would serve as subject matter experts for the facilitation of the proposed faculty development program. Various chairs of health science programs also work within the CEP and can provide expertise in the development of interdisciplinary simulation scenarios.

Support. The proposed faculty development program has support from many departments and leaders at Wilhof College. The Academic Development and Support (ADS) department is a resource for the creation and facilitation of the proposed faculty development program. The ADS department employs professionals with expertise in the fields of academic technology, instructional design, teaching strategies, and adult learning theories. This staff can also assist the simulation nurse educators from the CEP in facilitating the faculty development workshop. As simulation education continues to develop and improve, the librarians within the Learning Commons department can assist in locating current literature on best practices in the field of simulation education that should be integrated into the faculty development curriculum. Executive leadership and nursing administration at Wilhof College also support a faculty development program that educates nursing faculty on the best practices in simulation education.

Potential barriers. Time and financial expenses are the two biggest barriers associated with a faculty development program focused on simulation education. Time is a limited resource for all faculty at Wilhof College. In addition to their teaching assignments, faculty have various governance and administrative responsibilities that limit their ability to participate in a faculty development program. One potential solution would be a teaching release for nurse educators who participate in the program. A teaching release would provide the eight potential participants time during their semester to focus on the outcomes and objectives of the faculty development program. This solution adds to the second barrier; financial expenses. The increased financial burden to

pay adjunct nurse educators to teach the open course sections, may be a potential barrier to the faculty development program.

Lane and Mitchell's (2013) train-the-trainer model would minimize the staffing and financial impacts on Wilhof College's ASN program. This model uses a scaffold approach to prepare nurse educators in the development, testing, and integration of simulated learning experiences, within a nursing education program. The first step, in this three-step process, is to identify nurse educators who will advocate for simulation education. These champions could be the participants from this study, ASN clinical and didactic course coordinators, or nursing educators who self-select to participate. Ideally, eight full-time nurse educators would serve as simulation champions and would complete the faculty development program. These eight faculty members would represent the four didactic and four clinical courses that serve as the foundation for the ASN program.

The second step within this Lane and Mitchell's model is champion development. Nurse educators identified in step one would complete the faculty development program to increase their knowledge and skills in development, testing and integration of simulation scenarios. After completing the program, nurse educators would transition into the role of simulation champion for their clinical or didactic class. As simulation champions for their designated clinical or didactic class, these nurse educators would collaborate with other faculty who teach the same course and identify areas of simulation need within their curriculum. They would also collaborate with other faculty on the design, testing, and evaluating of simulation scenarios incorporated into their curriculum.

The blended delivery model for the proposed faculty development program, focused on simulation education, is another approach to minimizing the time commitment associated with the program. The blended delivery model incorporates asynchronous online units with in-person sessions, over a 12-week period. Each online unit has unique and specific objectives, collaborative learning activities, and assessments for nurse educators to complete prior to the subsequent in-person session. The online activities were purposefully designed to be collaborative among participants, while still allowing the flexibility to be completed at different times. Tools such as discussion boards, wikis, and journals allowed for variety of activities during the online weeks. The alternating in-person sessions are designed to review, clarify, and build on the online weekly objectives. It is a challenge to design a faculty development program without some concessions for time and expense; however, the proposed faculty development program strives to minimize both.

Implementation

Implementation of the faculty development program requires the approval of the Vice President of Academic Affairs and the Dean of Nursing. With their consent, the first step in implementation is to communicate the faculty development program to nurse educators at their division meeting. Following the meeting, a request for nurse educators, representing each clinical and didactic course, would be made to the Dean of Nursing. Once the participation pool is identified, a follow-up meeting with the participants would be scheduled to explain the goals and objectives of the program, as well as to answer any

questions. Ideally, the faculty development program would begin at the start of the following fall semester.

The blended design of the faculty development program requires 12-weeks, out of the 15-week semester, for participants to complete the program requirements. Faculty participants alternate weekly between online and in-person development sessions. Taking into account breaks and finals, the proposed faculty development program requires one-semester for the completion of the program. Implementation and evaluation of developed simulation scenarios would ideally occur in the following spring semester. This would then allow for the next group of nursing educator participants, for the fall semester development program, to be identified prior to going on summer break. Table 16 outlines the anticipated online and in-person topics covered each week of the development session.

Table 16

Sample Timeline for Project Implementation

Schedule 120 minutes each	Delivery Format	Description
Week 1	Online Module	Curriculum Integration
Week 2	In-person Session	Needs Analysis & Simulation Scenario
Week 3	Online Module	Teaching and Learning Strategies
Week 4	In-person Session	Facilitator Involvement Preparatory Materials
Week 5	Online Module	Maximizing Realism
Week 6	In-person Session	Simulation Scenario Design Fidelity Types
Week 7	Online Module	Debriefing Foundations
Week 8	In-person Session	Prebriefing Plan Debriefing Plan
Week 9	Online Module	Evaluating Simulations
Week 10	In-person Session	Simulation Scenario Evaluation Simulation Scenario Testing
Week 11	Center for Excellence in Practice	Piloting Simulation Scenarios
Week 12	In-person Session	Piloting Simulation Scenarios – Feedback

Roles and Responsibilities

As the coordinator of this faculty development program, I will oversee the planning and implementation of the program. The first responsibility is acquiring approval from the Vice-President of Academic Affairs and the Dean of Nursing, followed by presenting this faculty development opportunity at the first available division of nursing meeting. Communicating with participants and facilitating the 12-week program are key responsibilities for the success of the program.

Administrative tasks for this faculty development program include reserving rooms for in-person sessions, sending meeting planner to all participants, and securing the site license for the online simulation modules. Coordinating and scheduling the simulation nurse educators and instructional designers will ensure subject matter experts are available to assist and educate participants as needed throughout the program. Finally, to ensure continuous improvement of this faculty development program, analysis of the evaluations will be an essential function to the program.

Project Evaluation Plan

"All simulation-based experiences require participant evaluation" (INACSL Standards Committee, 2016e, p. 26). Based on this recommendation, nursing educators will conduct the simulation scenario evaluations. Research determined that Kirkpatrick's Four Levels of Evaluation is the ideal framework for evaluating this faculty development program (Abdulghani et al., 2014). Kirkpatrick's model utilizes four evaluation levels:

(a) reaction, (b) learning, (c) application, and (d) results (Kirkpatrick & Kirkpatrick, 2006).

Level 1, reaction, assesses the course instructor, setting, materials, and learning activities related to the training session. This level identifies any obstacles that would prevent participants from achieving the intended objectives. Level 2, learning, evaluates the participants' perceptions of acquiring new knowledge or skills as a result of participation in the faculty development sessions. Level 3, application, measures whether knowledge, skills, and attitudes acquired from the development program transfer to the workplace. Finally, in Level 4, results, follow-up assessments evaluate ongoing, continuous change in practice because of participation in the development program.

Levels 1 and 2 evaluations assess the impact of change on the individual, while levels three and four measure the impact of change for the institution/workplace. "Evaluation of Kirkpatrick's third and fourth level are always challenging for any program organization committee and should not be conducted before completing level one and two evaluations" (Abdulghani et al., 2014, p. 28). For this faculty development program, evaluation will focus on Kirkpatrick's (2006) level one and two evaluations.

Participants will complete an online formative survey, assessing their reaction and learning, following each in-person faculty development session. Information collected from each of these formative assessments allow changes to occur before the next in-person session. A five-point Likert-scale will evaluate participants' perceptions of satisfaction, usefulness, motivation, and their acquisition of knowledge, skills, and

attitudes. A summative assessment will follow the conclusion of the faculty development program evaluating perceptions of the overall program. These data will drive the continuous improvement process of the program.

A formative assessment will also be integrated into the evaluation of the simulation scenarios created by the nursing educators who take part in the faculty development program. These data will inform change in the faculty development program, as well as in the simulation scenarios. The NLN has the Simulation Design Scale (Student Version) that assesses a simulation scenario at Kirkpatrick's levels one and two. Categories assessed include objectives and information, support, problem solving, feedback/guided reflection, and fidelity. These categories are assessed on a five-point Likert-scale and rate the participant's level of agreement with each statement and the level of importance each statement has for the student.

Project Implications

Faculty remain untrained for the increased integration of simulation education in nursing education programs (Taibi & Kardong-Edgren, 2014). Findings from Taibi and Kardong-Edgren identified the interprofessional communication, leading a post-simulation debriefing, and integrating simulation into course curricula as the top three areas of need by nursing educators in simulation education. They also note that funds for faculty development are decreasing, or are nonexistent, at many institutions. Lack of adequate training poses a barrier for the adoption and implementation of simulation education.

Development programs improve faculty members' knowledge, skills, and motivation and enthusiasm for teaching (Lancaster, Stein, MacLean, Van Amburgh, & Persky, 2014). However, Ignatavicius and Chung (2016) identified financial, workload, and time as barriers to faculty implementing curricular and educational changes. Of these three, time was as the biggest barrier identified by participants. The proposed solution is to provide release time for nurse educators to participate in the faculty development program. The train-the-trainer model minimizes the cost of coverage for the release time and allows nurse educators to improve their knowledge and skills in the area of simulation education.

Stakeholders

There is a line of stakeholders interconnected by the outcomes associated with this project. The first stakeholder in the line are the nursing educators who will benefit from the acquisition of knowledge and skills in the creation of simulation scenarios for integration in their curriculum. The next stakeholder are the students who will benefit from the additional simulation scenarios incorporated into their nursing education curriculum. The intent is for the simulation scenarios to increase nursing students' critical thinking skills needed for success on the NCLEX-RN exam.

Third in line, benefitting from this faculty development program, would be the division of nursing and Wilhof College. Both groups would benefit from an increase in nursing student graduates passing the NCLEX-RN exam on their first attempt. Both would also benefit from the anticipated goodwill by the nurse educators who participate in the

program. Finally and ultimately most importantly, are the patients Wilhof College nursing graduates will care for in their communities. The simulation scenarios incorporated into the ASN curriculum will improve the critical thinking and clinical decision-making skills of our nursing student graduates. Improvement in these skills will result in better overall care for those served by our nursing student graduates.

Section 4: Reflection and Conclusion

Introduction

The purpose of this qualitative descriptive study was to examine the perceptions of nursing educators at Wilhof College in regard to the integration of learning activities between clinical and didactic courses, for the improved performance by first time nursing graduates on the NCLEX-RN exam. This section focuses on the process and growth that occurred throughout this study and the potential impact for lasting social change. I begin by identifying the strengths and limitations of the project, followed by recommendations for alternative approaches to those challenges. A summary of scholarship and project development is also included in Section 4, followed by the impact on leadership and change. Reflection on the importance of the study, the implication, application, and possible directions for future research are shared prior to the conclusion.

Project Strengths and Limitations

Strengths

Based on the findings from this study and support from the literature, a faculty development program, focused on simulation education, for nursing educators, was selected as the appropriate project. The data analysis identified five learning activities for potential integration between the clinical and didactic courses; simulation, ATI modules, hybrid theory, math and science, and minisimulations. Simulation education received 55% (6/11) of the responses and was therefore selected as the first learning activity for integration between clinical and didactic courses.

The review of literature on the integration of simulation, within a nursing education program, revealed the need for faculty development to achieve successful outcomes. McNeill et al., (2012) "identified faculty development as critical to the growth and refinement of the use of simulation in nursing education" (p. 686). Faculty development programs can comprise a variety of formats, with no consensus on which is the most effective (McNeill et al., 2012); therefore, allowing the utilization of a train-the-trainer, blended framework.

Lane and Mitchell's (2013) train-the trainer model scaffolds the number of participants in the program and builds a succession of simulation education champions within the nursing program. The blended format provides participants flexibility in completing the online modules, while receiving support and guidance during the bi-weekly in-person sessions. Based on the literature, this faculty development program combines the best practices of INACSL for simulation education, with the flexibility of a blended delivery model that focuses on the learning activity most identified by the participants in the study.

Limitations

The greatest limitation, associated with the faculty development project created for this study, is institutional leadership support. Leadership support is required for faculty to have release time from teaching to participate in the 12-week faculty development program. The design of the development program is for one nurse educator from each clinical and didactic course to complete the program together as simulation

champions. Eight faculty members would need release from teaching to complete the faculty development program. Leadership support is also required for the costs associated with the compensation for the adjuncts teaching classes in lieu of the nurse educators in the faculty development program. In addition to institutional leadership support, willing participation by nurse educators is another potential limitation to the study. Though there are several limitations associated with the implementation and achievement of outcomes associated with this faculty development project, I am confident by anticipating them, changes and adaptations can be made for the program to be successful.

Recommendations for Alternative Approaches

This qualitative descriptive study examined the perceptions of nursing educators on the integration of learning activities between clinical and didactic courses, for the improved performance on the NCLEX-RN exam. The integration of simulation scenarios between the courses was recommended the most often by the participants and was therefore selected for this project. However, interview question seven, inquired about student barriers to success on the NCLEX-RN exam. An alternate approach to identifying learning activities for integration between the clinical and didactic courses would be to explore further these barriers. Identifying learning activities that could address the perceived barriers and be integrated b etween clinical and didactic courses is an alternative approach to this study.

In addition to the student barriers to success identified in interview question seven, the participants also revealed systemic barriers. The lack of and/or low quality of student support services was identified by 27% (3/11) of the participants as a systemic barrier to student success. Further exploration into the missing or poor quality services is another alternative approach to the study. In lieu of a faculty development project, a policy recommendation could be an appropriate project.

Scholarship, Project Development, and Leadership and Change

Scholarship

Boyer (1997) defined scholarship along four interlocking dimensions: discovery, integration of knowledge, applying knowledge, and teaching. The scholarship of discovery focuses on the use of primary research to discover new solutions to existing problems. In relationship to my study, the creation of knowledge occurred through data analysis and designing of the faculty development program. This primary research lead to the discovery of integrating simulation education between clinical and didactic courses for improved performance on the NCLEX-RN exam.

The discovery of new knowledge does not meet all the criteria for scholarship according to Boyer (1997). The second dimension, to scholarship, is the integration of the new knowledge into the context of the larger problem. The literature review conducted for this research study ensured the guiding research question explored a possible outcome not already defined within the scope of the problem. The use of

simulation education as a learning activity that bridges clinical and didactic courses within an associate nursing education program was not identified.

The creation of a faculty development program that focuses on educating nursing faculty, on the integration of simulation scenarios into their curriculum, meets Boyer's (1997) third dimension of scholarship, the application of knowledge. Applying what was learned from the data analysis, and literature review, into the creation of a faculty development program, uses the new knowledge to benefit the identified problem at the local institution. The final element of Boyer's theory is the scholarship of teaching. Facilitating the project created for this study, allows me to educate the nursing faculty, on the new knowledge discovered, in context to the larger issue of success on the NCLEX-RN exam, using the application of a faculty development program.

Through the completion of this research study I have grown in Boyer's (1997) four of dimensions of scholarship. The ability to integrate new knowledge, to solve an existing problem, required the improvement of my critical evaluation skills of scholarly research. I learned which database collections had the research findings most applicable to my study, how to identify between primary and secondary research, and which publications were peer-reviewed. Focusing on improving first-time test scores, on the NCLEX-RN exam by our nurse graduates, improved my ability to integrate and apply new knowledge. Not being a nurse by trade, there was much for me to learn regarding the challenges associated with the NCLEX-RN exam. The impact failure on the licensure

exam has on students, on an institution, and the community they serve, were all areas of growth for me.

The literature reviews on simulation education, specifically applied to nursing education, allowed me to expand my understanding of how a simulation scenario is created and how I can best educate nurse educators on this process through the development and application of a faculty development program. I started my professional career as a faculty member teaching adults in the fields of business and finance. The literature review for the creation of the faculty development program reconnected me with adult learning theories not considered in several years. Overall, the academic journey of this doctoral study helped me to grow as a scholar, as a practitioner, and as a developer of faculty development programs.

Project Development

The findings from data analysis indicated the nursing educators, who participated in this study, felt that simulation scenarios are an appropriate learning activity to integrate between clinical and didactic courses. The literature review regarding the integration of simulation scenarios, into existing curriculum, emphasized the need for educating faculty. Examining these recommendations against the four genres of projects, lead to choosing a professional/faculty development program.

The evaluation report and curriculum plan were not appropriate options to meet the needs of this study that left either a professional development program or a policy recommendation. In my current role as a dean, a policy recommendation could be

viewed as an administrative directive based on the feedback of a select group of nursing educators. I did not feel this approach would garner the support of the associate nursing program. However, the hope is that nursing educators will perceive the creation of a faculty development program, as an investment in them as learners of simulation education.

My knowledge of simulation, as an education tool, was increased through the creation of the faculty development program for this study. Prior to starting at Wilhof College, I was aware of simulation as an educational tool, but did not have first-hand experience using it. Through this study I learned about INACSL's *Standards of Best Practice: Simulation* in the creation, deployment, and evaluation of simulation education (INACSL Standards Committee, 2016b). Topics such as writing objectives and formative versus summative evaluations were educational topics I had experience with from my prior teaching career; however, the importance of prebriefing, fidelity, and debriefing were all new and areas of growth for me.

Leadership and Change

Growth as a leader was an expected outcome, and goal, from the journey to earn a doctorate degree at Walden University. Quality leadership skills are needed in many facets of my life, but most especially in my professional life. As a dean in higher education, with aspirations for promotion, I selected the higher education leadership concentration to develop further my leadership abilities.

By purposefully selecting a topic for my doctoral study, that is outside my scope of expertise, challenged me to grow as a leader. A college that graduates health science and nursing professionals has a responsibility to ensure they are prepared for entry into their field of practice. For nursing students, demonstration of competency is achieved through successful performance on the NCLEX-RN exam. Though I am not a nurse by trade, as a leader at the college, I appreciated the magnitude of this responsibility. When our test scores on the NCLEX-RN exam fell below national average and jeopardized the program's accreditation status, I decided to explore this topic for my doctoral study.

Extensive literature reviews, both on the research question and the proposed project, expanded my understanding of nursing education. Conducting interviews with nurse educators allowed me to gain direct insight on the challenges they face in preparing nursing students for the NCLEX-RN exam. My commitment to social change, through the positive impact my doctoral study can derive, is how a faculty development program was selected. On this journey, my skills in communication, problem-solving, strategic planning, adaptability, and critical thinking skills have all improved.

Reflection on the Importance of the Work

This study is important on many levels. On a large scale, the better Wilhof College can prepare nursing students for entry into practice, the higher quality care patients will receive. The challenge for nursing education programs is the criteria for entry into practice can change every three years, resulting in changes on the NCLEX-RN exam. To better prepare Wilhof College's nursing graduates for the NCLEX-RN exam,

data collection came from nurse educators within the program. The findings from this study led to the creation of a faculty development program.

As the project for this study, the faculty development program, delivers positive outcomes in many areas. First, the investment of time and resources in Wilhof College nurse educators will increase their knowledge and abilities in simulation education. Second, curricular improvements will occur as simulation scenarios are integrated between clinical and didactic coursework. The third positive outcome will be for nursing students who are able to bridge the theory-practice gap by connecting concepts from didactic classes with application in simulation, prior to performing on real patients in the clinical environment. The combination of these outcomes has the potential to improve student performance on the NCLEX-RN exam.

Implications, Applications, and Directions for Future Research

In 2014, the registered nurse workforce is expected to grow from 2.71 million to 3.24 million by 2022 (AACN, 2014). The ability to meet the need for 526,800 registered nurses can only occur if colleges and universities are able to graduate nursing students who are prepared to pass the NCLEX-RN exam. This study has the potential to meet this need by preparing their nursing students for the licensure exam through the integration of simulation education into the curriculum. Meeting the local workforce need for registered nurses will serve as a positive social change resulting from this study.

The findings and recommended faculty development project from this study can be applied to other health science programs at Wilhof College. Many of the health

science programs have licensure or registry exams needed for entry into practice. Programs whose pass rates are less than ideal, could consider the integration of simulation education into their curriculums. There is also the possibility of creating interdisciplinary simulation scenarios for both nursing and health science students.

This study provides evidence of need for the integration of simulation education within the clinical and didactic courses in the nursing education program, based on the data gathered. Further research should be conducted after implementation of the faculty development program and integration of simulation scenarios in the curriculum. A qualitative study on student perceptions related to the use of simulation education is one area to explore. A quantitative study examining NLCEX-RN exam scores prior to the increased integration of simulation, with scores achieved after curricular changes would provide insight on the impact on performance.

Conclusion

Section 4 allowed for the reflection on the strengths and limitations of this study, the development of the project, my growth as a scholar and a leader, and the implications and future research derived from this doctoral work. The guiding research question for this study was to examine the perceptions of nurse educators, on the integration of learning activities, for improved performance on the NCLEX-RN exam. The findings from data analysis and literature reviews revealed the integration of simulation education within the curriculum would support the desired outcomes, but only through the proper development of faculty with this teaching tool. That led to the project focusing on faculty

development in the area of simulation education. I anticipate the outcomes from this study will result in positive social change, by more Wilhof College nursing graduates passing the NCLEX-RN exam, if implementation of the faculty development project is and the integration of simulation scenarios occur within the nursing education curriculum.

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Appendix A: Faculty Development Program

The participants of this study identified simulation education as a teaching tool that can integrate between didactic and clinical coursework within the undergraduate nursing program at Wilhof College. Therefore, the overall goal of this faculty development program is to prepare nursing educators on developing and integrating simulation scenarios into their curriculum. Over a 12-week period, the blended format will have nursing educators alternate between two-hours of required online instruction and two-hours of in-person faculty development sessions.

This faculty development program is designed to:

- Educate nurse educators on INACSL's *Standards of Best Practice: Simulation* eleven criteria in simulation education.
- Partner clinical and didactic simulation champions for the development and integration of simulation scenarios within their curriculum (Table 16).

Table 17

Didactic and Clinical Nurse Educators

Semester	Course ID	Classification
1	NUR101	Didactic
	NUR111	Clinical
2	NUR102	Didactic
	NUR112	Clinical
3	NUR201	Didactic
	NUR211	Clinical
4	NUR202	Didactic
	NUR212	Clinical

At the end of the faculty development program the nurse educators will be able to:

- Perform a needs assessment
- Construct measureable objectives
- Design a simulation scenario:
    - Determine the format of the scenario based on the purpose, theory, and modality of the experience.
    - Integrate the type of fidelity that will maximize the realism of the scenario.
    - Construct the prebriefing and debriefing agendas
    - Select an evaluation method and tool
- Assess a simulation scenario

Faculty Development Program – Simulation Education

Prior to the start of the faculty development program, the faculty development coordinate will send the following welcome email to all participants:

> *Greetings! Thank you for participating in the 12-week blended faculty development program focused on simulation education. Your expertise as a nurse educator within the ASN program makes you the ideal candidate! The blended format requires the completion of online modules during the odd weeks and in-person participation for two-hour sessions during the even weeks. Online modules are located in the College's Learning Management System (LMS) and accessed with your College login credentials. Meeting planners for the in-person sessions will arrive via email within the next three business days. As your faculty development coordinator, please contact me if you have any questions*.

Week 1 Online Module: Curriculum Integration

Module Overview:

The week one online module is located within Wilhof College's LMS and focuses on the need to integrate simulation education within the ASN program, identifying the key contributors to the successful integration, and overcoming barriers to the integration.

Online Objectives:

- Confirm the need for simulation education within the ASN curriculum.
- Identify potential contributors for the successful integration of simulation education.
- Identify potential barriers to the creation and integration of simulation education within the ASN curriculum and potential solutions to overcome those.

Activities (120 minutes):

Activity 1:

- Large group discussion:
    - Using the LMS's discussion board forum, all participants within the faculty development program will post an original forum identifying a curricular gap they feel exists within the ASN curriculum that has the potential to be corrected through the integration of a simulation education scenario.
    - Each participant must then rebut or affirm at least two original posts indicating why they agree or disagree with the identification of the curricular gap or their agreement or disagreement with the use of a simulation scenario to improve the gap within the curriculum.

- The faculty development coordinator will summarize the forum at the end of week one for all participants to review and use within the week two on-ground session.

Activity 2:

- Large group activity:
  - Using the LMS's wiki tool, all participants within the faculty development program will identify two key roles needed for the successful integration of simulation education within the ASN program.
  - Within the same wiki, participants will identify potential nursing educators within the ASN program that have the skill sets needed to support the identified role.

Activity 3:

- Large group discussion:
  - Using the LMS's discussion board forum, all participants within the faculty development program will post an original thread regarding potential challenges to the creation of simulation scenarios.
  - Each participant must then reply to at least two original threads, using cited facts in their replies, on how they can overcome the potential challenges.
  - The faculty development coordinator will summarize the forum and identify how the faculty development program will help them overcome these challenges.

Activity 4: Week 1 Review

- Individual group activity:
  - Using the LMS's journal feature, each participant will summarize the first week's online activities and share what elements of the faculty development program they are excited about and which they have reservations.
  - These journals will be private and only accessible by the faculty development coordinator and the participant.

- The faculty development coordinator will use these semiweekly journal entries as formative assessments on the progress of the individual participants on their journey to achieve the program's overall objectives.

Week 2 On-ground Session: Needs Analysis and Simulation Scenario

The faculty development coordinator will welcome nurse educators to the first in-person session of the training program. Using Presentation Slide 1, the faculty development coordinator will review week two's objectives with the nurse educators.

On-ground session objectives:

- Determine knowledge gaps through results of predictive licensure assessments.
- Integrate knowledge gaps with curricular gaps identified in online course.
- Prioritize comprehensive list of needs.
- Determine simulation scenario(s) to meet areas of deficiencies.

Activities (120 minutes):

Activity 1:

- Group discussion:
    - Using the whiteboards in the training room, have the participants write down the curricular gaps that were identified in the week one online module.
    - Have a nurse educator circle repeating curricular concepts written on the whiteboards.
    - Have a brief discussion with the nurse educators as to why they feel these are the conceptual gaps within the curriculum. Why are these the topics most difficult for students to learn?
- Small group activity:
    - The faculty development coordinator will form three groups of nurse educators who will work together for the remainder of the faculty development program on the creation of a simulation scenario.

- Based on the curricular gaps written on the whiteboard walls, and others identified in the week one online module, have each group complete Handout 1: NCLEX-RN Curricular Gap Activity Sheet.

- Working in their groups, have the nurse educators determine the curricular gaps that could be combined into a simulation scenario.

Activity 2:

- Small group activity:

  - Have each group determine if the curricular gaps identified as potential topics for a simulation scenario would be assessed as a formative or summative assessment of their students. Based on this determination, simulation scenario objectives need to be constructed.

  - In preparation for constructing objectives for each of the three simulation scenarios, the faculty development coordinator will review Handout 2: Bloom's Taxonomy and Nursing Application as presented by Moxley et al., (2017). The Bloom's Taxonomy and Nursing Application handout will allow nurse educators to align their curricular gaps with the appropriate cognitive level.

  - The appropriate level objectives will be constructed based on the appropriate cognitive level, determined by each group, to assess the effectiveness of their scenario in student learning at the end of the simulation experience.

Activity 3:

- Large group activity:

  - The faculty development coordinator will review Handout 3: NLN Simulation Design Template (National League of Nursing, n.d.) with the nurse educators.

  - Starting in the middle of page two, the coordinator will have each group complete the general objective section of the template. This section aligns the simulation scenario to the ASN curriculum objectives being achieved.

  - Each group will also include, on page two of the template, the specific simulation scenario objectives drafted in the prior activity.

- Small group activity:
    - Each group will have time to discuss the appropriate type of patient and clinical experience required to deliver the simulation learning objectives as written in activity two.
    - As each group formulates their simulation scenario, they will complete page one of the simulation design template.
    - The faculty development coordinator will circulate between the three groups to provide assistance as needed.

Activity 4: Week 2 Review

- Small group activity:
    - On Handout 4: Week 2 Review Page, the faculty development coordinator will have the nurse educators:
        - write down three curricular gaps identified either in the week one online module or in week two's training session
        - identify the level of Bloom's Taxonomy associated with the curricular gaps aligned in their simulation scenario and why they feel this is the appropriate cognitive level for the scenario
        - write a brief overview of their group's simulation scenario and explain why it is the appropriate patient case to meet the objectives of the scenario
    - The faculty development coordinator will collect handout four in preparation for week four's on-ground session.
    - The faculty development coordinator will review the week three online objectives being achieved by the nurse educators the following week.

Week 3 Online Module: Teaching and Learning Strategies

Module Overview:

This online module focuses on best practices with the teaching and learning strategies associated with simulation education. Presented are guidelines for incorporating simulation education into prelicensure nursing curriculum as a teaching strategy.

Objective(s):

- Discuss simulation teaching/learning strategies.
- Describe the challenges when facilitating simulation in a prelicensure nursing education program.
- Discuss challenges a nurse educator may encounter when using simulation as a teaching-learning strategy in a prelicensure nursing education program.

Activities (120 minutes):

Activity 1:

- Individual activity:
    - Nurse educators will read the attached article included in the LMS's assignment feature for week three: http://www.nursingsimulation.org/article/S1876-1399(16)30128-1/fulltext
    - Each nurse educator will summarize the required article and the criteria for best practices in simulation education and reflect on their areas of strength and areas for improvement. The week three folder of the online module contains an assignment link for the summary submission.

Activity 2:

- Large group activity:
    - Using the wiki feature the participants in the faculty development program will list the five criteria, identified in the required reading for week three, associated with the facilitation of simulation education.

- Each nurse educator will relate the required elements of the five criteria to their ability to deliver simulation education within Wilhof College's Center for Excellence in Practice. They can also correlate the required elements to their student population and the gaps in curriculum identified in week two's on-ground session.

Activity 3:

- Large group discussion:
  - Using the LMS's discussion board tool, all participants within the faculty development program will identify two potential challenges with facilitating simulation education. Nurse educators can base their discussion board forums either on direct personal experiences or through research on documented areas of simulation education concerns.
  - Within the same discussion board forums, participants will reply to at least two other forums and recommend potential solutions to challenges identified in delivering simulation education, either again based on personal experiences or best practices identified in research.

Activity 4: Week 3 Review

- Individual group activity:
  - Using the LMS's journal feature, each participant will summarize week three's online activities and share what elements of the facilitation of simulation education they are excited about and which they have reservations.
  - These journals will be private and only accessible by the faculty development coordinator and the participant.
  - The faculty development coordinator will use these semiweekly journal entries as formative assessments on the progress of the individual participants on their journey to achieve the program's overall objectives.

Week 4 On-ground Session: Facilitator Involvement and Preparatory Materials

The faculty development coordinator will welcome back the nurse educators and address any issues or concerns that arose during week three. Following this, the coordinator will use Presentation Slide 2 to review week four's objectives with the nurse educators.

On-ground session objectives:

- Determine the anticipated level of facilitator involvement in the simulation scenario.
- Integrate a facilitator approach in the simulation scenario.
- Design and develop preparatory activities and resources for students involved in the simulation scenario.

Activities (120 minutes):

The coordinator will remind nurse educators that the development of a simulation scenario is an iterative process. As new decisions are considered each week, they must be examined in context to the scenario currently developed. Changes can be made within the simulation scenario template, as long as all decisions are in support of the simulation scenario objectives.

Activity 1:

- Small group activity:
    - The coordinator will have the nurse educators work in their groups created during the week two training session. For this activity, the participants will need Handout 3: NLN Simulation Design Template.
    - Page six of the template requires the nurse educators to outline the scenario progression to assess the objectives of the scenario. This outline

requires the nurse educators to consider the required actions of the manikin, the expected interventions of the students, and any possible cues that may be needed for the scenario to progress. Nurse educators will need to decide what level of facilitator involvement will occur in any of these three categories. In addition to the scenario objectives and desired progression, facilitator involvement is also based on the students' level of knowledge and experience related to the topics presented (INACSL Standards Committee, 2016c).

Activity 2:

- Small group activity:
    - Continuing the development of the simulation scenario, each group now needs to consider the prerequisite knowledge, skills, attitudes, and behaviors required by the students for successful participation in the simulation scenario. These factors should be included on page two of Handout 3: NLN Simulation Design Template.
    - Each group of nurse educators will need to determine if the preparatory materials and resources needed for successful participation in the scenario exist in the current ASN curriculum or if an item needs to be created. This analysis has the potential to identify where specific resource gaps occur within the ASN curriculum.

Activity 3:

- Small group activity:
    - To review the concepts presented on simulation scenario development, each group of nurse educators will pass their simulation scenario template to a different group for review and feedback. Based on what everyone has learned in the first four weeks of the development program, this will serve as a formative assessment, allowing the nurse educators to provide feedback on areas for improvement to their peers.
    - Each nurse educator will complete Handout 5: Week 4 Review Page and submit it to the faculty development coordinator before the end of the session.
    - The faculty development coordinator will review the week five online objectives with the group.

Week 5 Online Module: Maximizing Realism

Module Overview:

Week five's online module provides terms and definitions associated with authenticity and fidelity relating to simulation scenarios. Discussion for how to incorporate realism into simulation scenarios within the Center for Excellence in Practice at Wilhof College is included in the module.

Objective(s):

- Define terms related to the authenticity of simulation scenarios.
- Identify methods to increase the authenticity of simulation scenarios.
- Discuss pitfalls related to increasing the authenticity of simulation scenarios

Activities (120 minutes):

Activity 1:

- Large group activity:
    - Nurse educators will watch the attached video regarding authenticity in simulation education: https://youtu.be/Fp1lQzHbxKo
    - Using the glossary feature within the LMS, the participants in the faculty development program will identify terms associated with authenticity and post the definitions in the forum for their colleagues.

Activity 2:

- Large group discussion:
    - Using the discussion board feature the participants in the faculty development program will identify ways to improve authenticity for simulation scenarios conducted within the Center for Excellence in Practice.

- Participants will focus their suggestions along the three dimensions of physical, conceptual, and emotional realism.

- In addition to the original post, all participants will support or enhance at least two original forums through research-based suggestions.

Activity 3: Week 5 Review

- Individual group activity:

  - Using the LMS's journal feature, each participant will summarize the pitfalls related to increasing authenticity within simulation-based scenarios. Based on the scenarios being developed within the on-ground portions of the faculty development program, participants will identify areas of realism to enhance for achieving the intended learning outcomes.

  - These journals will be private and only accessible by the faculty development coordinator and the participant.

  - The faculty development coordinator will use these semiweekly journal entries as formative assessments on the progress of the individual participants on their journey to achieve the program's overall objectives.

Week 6 On-ground Session: Simulation Scenario Design and Fidelity Types

The faculty development coordinator begins week six by reflecting with the nurse educators on all that has been covered in the first half of the training program. Each group reviews with the class the curriculum gaps being addressed in their simulation scenario, the alignment those gaps with the NCLEX-RN exam, the intended objectives of the scenario and the patient case drafted to date. Nurse educators are asked to share area of realism that can be enhanced in their scenario, based on what they learned in the week five online module. Using Presentation Slide 3, the faculty development coordinator reviews the objectives for week six's on-ground session.

Objectives:

- Design a simulation scenario that supports the intended objectives and outcomes, by:
    - Constructing a backstory
    - Developing standardized cues for clinical progression
    - Integrating appropriate level of fidelity

Activities (120 minutes):

The faculty development coordinator will give each group time to discuss changes and improvements to their simulation scenario based on the information learned in the week five online module pertaining to fidelity and realism.

Activity 1:

- Small group activity:

- Each group will review page one of the patient case description for revisions and potential updates.

Activity2:

- Guest Speaker:
  - The faculty development coordinator will arrange for the Coordinator of Simulation Operations to come and speak to the nurse educators about the fidelity options available to them in the Center for Excellence in Practice. The guest speaker will use pages three and four of Handout 3: NLN Simulation Design Template as a guide for discussing fidelity options and uses in scenario deployment.

- Small group activity:
  - Based on the simulation scenario objectives, the patient case description, and the scenario progression outline, each group will determine the level of realism possible based on the options available to them in the Center for Excellence in Practice.

Activity 3:

- Small group activity:
  - Each nurse educator will complete Handout 6: Week 6 Review Page. On this handout, nurse educators will share anything new they learned relating to fidelity options that are available in the Center for Excellence in Practice. They will also include what fidelity options are incorporated into their scenarios to increase the realism of the experience for the student participants. Finally, any details in the patient description, which if over looked, could affect the progression of the scenario are shared.
  - The faculty development coordinator will review the week seven online objectives with the group.

Week 7 Online Module: Debriefing Foundations

Module Overview:

The week seven online module focuses on the post-simulation review process, also known as debriefing, of a simulation scenario. Best practices related to debriefing as a teaching strategy and learner-centered approaches to post-simulation review processes are discussed.

Objective(s):

- Define post-simulation review as it relates to nursing education simulation scenarios.
- Identify the goals of post-simulation review when integrated into nursing education simulation scenarios.
- Analyze the role of the facilitator during the post-simulation review process for a simulation scenario focused on nursing outcomes.
- Identify various approaches to post-simulation review to promote critical thinking within nursing students.

Activities (120 minutes):

Activity 1:

- Individual activity:
    - Nurse educators will read the attached article included in the LMS's assignment feature for week seven: http://www.nursingsimulation.org/article/S1876-1399(16)30129-3/fulltext
    - Each nurse educator will summarize the required article and the criteria for best practices, as well as defining the purpose and goals of debriefing

within simulation education. The week seven folder of the online module contains an assignment link for the summary submission.

Activity 2:

- Large group discussion:
    - Using a discussion board forum, the participants in the faculty development program will identify various approaches to post-simulation review processes within simulation education.
    - In a separate forum thread, participants will share their intended approaches to debriefing based on the simulation scenarios developed in the on-ground faculty development sessions.
    - In addition to the both original forum post requirements, all participants will reply to least two original forums for further clarification on their intended post-simulation review process strategies.

Activity 3: Week 7 Review

- Individual group activity:
    - Using the LMS's journal feature, each participant will share how they intend to promote self-reflection and critical thinking using debriefing as a teaching strategy within their future simulation scenarios.
    - These journals will be private and only accessible by the faculty development coordinator and the participant.
    - The faculty development coordinator will use these semiweekly journal entries as formative assessments on the progress of the individual participants on their journey to achieve the program's overall objectives.

Week 8 On-ground Session: Prebriefing and Debriefing Plans

The faculty development coordinator welcomes the nurse educators back to the development program and emphasizes the importance of imbedding the debriefing concepts learned in week seven's online module, with the concepts presented today, to maximize the learning opportunity for students in the simulation scenario. Using Presentation Slide 4, the faculty development coordinator can review the two objectives for week eight's on-ground session.

Objectives:

- Develop and integrate a prebriefing plan for the simulation scenario.
- Develop and integrate a post-simulation review process plan for the simulation scenario.

Activities (120 minutes):

It is important that the faculty development coordinator emphasizes the role prebriefing plays in the success of a simulation scenario. Though a post-simulation review process is emphasized in the literature (INACSL Standards Committee, 2016c) as a key element to a successful simulation scenario, it will not occur if proper prebriefing is not incorporated into the simulation design.

Activity 1:

- Small group activity:
    - The nurse educators within each group, need to review, revise, and/or create the prebriefing plan for their simulation scenario. Factors to consider are the expectation of the student participants, how the simulation

facilitator will establish a culture of trust among the student participants, and what the ground rules are for participating in the simulation scenario.

- The cognitive and psychomotor skills required in the simulation scenario, of student participants, was documented on page two of the simulation scenario design template. Nurse educators should use this time to reflect on whether those expectations are still appropriate for the simulation scenario design.

- Page eight of the template is blank and can be used by each group to draft the expectations for a culture of trust and the ground rules for participating in a simulation scenario.

- Also part of the prebriefing plan is time designated before the start of the simulation scenario to orient the students to the environment of the scenario, the equipment used in the scenario, and whether a manikin or standard patient actor will be used in the role of the patient. If there are any limitations associated with the scenario, students must be made aware of these during the prebriefing.

- During this orientation, students should also be informed about the patient case, the type and method of evaluation, the amount of time allotted, and the objectives associated with the simulation scenario.

- Each group will have the autonomy to determine when the prebriefing/orientation for their simulation scenario will occur. It is recommended that the prebriefing/orientation occurs in advance of the simulation deployment so students can properly prepare for the learning activity (INACSL Standards Committee, 2016c).

Activity 2:

- Small group activity:

    - Post-simulation review processes, known as debriefing sessions, are included in simulation designs for improving the future performance of students or clinicians (INACSL Standards Committee, 2016a). Similar to the prebriefing requirement, debriefing requires a culture of respect by all participants.

    - The nurse educators within each group will evaluate the debriefing questions provided on page seven of the simulation design template. Each

group is allowed to revise, remove, or add questions as they feel appropriate to their specific simulation scenario.

- Debriefing also provides student participants the opportunity to adapt their critical thinking and clinical judgement skills to variations on the patient case presented (INACSL Standards Committee, 2016a). Debriefing questions such as how would you have handled a scenario where the patient presented with this problem? The bottom of page seven on the simulation design template provides space for the nurse educators in each group to plan for adaptations to their scenario as discussion points during the debriefing process. Each group will be required to provide at least two variations to their patient case for possible discussion in debriefing.

Activity 3:

- Large group activity:
  - In a large circle, the faculty development coordinator will have each nurse educator share one strategy from their group's prebriefing plan to establish a culture of trust and respect in the simulation scenario. Other nurse educators/groups, can adopt strategies learned from their peers into their simulation scenario design.
  - For the second review activity nurse educators will be asked to share if they revised or added any debriefing questions to the ones provide in the simulation design template.
  - The final review activity will require each nurse educator to share one variation on his or her simulation patient case developed as a possible debriefing topic. They will also explain why that variation was chosen and how it either supports the objectives of the simulation scenario, the ASN curriculum, or a testing strategy for success on the NCLEX-RN exam.

Week 9 Online Module: Evaluating Simulations

Module Overview:

The week nine module addresses the recommended criteria for best practices associated with the assessment of simulation as an evaluation tool for nursing curriculum. Discussion on the possible areas of simulation assessment are included and based on sample evaluation forms provided.

Objective(s):

- Identify an assessment approach for using clinical simulation in nursing education.
- Discuss how student and facilitator assessment forms can contribute to the continuous improvement of simulation scenarios.
- Participants will integrate one approach to assess the effectiveness of their clinical simulation scenario.

Activities (120 minutes):

Activity 1:

- Individual activity:
    - Nurse educators will read the attached article included in the LMS's assignment feature for week nine: http://www.nursingsimulation.org/article/S1876-1399(16)30130-X/fulltext
    - Each nurse educator will summarize the different approaches to simulation assessment based either on intended outcomes/objectives or if guided by the level of evaluation: formative, summative, or high-stakes. The week nine folder of the online module contains an assignment link for the summary submission.

Activity 2:

- Large group discussion:
    - Within the wiki tool, in the LMS environment, one forum will contain a link to a sample student-evaluation form and a second forum will contain a link to a sample facilitator-evaluation form.
    - Sample student-evaluation form: http://www.nln.org/docs/default-source/professional-development-programs/nln-instrument_simulation-design-scale.pdf?sfvrsn=0
    - Sample facilitator-evaluation form: http://www.nln.org/docs/default-source/default-document-library/instrument-1_educational-practices-questionnaire.pdf?sfvrsn=0
    - Participants will comment within both wiki documents on the areas of evaluation they feel are applicable to the simulation scenarios they are developing with their small groups during the on-ground sessions.

Activity 3: Week 7 Review

- Individual group activity:
    - Using the LMS's journal feature, each participant will share one strategy learned from either the embedded article or sample evaluation forms that they intended to recommend for use in their simulation scenario designed in the on-ground sessions.
    - Participants will reflect on their personal journey of growth in learning about the creation, integration, and evaluation of simulation scenarios as a teaching strategy for nursing education.
    - The faculty development coordinator will review these reflections and look for opportunities to modify or improve future elements of the faculty development program.

Week 10 On-ground Session: Simulation Scenario Evaluation and Testing

Evaluation tools must be included in the design of a simulation scenario for two reasons: (a) to assess the student participant's ability to achieve the desired objectives intended for the scenario and (b) for the continuous improvement of educational tools used within the ASN curriculum. The faculty development coordinator will explain these two purposes, in general and in context to the expectations at Wilhof College. Using Presentation Slide 5, the faculty development coordinator can review the two objectives for week ten's on-ground session.

Objectives:

- Determine, develop, and integrate an evaluation plan for the intended outcomes and objectives of the simulation scenario.
- Develop a plan to pilot the simulation scenario.

Activities (120 minutes):

Activity 1:

- Small group activity:
    - Using Presentation Slide 6, the faculty development coordinator should explain the difference between formative and summative evaluations (INACSL Standards Committee, 2016e).
    - Based on the simulation scenario objectives, written as either formative or summative outcomes, each group will now determine how they will evaluate those objectives for their scenario.
    - The faculty development coordinator will coordinate with library services to have a librarian on hand during this activity to assist nurse educator with finding valid and reliable evaluation instruments.

Activity 2:

- Small group activity:
    - The final on-ground development session will be conducted in the Center for Excellence in Practice so each group can pilot their simulation scenario. In preparation for that session, each group needs to identify an audience similar to the target participant group and solicit their participation in the week 12 pilot activities.

Activity 3:

- Individual activity:
    - The faculty development coordinator will provide each nurse educator with Handout 7: Simulation Design Template Sample. This sample is provided as an idea-generator for each group/nurse educator to use in review of their simulation scenario. Each participant will review both templates and look for opportunities to revise or improve their scenario.
    - Following individual review of the simulation scenario, the three groups will reconvene to compare revisions and to come to consensus on any changes to the final simulation scenario.
    - Finally, in a large circle the faculty development coordinator will have each nurse educator share one insight gained from reviewing the sample template and whether that insight was incorporated into their group's final simulation scenario.

Week 11 Online Module: Piloting Simulation Scenarios

Module Overview:

The week 11 module provides participants with the opportunity to review, assess, and evaluate the simulation scenarios developed during on-ground sessions, against best practices in the field of nursing education. This module will require participants to review and reflect on their scenario and possible areas of improvement, while highlighting techniques to avoid during the debriefing process.

Objective(s):

- Assess simulation scenario against best practices in simulation design and identify possible areas for improvement and change.
- Discuss the importance of post-simulation review processes and ineffective approaches to teaching strategies.
- Reflect on how debriefing can be used in other areas of nursing education.

Activities (120 minutes):

Activity 1:

- Large group activity:
    - Participants in the faculty development program will view the embedded video summarizing key elements within a nursing simulation scenario: https://youtu.be/9bADCN-EfVA
    - Within the discussion board forums, each small group from the on-ground sessions will post replies to the following two threads:
    - Have the team member roles been identified for your simulation scenario? If so, who are these individuals and what will they contribute to your specific simulation scenario?

- How has your group suspended disbelief for your simulation scenario? Could others use this approach?

Activity 2:

- Large group activity:
  - Participants in the faculty development program will view the embedded video dramatizing a poorly conducted debriefing session following a simulation scenario: https://youtu.be/nG-RWn0Xcbo
  - Within the discussion board forums, each small group from the on-ground sessions will post replies to the following two threads:
  - Pick one ineffective debriefing approach utilized in the embedded video and explain how a well-designed model would achieve the desired outcomes.
  - How does your scenario assess the intended outcome of the simulation through debriefing?

Activity 3: Week 11 Review

- Individual group activity:
  - Using the LMS's journal feature, each participant will share one strategy on how they can incorporate the best practices related to debriefing into their didactic nursing curriculum.
  - Participants will share their concerns and optimize for the piloting of their simulation scenarios in week 12 of the faculty development program.

Week 12 On-ground Session: Piloting Simulation Scenarios – Feedback

For the final on-ground session of the faculty development program, focusing on simulation education, the nurse educators will be meeting in the Center for Excellence in Practice. Each group will have an opportunity to pilot their simulation scenario with participants similar to their target audience and then debrief as a group on areas of success and opportunities for improvement before integrating into the ASN curriculum. Using Presentation Slide 7, the faculty development coordinator can review the two objectives for week 12's on-ground session.

Objectives:

- Describe insights gained from conducting the pilot session.
- Explain intended changes for the simulation scenario.

Activities (120 minutes):

Activity 1:

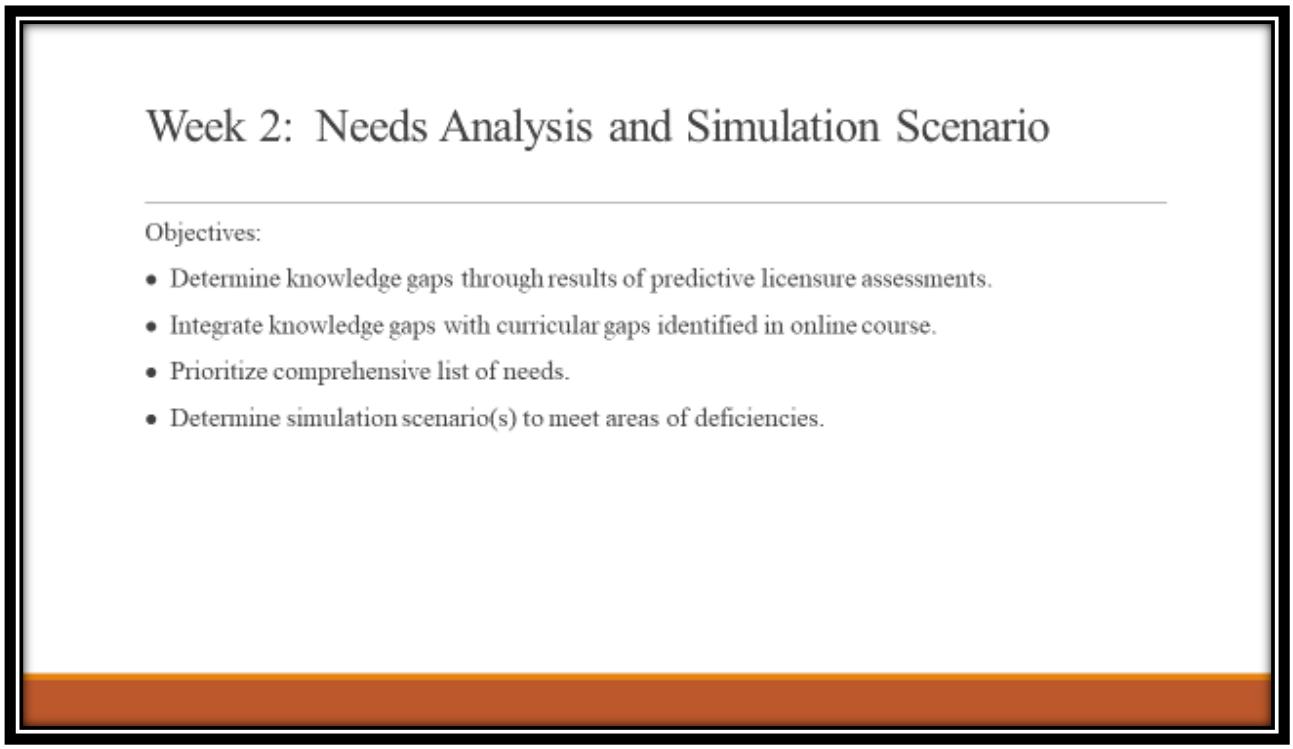
- Large group activity:
    - Each group will pilot their simulation scenario from prebriefing through debriefing with their pilot participants.
    - The faculty development coordinator will arrange with the coordinator of simulation operations to have each pilot session audio and video recorded for use in each group's debriefing session.
    - The other two groups of nurse educators will enhance their learning of simulation, as an education tool, by observing their peers behind one-way mirrors in the control room.
    - Following all three pilot activities, nurse educators will share their thoughts on the deployment of their simulation scenario. Discussions for planned revisions to the scenarios based on outcomes from the pilot, along

with integration plans for the simulation scenario will occur with the large group of participants.

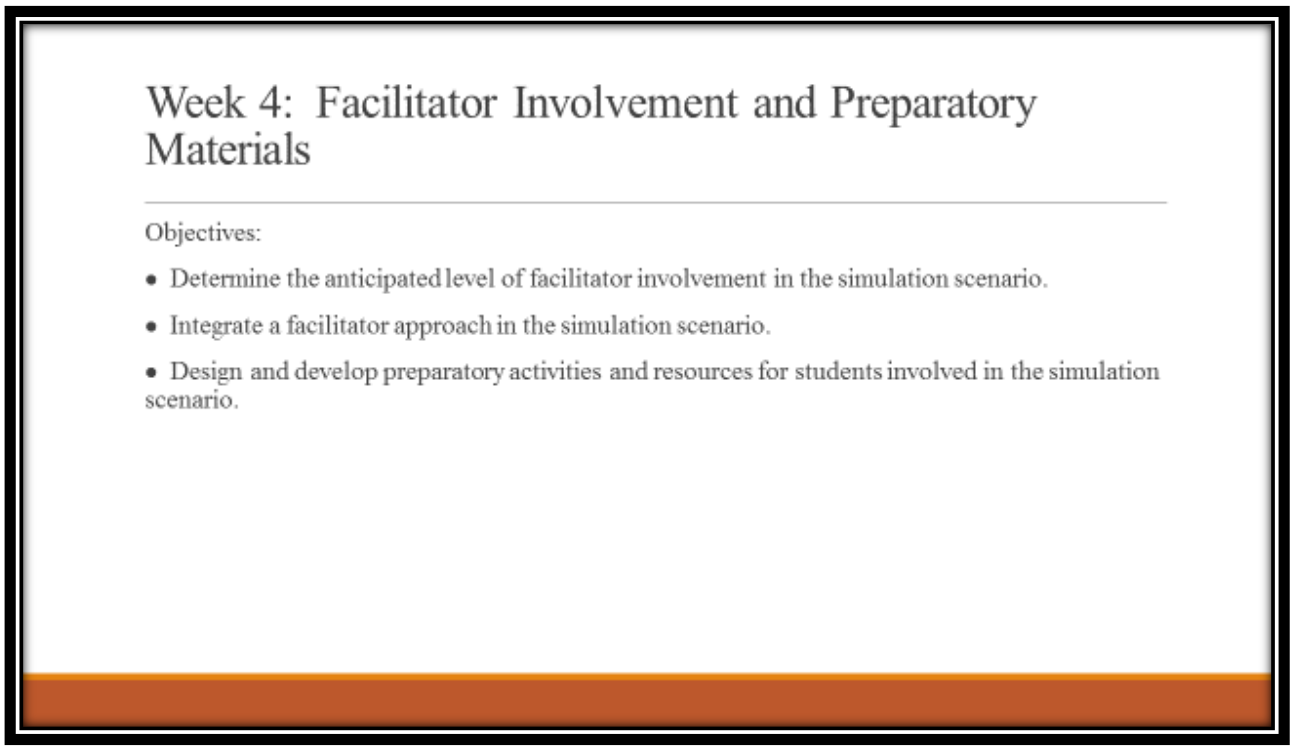
Activity 2: Summary and Conclusion

- The faculty development coordinator will review:
    - The INACSL standards modeled in this faculty development program with the nurse educators.
    - Resources available to them in the ADS department for continued development of their teaching and learning strategies.
    - Resources available to them through the library for the continued acquisition of up to date research in the field of simulation education and changes to the NCLEX-RN exam.
    - Resources available to them through the Center for Excellence in Practice relating to simulation operations, fidelity, and realism relating to the development of simulation scenarios. Also, the ability to continue to pilot and improve simulation scenarios as needed within the Center.
    - Finally, their evaluation of the faculty development program focused on simulation education will arrive via email within 48-hours, along with their certificate of completion of the program.

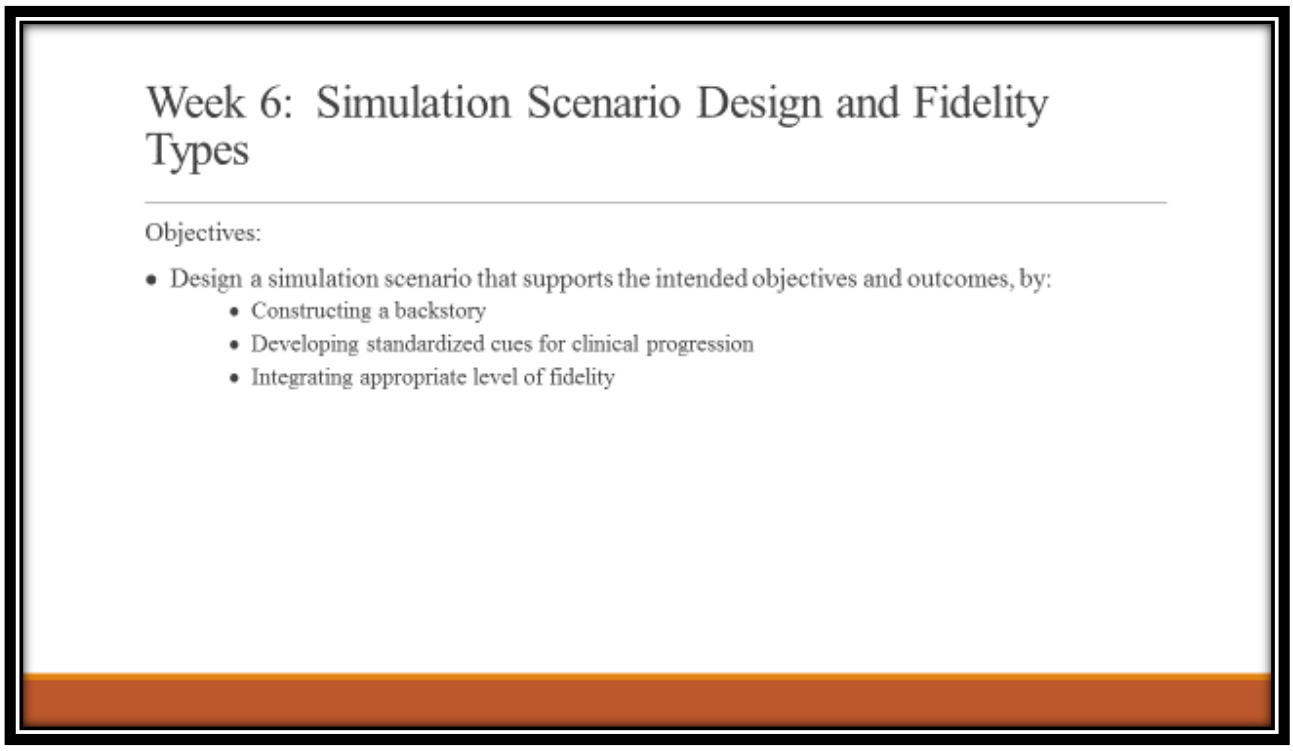
Presentation Slide 1:



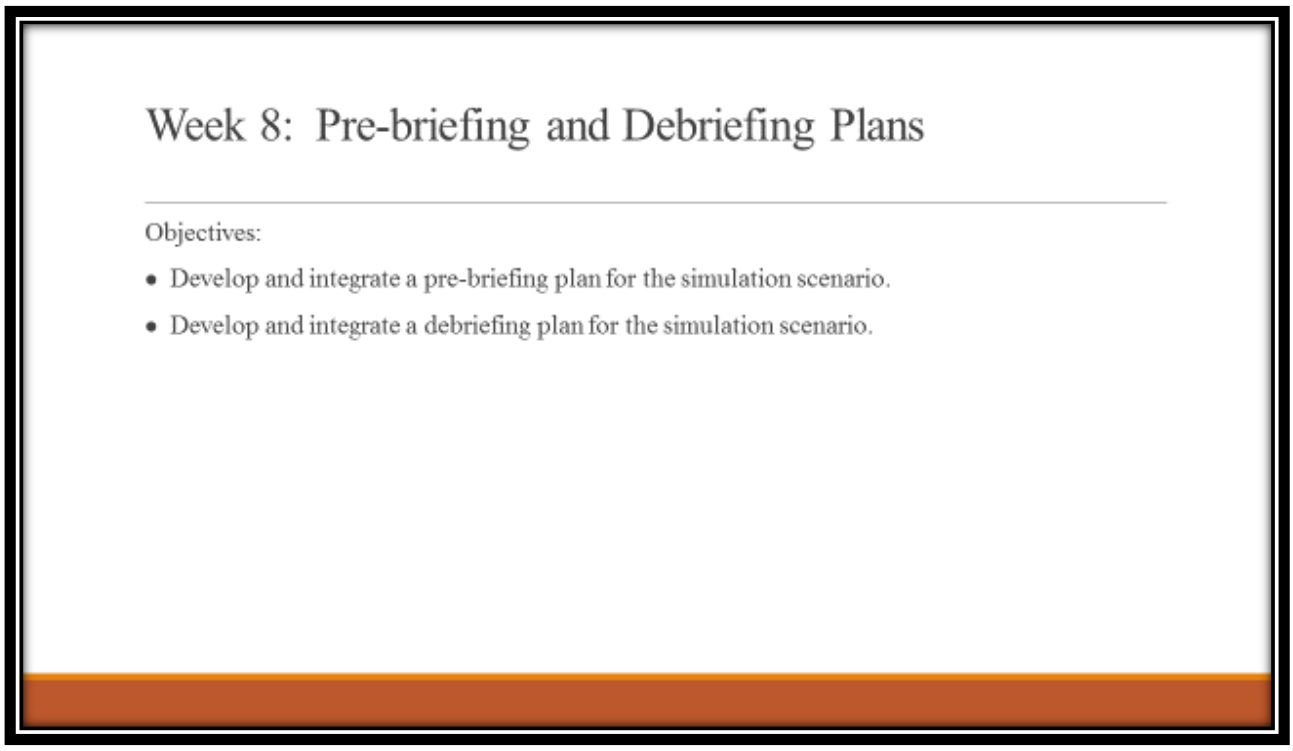
Presentation Slide 2:



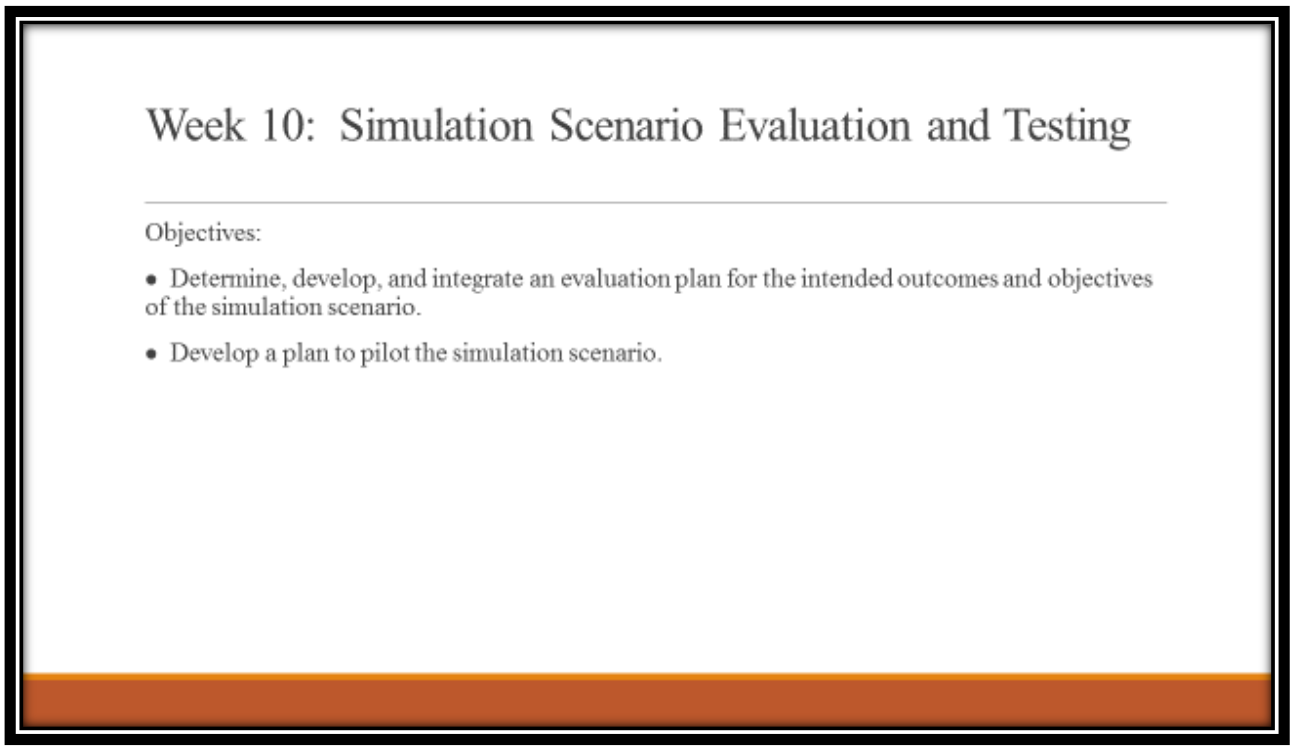
Presentation Slide 3:



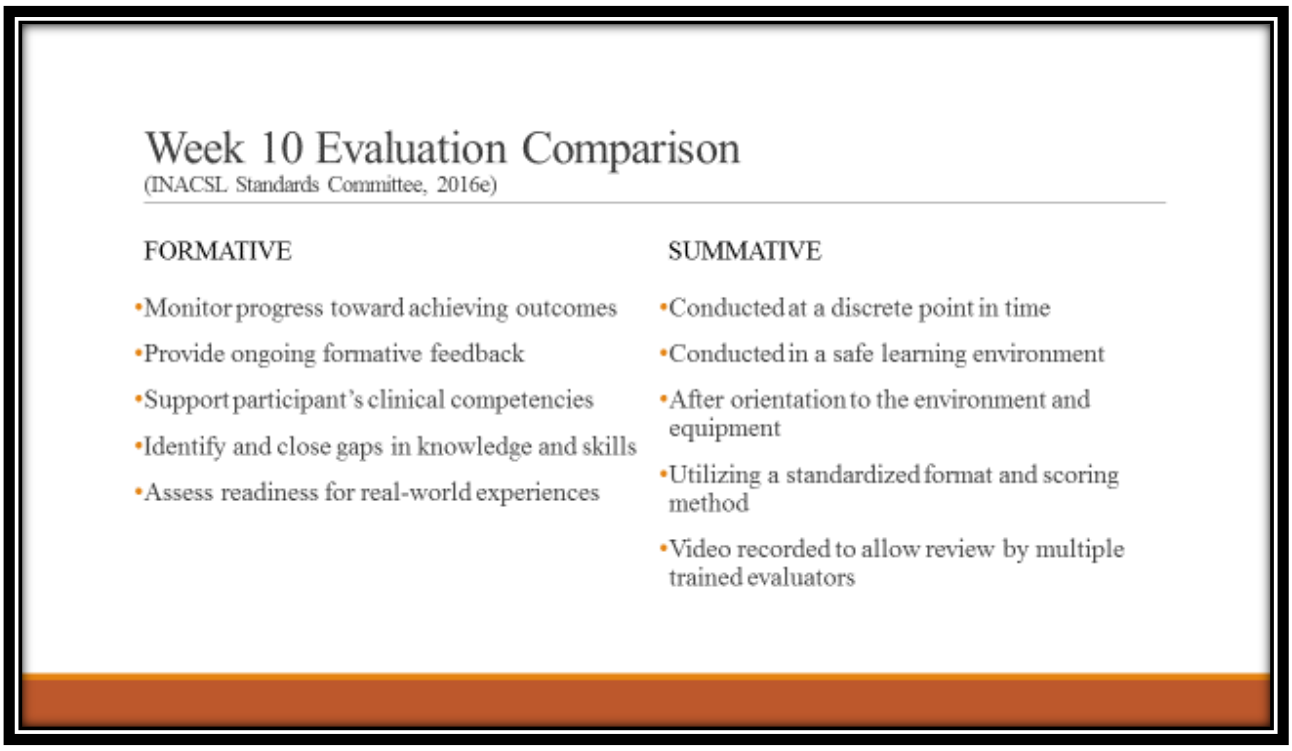
Presentation Slide 4:



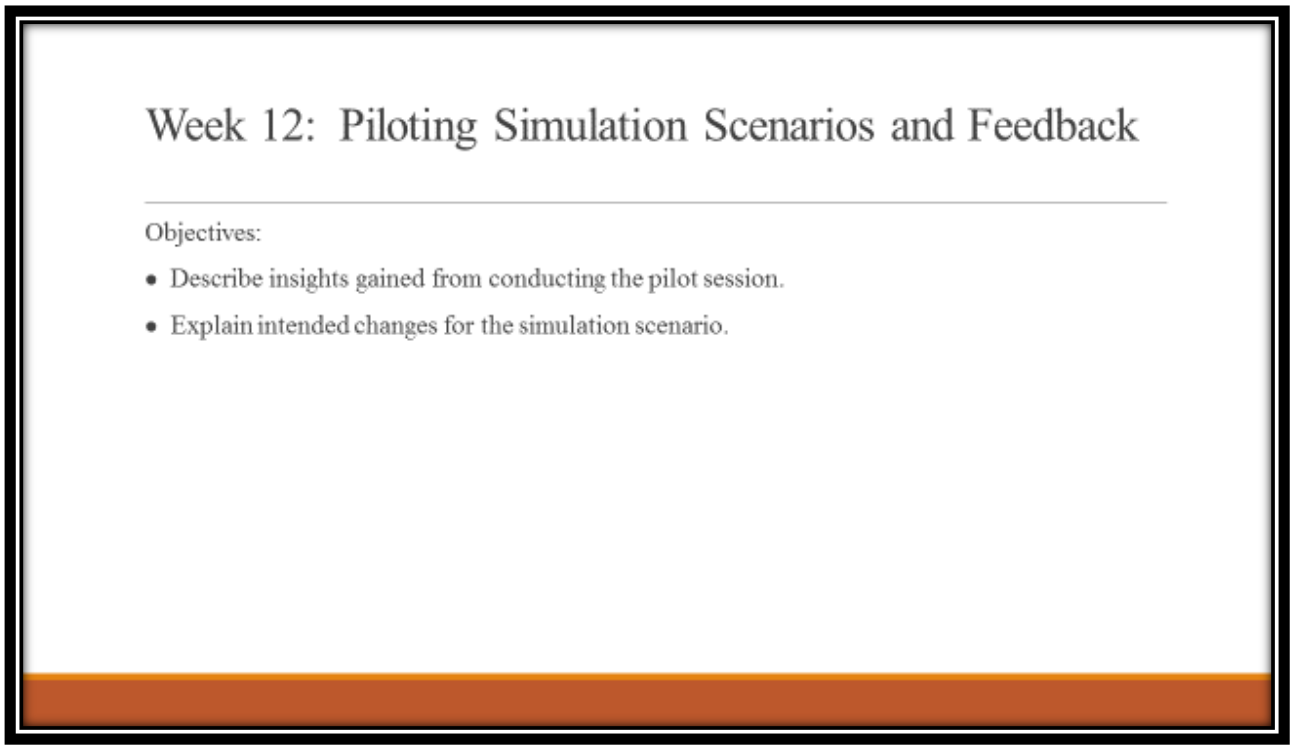
Presentation Slide 5:



Presentation Slide 6:


Week 10 Evaluation Comparison
(INACSL Standards Committee, 2016e)
FORMATIVE
•Monitor progress toward achieving outcomes
•Provide ongoing formative feedback
•Support participant's clinical competencies
•Identify and close gaps in knowledge and skills
•Assess readiness for real-world experiences
SUMMATIVE
•Conducted at a discrete point in time
•Conducted in a safe learning environment
•After orientation to the environment and equipment
•Utilizing a standardized format and scoring method
•Video recorded to allow review by multiple trained evaluators

Presentation Slide 7:



Handout 1: NCLEX-RN Curricular Gap Activity Sheet (NCSBN, 2015).

Category: Management of Care Providing and directing nursing care that enhances the care delivery setting to protect clients and health care personnel.		**Category: Safety and Infection Control** Protecting clients and health care personnel from health and environmental hazards.		**Category: Physiological Integrity** The nurse promotes physical health and wellness by providing care and comfort, reducing client risk potential and managing health alterations.	
Related Content:	**Gap**:	**Related Content**:	**Gap**:	**Related Content**:	**Gap**:
Advance Directives/Self-Determination		Accident/Error/Injury Prevention		Assistive Devices	
Advocacy		Emergency Response Plan		Personal Hygiene and Elimination	
Assignment, Delegation and Supervision		Ergonomic Principles		Mobility/Immobility	
Case Management		Handling Hazardous and Infectious Materials		Nonpharmacological Comfort Interventions	

Client Rights		Home Safety		Nutrition and Oral Hydration	
Collaboration with Interdisciplinary Team		Reporting of Incident/Event/Variance		Adverse Effects to Medication	
Concepts of Management		Safe Use of Equipment		Dosage Calculation	
Confidentiality/Information Security		Security Plan		Mediation Administration	
Continuity of Care		Standard Precautions		Parenteral/Intravenous Therapies	
Establishing Priorities		Use of Restraints/Safety Devices		Pharmacological Pain Management	
Ethical practice		Other		Changes/Abnormalities in Vital Signs	
Informed Consent				Diagnostic Tests	
Information Technology				Laboratory Values	

Referral				Illness Management	
Other				Other	

NCLEX-RN Curricular Gap Activity Sheet (NCSBN, 2015).

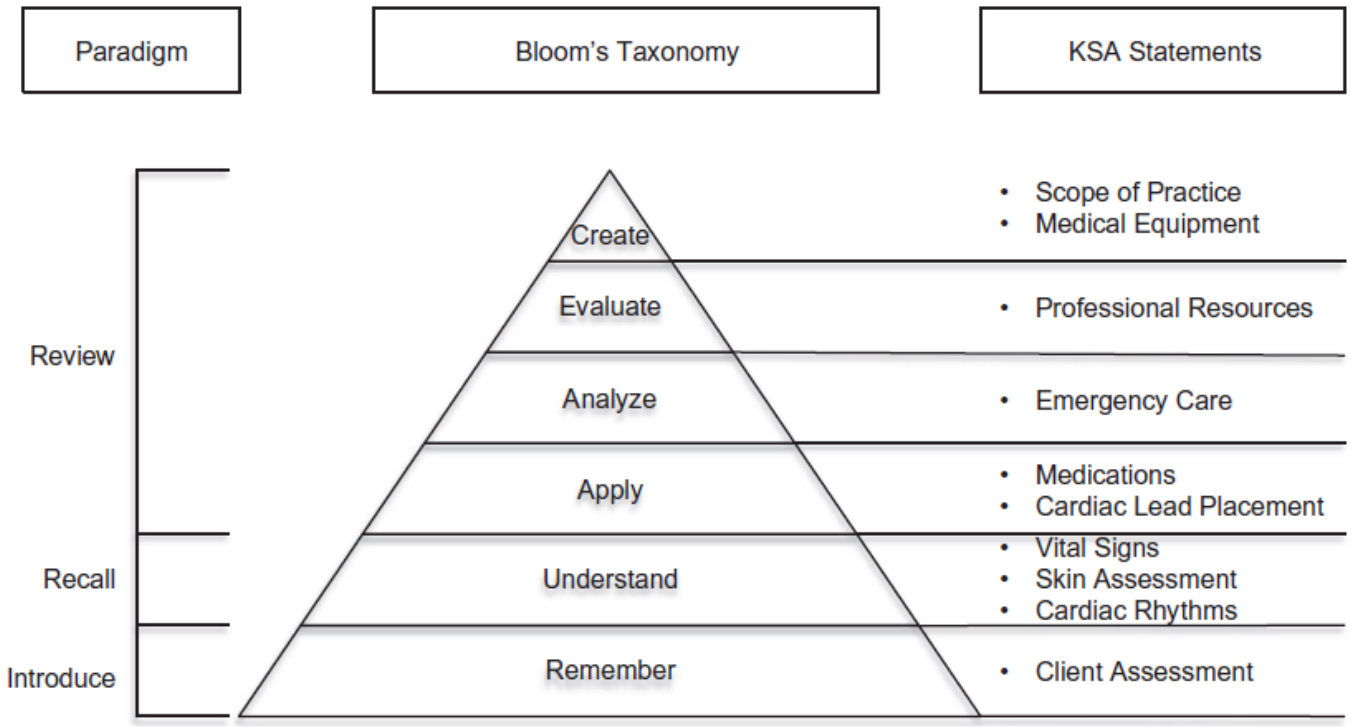
Page 2

Category: Health and Maintenance The nurse provides and directs nursing care of the client that incorporates the knowledge of expected growth and development of principles, prevention and/or early detection of health problems, and strategies to achieve optimal health.		**Category: Psychosocial Integrity** The nurse provides and directs nursing care that promotes and supports the emotional, mental and social well-being of the client experiencing stressful events, as well as clients with acute or chronic mental illness.		**Category: Physiological Integrity** The nurse promotes physical health and wellness by providing care and comfort, reducing client risk potential and managing health alterations.	
Related Content:	**Gap**:	**Related Content**:	**Gap**:	**Related Content**:	**Gap**:
Aging Process		Abuse/Neglect		Assistive Devices	
Ante/Intra/Postpartum and Newborn Care		Behavioral Interventions		Personal Hygiene and Elimination	
Developmental Stages and Transitions		Chemical and Other Dependencies		Mobility/Immobility	

Health Promotion/Disease Prevention		Coping Mechanisms/ Grief and Loss		Nonpharmacological Comfort Interventions	
Health Screening		Crisis Intervention		Nutrition and Oral Hydration	
High Risk Behaviors		Cultural Influences on Health		Adverse Effects to Medication	
Lifestyle Choices		End of Life Care		Dosage Calculation	
Self-Care		Family Dynamics		Mediation Administration	
Techniques of Physical Assessment		Therapeutic Communication		Parenteral/Intravenous Therapies	
Other		Mental Health Concepts		Pharmacological Pain Management	
		Religious and Spiritual Influences on Health		Changes/Abnormalities in Vital Signs	

		Sensory/Perceptual Alterations		Diagnostic Tests and Laboratory Values	
		Support Systems		System Specific Assessments	

Handout 2: Bloom's Taxonomy and Nursing Application (Moxley et al., 2017).



Handout 3: NLN Simulation Design Template (National League of Nursing, n.d.).

National League for Nursing

Simulation Design Template

Date:	**File Name:**
Discipline:	**Student Level:**
Expected Simulation Run Time:	**Guided Reflection Time:**
Location:	**Location for Reflection:**

Admission Date: | **Today's Date:**

Brief Description of Client

Name:

Gender: **Age:** **Race:** **Weight:** **Height:**

Religion:

Major Support: **Support Phone:**

Allergies: **Immunizations:**

Primary Care Provider/Team:

Past Medical History:

History of Present Illness:

Social History:

Primary Medical Diagnosis:

Surgeries/Procedures & Dates:

Nursing Diagnoses:

1

National League for Nursing

Psychomotor Skills Required Prior to Simulation:

Cognitive Activities Required Prior to Simulation:

[i.e. independent reading (R), video review (V), computer simulations (CS), lecture (L)]

Simulation Learning Objectives

General Objectives:

Simulation Scenario Objectives:

References, Evidence-Based Practice Guidelines, Protocols, or Algorithms Used for This Scenario:

NLN
National League
for Nursing

Fidelity (choose all that apply to this simulation)

Setting/Environment:
- ☐ ER
- ☐ Med-Surg
- ☐ Peds
- ☐ ICU
- ☐ OR / PACU
- ☐ Women's Center
- ☐ Behavioral Health
- ☐ Home Health
- ☐ Pre-Hospital
- ☐ Other:

Simulator Manikin/s Needed:

Props:

Equipment Attached to Manikin:
- ☐ IV tubing with primary line fluids running at ☐ mL/hr
- ☐ Secondary IV line running at mL/hr
- ☐ IV pump
- ☐ Foley catheter ☐ mL output
- ☐ PCA pump running
- ☐ IVPB with running at ☐ mL/hr
- ☐ 02 ☐
- ☐ Monitor attached
- ☐ ID band
- ☐ Other:

Equipment Available in Room:
- ☐ Bedpan/Urinal
- ☐ Foley kit
- ☐ Straight Catheter Kit
- ☐ Incentive Spirometer
- ☐ Fluids
- ☐ IV start kit
- ☐ IV tubing
- ☐ IVPB Tubing

Medications and Fluids: (see chart)
- ☐ IV Fluids
- ☐ Oral Meds
- ☐ IVPB
- ☐ IV Push
- ☐ IM or SC

Diagnostics Available: (see chart)
- ☐ Labs
- ☐ X-rays (Images)
- ☐ 12-Lead EKG
- ☐ Other:

Documentation Forms:
- ☐ Provider Orders
- ☐ Admit Orders
- ☐ Flow sheet
- ☐ Medication Administration Record
- ☐ Graphic Record
- ☐ Shift Assessment
- ☐ Triage Forms
- ☐ Code Record
- ☐ Anesthesia / PACU Record
- ☐ Standing (Protocol) Orders
- ☐ Transfer Orders
- ☐ Other:

Recommended Mode for Simulation:
(i.e. manual, programmed, etc.)

Student Information Needed Prior to Scenario:
- ☐ Has been oriented to simulator
- ☐ Understands guidelines /expectations for scenario
- ☐ Has accomplished all pre-simulation requirements
- ☐ All participants understand their assigned roles

NLN

National League
for **Nursing**

- ☐ IV Pump
- ☐ Feeding Pump
- ☐ Pressure Bag
- ☐ 02 delivery device (type)
- ☐ Crash cart with airway devices and emergency medications
- ☐ Defibrillator/Pacer
- ☐ Suction
- ☐ Other:

- ☐ Has been given time frame expectations
- ☐ Other:

Roles/Guidelines for Roles:	**Important Information Related to Roles:**
☐ Primary Nurse	
☐ Secondary Nurse	
☐ Clinical Instructor	
☐ Family Member #1	
☐ Family Member #2	
☐ Observer/s	
☐ Recorder	
☐ Physician/Advanced Practice Nurse	
☐ Respiratory Therapy	
☐ Anesthesia	
☐ Pharmacy	
☐ Lab	
☐ Imaging	
☐ Social Services	
☐ Clergy	
☐ Unlicensed Assistive Personnel	
☐ Code Team	
☐ Other:	

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for Nursing

Report Students Will Receive Before Simulation

Time:

Significant Lab Values:	refer to chart
Provider Orders:	refer to chart
Home Medications:	refer to chart

National League for Nursing

Scenario Progression Outline

Timing (approx.)	Manikin/SP Actions	Expected Interventions	May Use the Following Cues
0-5 min			**Role member providing cue:** Cue:
5-10 min			**Role member providing cue:** Cue:
10-15 min			**Role member providing cue:** Cue:
15-20 min			**Role member providing cue:** Cue:

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Debriefing/Guided Reflection Questions for This Simulation

(Remember to identify important concepts or curricular threads that are specific to your program)

1. How did you feel throughout the simulation experience?
2. Describe the objectives you were able to achieve.
3. Which ones were you unable to achieve (if any)?
4. Did you have the knowledge and skills to meet objectives?
5. Were you satisfied with your ability to work through the simulation?
6. To Observer: Could the nurses have handled any aspects of the simulation differently?
7. If you were able to do this again, how could you have handled the situation differently?
8. What did the group do well?
9. What did the team feel was the primary nursing diagnosis?
10. How were physical and mental health aspects interrelated in this case?
11. What were the key assessments and interventions?
12. Is there anything else you would like to discuss?

Complexity – Simple to Complex

Suggestions for Changing the Complexity of This Scenario to Adapt to Different Levels of Learners

Handout 4: Week 2 Review Page

Week 2 Review

1. What are three curricular gaps identified either in the week one online module or through discussion in the week two training session?

2. What was the level of Bloom's Taxonomy associated with the curricular gaps aligned with your simulation scenario? Why do you feel this is the appropriate cognitive level for the scenario?

3. Write a brief overview of your group's simulation scenario and explain why it is the appropriate patient case to meet the objectives of the scenario.

Handout 5: Week 4 Review Page

Week 4 Review

1. Did you determine if there were any missing resources needed by students to participate in your simulation scenario? If so, who will be creating the materials and how will they be integrated into the didactic curriculum?

2. What are some of the prerequisite knowledge, skills, attitudes, and behaviors students must possess to successfully participate in your simulation scenario?

3. How would you rate the level of facilitator involvement in your simulation scenario; minimal, moderate, maximum?

Handout 6: Week 6 Review Page

Week 6 Review

1. Did you learn anything new about the fidelity options available, for simulation scenarios, from our guest speaker? If so, what?

2. What fidelity options did you include in your simulation scenario that will enhance the realism of the patient case for the student participants?

3. Are there any details that are include in the patient description that impact the progression of the scenario if missed by the students?

Handout 7: Simulation Design Template Sample

Simulation Design Template

Date: 8/31 **File Name:** Adolescent Asthma
Discipline: Nursing **Student Level:** Students in Pediatric Nursing course/Basic
Expected Simulation Run Time: 15-20 minutes **Guided Reflection Time:** 30 minutes
Location: Simulation Lab **Location for Reflection:** Debriefing room, near Sim Lab

Admission Date: August 31

Today's Date: August 31

Brief Description of Client

Name: Julio Morales
Gender: Male
Age: 14 **Race:** Hispanic
Weight: 63.5 kg **Height:** 167cm
Religion: Catholic

Major Support: mother
Phone: 777-0009

Allergies: No known drug allergies

Immunizations: Current per CDC recommendations

Attending Physician/Team: Pediatrician, Dr. Marla Goodrich

Past Medical History: No pertinent medical or surgical history. Patient diagnosed with asthma at age 4 years. Emergency Department visits X 2 in past 2 years for exacerbation of asthma. Has multiple environmental allergies including grass, mold, and animal dander. Uses albuterol metered dose inhaler PRN.

History of Present Illness: Mild wheezing began last night. Increasing distress noted during the night, mother brought patient to Emergency Department this morning due to no reported response to inhaler

Social History: Lives with mother, father, grandmother, and 4 younger siblings. Is in 8th grade at local middle school.

Primary Medical Diagnosis: Exacerbation of asthma

Surgeries/Procedures & Dates: None

Psychomotor Skills Required Prior to Simulation

Exacerbation of asthma
Basic respiratory assessment
Use of pulse oximeter
Oxygen administration
Communication skills/developmentally appropriate
Use of metered dose inhaler

Cognitive Activities Required prior to Simulation [i.e. independent reading (R), video review (V), computer simulations (CS), lecture (L)]

Attendance at lecture: Pediatric Respiratory Illness (L)
Oxygen Lab
Read Chapter on Asthma (R)
Medication review: Inhaler
Pharmacology review: Albuterol

Simulation Learning Objectives

1. Perform focused respiratory assessment
2. Identify signs of respiratory distress
3. Implement non-pharmacologic methods to aid breathing, i.e. positioning
4. Review physician orders
5. Administer oxygen PRN
6. Administer albuterol safely
7. Evaluate effectiveness of interventions
8. Communicate effectively with pediatric patient and family

Fidelity (choose all that apply to this simulation)

Setting/Environment

- [x] ER
- [ ] Med-Surg
- [ ] Peds
- [ ] ICU
- [ ] OR / PACU
- [ ] Women's Center
- [ ] Behavioral Health
- [ ] Home Health
- [ ] Pre-Hospital
- [ ] Other

Simulator Manikin/s Needed: SimMan as 14 year old boy

Props: baseball cap, hospital gown with gym shorts underneath

Equipment attached to manikin:

- [ ] IV tubing with primary line _____ fluids running at _____ mL/hr
- [ ] Secondary IV line _____ running at _____ mL/hr
- [ ] IV pump
- [ ] Foley catheter _____ cc output
- [ ] PCA pump running
- [ ] IVPB with _____ running at mL/hr
- [ ] O_2 _____
- [ ] Monitor attached
- [x] ID band Morales, Julio, include DOB
- [ ] Other _____

Equipment available in room

- [ ] Bedpan/Urinal
- [ ] Foley kit
- [ ] Straight Catheter Kit
- [ ] Incentive Spirometer
- [ ] Fluids
- [ ] IV start kit
- [ ] IV tubing
- [ ] IVPB Tubing
- [ ] IV Pump
- [ ] Feeding Pump
- [ ] Pressure Bag
- [x] O_2 delivery device (type) nasal canula and simple mask
- [ ] Crash cart with airway devices and emergency medications
- [ ] Defibrillator/Pacer

Medications and Fluids

- [ ] IV Fluids:
- [ ] Oral Meds:
- [ ] IVPB:
- [ ] IV Push:
- [ ] IM or SC:

Diagnostics Available

- [ ] Labs
- [ ] X-rays (Images)
- [ ] 12-Lead EKG
- [ ] Other

Documentation Forms

- [x] Physician Orders
- [ ] Admit Orders
- [ ] Flow sheet
- [x] Medication Administration Record
- [ ] Kardex
- [ ] Graphic Record
- [ ] Shift Assessment
- [ ] Triage Forms
- [ ] Code Record
- [ ] Anesthesia / PACU Record
- [ ] Standing (Protocol) Orders
- [ ] Transfer Orders
- [ ] Other

Recommended Mode for Simulation (i.e. manual, programmed, etc.)

Scenario can be run manually

- ☐ **Suction**
- ☒ **Other** Albuterol MDI

Roles / Guidelines for Roles

- ☒ **Primary Nurse**
- ☒ **Secondary Nurse**
- ☐ **Clinical Instructor**
- ☒ **Family Member #1** Patient's mother is in room with patient
- ☐ **Family Member #2**
- ☐ **Observer/s**
- ☐ **Recorder**
- ☐ **Physician / Advanced Practice Nurse**
- ☐ **Respiratory Therapy**
- ☐ **Anesthesia**
- ☐ **Pharmacy**
- ☐ **Lab**
- ☐ **Imaging**
- ☐ **Social Services**
- ☐ **Clergy**
- ☐ **Unlicensed Assistive Personnel**
- ☐ **Code Team**
- ☐ **Other**

Important Information Related to Roles

Patient is upset about being in the hospital; he is missing a basketball game in school today. His mother is worried, upset with son about not using his inhaler often enough

Significant Lab Values

Physician Orders

Admit to peds observation unit
VS q 1 hour
Continuous pulse oximetry
Administer oxygen to maintain SpO2 > 95%
Albuterol MDI (90 micrograms/inhalation), 2 puffs Q 15 minutes X 2
Labs – CBC and Basic metabolic panel
Chest x-ray - AP and lateral

Student Information Needed Prior to Scenario:

- ☐ **Has been oriented to simulator**
- ☐ **Understands guidelines /expectations for scenario**
- ☐ **Has accomplished all pre-simulation requirements**
- ☐ **All participants understand their assigned roles**
- ☐ **Has been given time frame expectations**
- ☐ **Other**

Report Students Will Receive Before Simulation

Julio was just admitted to the Observation Unit, needs an assessment. His mother says he was wheezing a little last evening, during the night he began wheezing more and coughing, could not sleep. She said he has an inhaler but she does not know if and when he uses that. He reportedly tried during the night but distress continued. Lab and x-ray have not been here yet. Dr. Goodrich just wrote the orders.

Time: 0900

References, Evidence-Based Practice Guidelines, Protocols, or Algorithms Used For This Scenario: (site source, author, year, and page)

Asthma is a chronic inflammatory disorder of the airway with obstruction that can be partially or completely reversed, and increased airway responsiveness to stimuli.

In asthma, the inflammation causes the normal protective mechanisms of the lungs (mucus formation, mucosal swelling, and airway muscle contraction) to react excessively in response to a stimulus, (a "trigger.")

Airway narrowing results from airway swelling and production of copious amounts of mucus. Mucus clogs small airways, trapping air below the plugs, causes muscle spasm that can become uncontrolled in the large airways.

Diagnosis of asthma has 4 key elements: symptoms of episodic airflow obstruction; partial reversibility of bronchospasm with bronchodilator treatment, exclusion of alternate diagnosis, and confirmation by spirometry of measurement of peak expiratory flow variability.

Bronchodilators (i.e. albuterol) relax smooth muscle in airways, results in bronchodilation within 5-10 minutes, has some side effects such as tachycardia, nervousness, nausea, and vomiting

OUTCOMES: Patient will evidence stable vital signs and be afebrile, exhibit unlabored respirations and patent airway, tolerate full diet, tolerate age-appropriate activity with evidence of respiratory distress, weakness, or exhaustion, have moist mucus membranes, verbalize understanding and demonstrate cooperation with respiratory therapy

Supplemental oxygen may be required, humidified preferred, best administered by face mask or nasal canula. Place patient in sitting or upright position to promote ease of breathing.

Discharge planning: child and family need a thorough understanding of asthma, how to prevent attacks and how to treat to avoid unnecessary hospitalization.

Reference

London, M.L., Ladewig, P.W., Ball, J.W., & Bindler, R.C. (2003). The Child with Alterations in Respiratory Function (pp.1035-1046), Maternal-Newborn & Child Nursing, Family-Centered Care. Upper Saddle River, NJ: Prentice Hall.

Scenario Progression Outline

Timing (approximate)	Manikin Actions	Expected Interventions	May Use the Following Cues
First 5 minutes	Patient is flat in bed Temp: 37.2 BP: 110/68 P: 90 reg RR: 22 SpO2: 91% Wheezing bilaterally Normal heart and bowel sounds Use of faculty,staff or student as patient voice: "I hate coming to the hospital. I have a game today."	Wash hands Introductions, address patient and his mother Elevate HOB Perform assessment, focus on respiratory with bilateral auscultation and pulse oximetry as priorities. Teamwork, primary and secondary nurse work together to assess and perform interventions	**Role member providing cue:** Patient's mother **Cue:** "Why does he keep having this breathing trouble? We have been here for this same thing before."
Next 10 minutes	Wheezing persists RR ^ to 24 SpO2: 89% "I hate this, it's hard to catch my breath" "I used the stupid puffer."	Review physician orders Administer oxygen via nasal canula at 2 L/min Administer albuterol via metered dose inhaler, utilizing 5 rights of med administration, assessing patient's knowledge, and giving age appropriate instructions	**Role member providing cue:** Patient (sounds short of breath with talking) **Cue:** "I had that inhaler a long time. Since I was in 7th grade last year. I always have to use it when I'm running, and when I'm outside, and if the cat comes in the house"
Final 5 minutes	Slight improvement in wheezing after albuterol and oxygen RR to 18 HR to 108 SpO2: 95 "How come my heart is pounding. I hate this."	Continuous assessment of respiratory status Assess inhaler knowledge and use. When and how often is inhaler used? How long has patient had inhaler? Does he know how to check whether it is empty? Begin teaching of inhaler and side effects	**Role member providing cue:** Patient **Cue:** "What do I have to do so my mom won't bring me back here again? I'm old enough to take care of myself."

Appendix B: Copyright Approval

January 30, 2018

Dear Erika:

You have permission from the American Society of Radiologic Technologists to use the figure from the peer review article request in your email. All we ask is that you include the following statement on any copies made or distributed:

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If you need further assistance in regard to this, please let me know.

Sincerely,

Stephanie Barela
Administrative Assistant
American Society of Radiologic Technologists
15000 Central Ave SE
Albuquerque, NM 87123-3919
Phone 800-444-2778, Ext. 1277
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Visit our web site at www.asrt.org

Sent: Monday, January 29, 2018 6:16 PM
To: Publications <publications@ASRT.ORG>
Subject: Permission to reprint

Greetings,

My name is Erika Wilkinson and I am a doctoral study at Walden University earning my doctorate in education. My doctoral study examines nursing faculty perspectives on integrating simulation into our associate nursing program. Within my literature review, I cite *Managing Clinical Education Through Understanding Key Principles* by Joanne

Cunningham, Marilyn Baird, and Caroline Wright from the January/February 2015 edition of Radiologic Technology.

I am contacting you for permission to reproduce the figure on page 264 within my doctoral study. I am seeking a onetime use permission to use the figure only within my doctoral study.

Thank you for considering my request,
Erika

Appendix C: Request for Participation E-mail

TO: Selected ASN nursing educators

FROM: Erika Wilkinson Erika.wilkinson@waldenu.edu

SUBJECT: RESEARCH PARTICIPATION REQUEST

Because of your expertise as a faculty member within Pennsylvania College of Health Sciences' ASN program, I would like to invite you to take part in a research study examining the perceptions of nursing educators about the integration of learning activities, between clinical and didactic courses, for the improved performance by first-time nursing graduates on the NCLEX-RN exam.

If you agree to be in this study, you will be among 16 potential participants who are asked to partake in a 30-60 minute, audio-recorded, in-person interview. These interviews will occur at a neutral location at Pennsylvania College of Health Sciences. A follow-up interview for clarification purposes is a possibility and is voluntary.

The guiding research question, "what are the perceptions of nursing educators about the integration of learning activities, between clinical and didactic courses, for the improved performance by first-time nursing graduates on the NCLEX-RN exam?"

Any information provided will be kept confidential. No identifying information will be included within the study. Data will be stored on a password protected flash drive and all draft copies of my research in a locked file cabinet at my personal residence. Data will be kept for a period of at least 5 years, as required by Walden University, and then destroyed.

The attached consent form provides a full description of the study and expectations of participants. If you have any questions, you can contact me at Erika.wilkinson@waldenu.edu. If you agree to participate in this study, please reply to this email within three business days. At the start of the interview, you will be requested to sign two copies of the attached consent form. One will be for your records and one will be kept with the study. No reply will be perceived as a decline to the offer.

This study is voluntary and there are no consequences, from Pennsylvania College of Health Sciences or the Division of Nursing, for choosing not to participate. If you decide to join the study now, you can opt out at any time.

Thank you for considering my request.
Erika

Appendix D: Consent to Participate in a Research Study

I. STUDY TITLE AND APPROVAL NUMBER:

INTEGRATION OF LEARNING ACTIVITIES FOR IMPROVED PERFORMANCE ON THE NCLEX-RN EXAM. WALDEN IRB APPROVAL #10-14-160333932

II. INVESTIGATORS AND COLLABORATORS:

Erika Wilkinson, Dean, Education Innovation

PA College of Health Sciences 717-947-6067

III. Anyone who is asked to participate in a research study must give his or her consent prior to participating. In order to decide if you want to take part in this study, you need to understand the risks and benefits that are involved. The consent form you are about to read gives detailed information about this study. Once you understand the study, you can decide if you want to take part in it. If you do, you will need reply to this email indicating your consent to participate in the study. At the time of the interview, if you still agree to participate, you will be asked to sign a hard copy of this consent form.

IV. OVERVIEW:

Because of your expertise as a faculty member within PA College of Health Sciences' ASN program, I would like to invite you to take part in a research study examining the perceptions of nursing educators about the integration of learning activities, between clinical and didactic courses, for the improved performance by first-time nursing graduate students on the NCLEX-RN exam.

If you agree to be in this study, you will be among 16 potential participants who are asked to partake in a 30-60 minute, audio-recorded, in-person interview. These interviews will occur at a neutral location at PA College of Health Sciences. There is the possibility of a follow-up interview for clarification purposes.

The guiding research question, "what are the perceptions of nursing educators about the integration of learning activities, between clinical and didactic courses, for the improved performance by first-time nursing graduate students on the NCLEX-RN exam?"

V. RISKS AND BENEFITS:

There are no foreseeable physical or emotional risks, inconveniences, or discomforts associated with the study. Faculty development sessions on the integration of learning activities between clinical and didactic courses is the potential benefit derived from the study.

VI. ALTERNATIVES TO PARTICIPATION:

There are no alternatives to agreeing to participate in the study.

VII. COMPENSATION:

At the start of each interview, each participant will receive a thank you card with a five-dollar gift card.

VIII. CONFIDENTIALITY/HIPAA:

Any information provided will be kept confidential. No identifying information will be included within the study. Data will be stored on a password protected flash drive and all draft copies of my research in a locked file cabinet at my personal residence. Data will

be kept for a period of at least 5 years, and then destroyed. You have the right to refuse signing this authorization. You may withdraw from the study at any time. You must withdraw in writing to the principal investigator (name and address on the first page of this consent form) in order to withdraw your permission for us to continue to use the data that we have already collected about you.

IX. FURTHER INFORMATION/QUESTIONS:

If you have any questions about this research or if you believe you have been injured as a result of participating in this research study, you can contact Erika Wilkinson at 717-947-6067.

X. SUBJECT'S RIGHTS OR QUESTIONS:

The Human Research Protection Program (HRPP) provides oversight of all research activities involving human subjects at Lancaster General Health. If you have any questions about your rights as a research participant, or if you have complaints or concerns, you may send an e-mail to the HRPP (SM-HRPP@lghealth.org). You also may call the Chair of the Institutional Review Board at Lancaster General Hospital at 717-544-5091.

XI. VOLUNTARY PARTICIPATION:

This study is voluntary and there are no consequences, from PA College of Health Sciences or the Division of Nursing, for choosing not to participate. If you decide to join the study now, you can opt out at any time by emailing the principal investigator at erika.wilkinson@waldenu.edu .

If you chose to participate, reply to this email indicating your consent to participate in the study. At the time of data collection, you will be asked to sign and date this form. Lack of reply to this request will be presumed to be a refusal to participate. If chose to opt out of the study after data collection has occurred, notify the principal investigator via email erika.wilkinson@waldenu.edu and all data will be deleted and not included in the results of the study.

XII. STATEMENT OF CONSENT:

I have read the above information, or have had it read to me, and I understand the purpose of the study, as well as the possible benefits and risks of taking part in the study. I have had the chance to ask questions, and all of my questions have been answered to my satisfaction. I am 18 years or older and freely give my informed consent to take part in this study.

XIII. SIGNATURES:

Participant's signature	Date
Participant's name (spelled out)	Date
Principal Investigators' signature	Date
Principal Investigators' name (spelled out)	Date

Appendix E: Semistructured Interview Questions

Accreditation

1. What significance does ACEN accreditation have for students, faculty members, and Wilhof College?
2. Are you aware that the ASN accreditation status, through ACEN, changed to accreditation with conditions as a result of the spring 2014 NCLEX-RN exam scores?
3. What impact did this change in status have for students, faculty, and Wilhof College?

NCLEX-RN Exam

4. What are the barriers to Wilhof College first-time nursing graduates' success on NCLEX-RN exam?

Theory-Practice Gap

5. Dadgaran et al., (2012) defined the theory-practice gap as the discrepancy between the theoretical aspects of nursing, taught in the classroom, and what students experience in the clinical learning environment. Based on this definition, do you feel the concept occurs within the ASN curriculum at Wilhof College? If so, is this problem a contributing factor on first-time nursing graduates' success on the NCLEX-RN exam?

Benner's Model of Skill Acquisition

6. Take a moment to review the handout on Benner's Model of Skill Acquisition for nurses (Appendix D). What level do Wilhof College ASN nursing students graduate? What level do you believe they should be at to pass the NCLEX-RN exam?

Nursing Education Curriculum

7. Are there barriers within the ASN curriculum that prevents students from successfully passing the NCLEX-RN exam?

8. Currently, are there learning activities integrated between clinical and didactic courses?

9. Are there opportunities to purposefully integrate learning activities between the clinical and didactic courses?

10. What learning activities could be integrated between the two types of courses to improve students' application of theoretical knowledge in the clinical learning environment?

Conclusion

11. Is there anything else you would like to share regarding accreditation, student performance on the NCLEX-RN exam, the possible integration of learning activities or anything else?