

The Use of Simulation to Facilitate a Successful Transition from Classroom to Initial Clinical
Experience

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Dedication and Acknowledgement

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I am dedicating this capstone project in memory of my beloved brother, Mark Robinson. Even though we are physically separated I know you are still one of my biggest supporters. I miss you more than you will ever know.

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Executive Summary

Problem: As a practice profession, the clinical learning experience is an essential component of nursing education. Despite the importance of clinical education, students often describe the initial clinical experience as a stressful and anxiety-provoking component of nursing education. High levels of stress and anxiety can impede students' ability to learn in the clinical environment and may cause students to leave nursing education. Educators need evidence-based teaching strategies to facilitate a successful transition for beginning nursing students as they move from the classroom to the initial clinical experience.

Purpose: The purpose of the capstone project is to use a simulated learning experience to facilitate a successful transition for beginning nursing students entering their initial clinical experience.

Objective: The overall project objective is to implement a simulated learning experience to facilitate a successful transition for beginning nursing students. The outcome of the project will potentially decrease anxiety, increase self-confidence, and increase competence with basic clinical skills during the initial clinical experience.

Plan: The Transitions Theory served as the theoretical framework for development and evaluation of the project. A convenience sample of beginning nursing students was utilized (n=101). The consequences of a successful transition were utilized to evaluate the effectiveness of the project. Quantitative data was collected using the State-Trait Anxiety Inventory, NLN Student Satisfaction and Self-Confidence in Learning tool, and a clinical skills checklist. Qualitative data was collected via reflective journal responses. Data was analyzed to identify evidence of a successful transition from classroom to initial clinical experience.

Project Results: Quantitative data analysis did not show a statistically significant difference in anxiety scores between groups (p-value= 0.330), however participant comments from the reflective journal responses indicated otherwise. Comments stating the simulation helped prepare students for the first clinical day and decreased anxiety were threaded throughout the qualitative data. After the simulation experience, 98.25% of participants either "agreed" or "strongly agreed" they were confident they obtained skills from the simulation to perform necessary tasks in clinical. Comparison of clinical skills between groups did not show a statistically significant difference (p-value= 0.855); however, participants' comments indicated they felt the simulation helped develop communication skills.

Recommendations: The author recommends that the project continue with beginning nursing students but expand the project to include transition-based simulations in all clinical courses. Additionally, include students from other health care disciplines in the simulation experiences, and recruit theater students to portray SPs for the simulation experiences. Healthcare can only benefit from preparing all students to transition successfully to new roles.

The Use of Simulation to Facilitate a Successful Transition from Classroom to Initial Clinical Experience

Problem Statement

Transitions are a universal part of life. Nursing students begin the transition from layperson to student nurse with the onset of their nursing education. When students begin their initial clinical experience, a new sense of self begins (Chick & Meleis, 1986; Schumacher & Meleis, 1994). However, students report the clinical experience is one of the most stressful and anxiety-producing components of their nursing education (Reeve, Shumaker, Yearwood, Crowell & Riley, 2013; Shaban, Khater & Akhu-Zaheya, 2012). Students who have a negative initial clinical experience may choose to leave nursing education (Andrew, 2013; Andrew, McGuinness, Reid, & Corcoran, 2009; Crombie, Brindley, Harris, Marks-Maran & Thompson, 2013). Conversely, students who have a positive initial clinical experience and continue the transition successfully are more likely to become competent nurses who are able to provide high-quality care needed to meet the increasing demands of the healthcare industry (American Association of Colleges of Nursing [AACN], 2013).

Nurses comprise the largest group of healthcare professionals in the United States with approximately 2.6 million registered nurses (RNs) practicing in hospitals and various other healthcare settings (AACN, 2013). A documented shortage of registered nurses exists and the shortage is predicted to worsen in the next several years. The Bureau of Labor Statistics (BLS) projects by the year 2020, an additional 1.2 million registered nurses will be needed to meet the nation's healthcare needs (2012). The American Health Care Association (AHCA) reported in 2008 the national staff RN vacancy rate was 7.9% (2010). In 2008, the Council on Physician and Nurse Supply reported an additional 30,000 RN graduates are needed annually to meet the

additional healthcare needs (n.d.). This translates to an increase of 30% from the current number of graduates. To compound the problem, a shortage of qualified nursing faculty exists. In 2011, baccalaureate and graduate programs turned away 75,587 qualified applicants due in part to insufficient numbers of nursing faculty (AACN, 2013).

Despite the shortage of qualified faculty, nursing education has the monumental task of preparing nursing students to meet the increased demands of the healthcare industry. Not only are increased numbers of graduates needed, students have to be prepared to work in a complex, ever-changing healthcare environment. Despite the need to prepare students to fill vacancies within the profession, attrition rates in nursing programs are a concern (Crombie et al., 2013; Glogowska, Young, & Lockyer, 2007; Urwin et al., 2010). The reasons students leave nursing programs are complex and multi-faceted. Researchers report individual issues, course-related concerns, stress and anxiety are among the reasons students leave nursing programs (Crombie et al., 2013; Glogowska et al., 2007; Urwin et al., 2010).

As a practice profession, the clinical learning experience is an essential component of nursing education (Andrew et al., 2009; Benner, Sutphen, Leonard & Day, 2010; Chesser-Smyth, 2005; Moscaritolo, 2009; Sharif & Masoumi, 2005). According to the AACN Essentials of Baccalaureate Education for Professional Nursing Practice (2008), clinical experiences should prepare students to proficiently perform psychomotor skills, utilize professional communication skills, and develop a professional identity. Clinical education should focus on making connections between theory and actual patient situations (AACN, 2008). Research suggests the initial clinical experience is essential to the success of the student (Andrew, 2013; Andrew, et al., 2009; Chesser-Smyth, 2005; Crombie, et al., 2013; Glogowska et al., 2007). According to Andrew (2013), the quality of the initial clinical experience can be the reason a student thrives or

fails to thrive in nursing. A study by Crombie et al. (2013) reports, “experiences in the clinical practice have the greatest influence on students wanting to stay in the programme [*sic*]” (p. 1286). In a qualitative study by Glogowska et al. (2007) negative early experiences were identified as one of the reasons students withdrew from their nursing program. Students who have negative initial experiences and leave nursing education perpetuate the nursing shortage.

Despite the importance of clinical education, students often find the initial experience daunting. Students report “reality shock” when they first enter the clinical arena (Gorostidi et al., 2006; Moscaritolo, 2009; Shaban et al., 2012; Sharif & Masoumi, 2005). Students reported feeling anxious, stressed, unprepared, incompetent, and fear making mistakes and harming patients (Andrew et al., 2009; Chesser-Smyth, 2005; Gorostidi et al., 2006; Moscaritolo, 2009; Reeve et al., 2013; Sharif & Masoumi, 2005). In a qualitative study by Reeve et al. (2013), students reported stress due to feelings of inadequacy caused from lack of adequate preparation for the initial clinical experience and fear of the unknown. High levels of anxiety and stress can impede a student’s ability to learn and threatens their success in the program (Chesser-Smyth, 2005; Dearmon et al., 2013; Moscaritolo, 2009).

Nursing students must go through the process of transition to successfully re-define their sense of self. Beginning nursing students must transition from the structured classroom setting to the chaotic, diverse clinical environment (Wadsworth, 2010). Transition is defined as a complex process of moving from one state, condition, or place to another. It requires individuals to incorporate new knowledge in order to alter behavior and to change identity and roles (Chick & Meleis, 1986; Schumacher & Meleis, 1994). A successful transition will result in competent, confident, practitioners while an unsuccessful transition can result in confusion, anxiety, conflict, frustration and even a decision to leave the profession (Schumacher & Meleis, 1994). Literature

exists regarding the transition from graduate nurse to registered nurse (Doody, Tuohy & Deasy, 2012; Wieland, Altmiller, Dorr & Wolf, 2007). Duchscher's Transition Theory (2012) examines ways to facilitate a successful transition for new graduate nurses. However, nurse educators need to employ evidence-based strategies to facilitate a successful transition for beginning nursing students as well as new graduate nurses.

The use of simulation in nursing education has become an accepted teaching strategy (Jeffries, 2012). Simulated experiences allow students to practice nursing care in a safe, supportive environment without fear of harming real patients (Jeffries, 2012). The use of simulation in nursing education has been widely studied. Several studies suggest the use of simulated learning experiences can improve students' self-confidence and competence with psychomotor skills (Bambini, Washburn & Perkins, 2009; Blum, Borglund & Parcels, 2010; Dearmon et al., 2013; Hope, Garside & Precott, 2011; Nickless, 2011). Dearmon et al. (2013) reported using a simulation-based orientation program for baccalaureate students preparing for their initial clinical experience. The results of the two-day simulated experience were improved self-confidence, increased knowledge, and decreased anxiety. Because a successful initial transition is imperative for students' success (Andrew, 2013; Andrew, et al., 2009; Chesser-Smyth, 2005; Crombie, et al., 2013; Glogowska et al., 2007; Orland-Barak & Wilhelem, 2005) similar studies should be conducted to support these findings. Yet, the literature remains limited with regard to strategies for facilitating a successful transition for beginning nursing students entering their initial clinical experience.

The purpose of this capstone project was to use a simulated learning experience to facilitate a successful transition for beginning nursing students entering their initial clinical experience. The capstone project utilized a simulated learning experience with standardized

patients (SPs). A SP is defined as an “individual trained to portray a patient with a specific condition in a realistic, standardized and repeatable way” (Association of Standardized Patient Educators, 2011, para 1). The use of SPs, while fairly new in nursing, has been shown to increase learning when compared to traditional teaching strategies (Becker, Rose, Berg, Park & Shatzer, 2006; Bornais, Raiger, Krahn & El-Masri, 2012; Dearmon et al., 2013; Yoo & Yoo, 2003). The realism that can be achieved with the use of SPs reduces the gap between theory and practice (Dearmon et al., 2013).

The clinical coordinator for the nursing program where the capstone project took place had acknowledged there was not a formal orientation for students before they entered their initial clinical experience. She stated clinical faculty reported many students were anxious and stressed about the experience and it often took several weeks before they felt comfortable with basic care (J. Churchill, personal communication, September 23, 2013). Therefore, the simulation was designed to mimic a typical clinical day and took place immediately before students’ initial clinical experience.

One of the antecedents to successful transition is knowledge acquisition (Chick & Meleis, 1986; Schumacher & Meleis, 1994). By providing students with a simulated experience, they can practice basic skills and understand the expectations before the actual experience. The goal is facilitating a successful transition so students feel more confident, experience less anxiety, become competent with basic skills, and begin to envision their role in the profession.

Theoretical Framework

The Transitions Theory by Meleis, Sawyer, Im, Messias, and Schumacher (2000) served as the theoretical framework for development and implementation of the capstone project. The Transitions Theory was developed as the result of a collective effort by nurse researchers who

studied the concept of transitions in a variety of contexts (Im, 2014). According to Meleis et al. (2000), transitions are a central concept to nursing. The major concepts of the Transitions Theory include types and patterns of transitions; properties of transition experience; transition conditions; patterns of response; and nursing therapeutics (Im, 2014; Meleis et al, 2000). The theoretical concepts and conceptual relationships are applicable to the transition experience of beginning nursing students.

Types and Patterns of Transitions

Types of transitions include developmental, health-illness, situational, and organizational. Situational transitions involve changes in roles or educational levels (Im, 2014; Meleis et al., 2000). Patterns of transitions include multiplicity and complexity. According to Meleis et al. (2000), individuals may experience multiple transitions, which can be sequential or simultaneous. Students entering nursing education initially experience a situational transition. Depending on their life events, nursing students may be experiencing simultaneous transitions as well.

Properties of Transitions

Properties of transition include awareness, engagement, change and difference, time span, and critical points (Meleis et al., 2000). According to Chick and Meleis (1986) in order to be in transition a person must have some level of awareness of the changes that are occurring. Engagement includes seeking out information, actively preparing, and using role models (Meleis et al., 2000). Change involves disequilibrating events, which leads to change in perceptions, routines, or ideas (Meleis et al., 2000). Because a transition involves a complex process, there is no set time frame in which the transition will be complete. According to Meleis et al. (2000) all transitions flow and move over time. Critical points are defining moments in a transition and are

usually associated with increased awareness of change and more active engagement (Meleis et al., 2000).

For beginning nursing students the initial transition from classroom to clinical takes place during the first clinical rotation. When student nurses enter the clinical environment, they must be aware of the change that needs to occur with regard to their cognitive, psychomotor, and affective skills. By helping students prepare for the initial clinical experience, educators can assist students' engagement in the transition process. By understanding the uneasy feelings the transition creates, educators can support students as they learn to cope with their new reality.

Transition Conditions

Transition conditions are circumstances that either facilitate or hinder the way an individual moves through a transition. Personal conditions that facilitate a successful transition include preparation and knowledge (Meleis et al., 2000). Anticipatory preparation and knowledge about expectations during a transition can facilitate a transition experience; lack of preparation can inhibit the process. The use of a simulated experience to prepare students for the initial clinical experience will facilitate a successful transition.

Patterns of Response

Patterns of response include process indicators and outcome indicators. According to Meleis et al. (2000), confidence progresses as an individual moves through the transition. Outcome indicators signify a healthy completion of a transition and include mastery of skills and behaviors needed to manage the new situation or environment (Meleis et al., 2000). As students successfully transition from the classroom to the initial clinical experience, they will have increased confidence, mastery of basic fundamental skills, and development of a new identity.

Nursing Therapeutics

Nursing therapeutics includes interventions to help facilitate successful transitions such as assessment of readiness and preparation. According to Meleis et al. (2000) education is the primary modality for preparing individuals for a transition. By helping students prepare for the initial clinical experience, through a simulated experience, nurse educators are creating optimal conditions for the transition process. A schematic depiction of the Transition Theory as related to beginning nursing students is represented in Appendix A.

Project Objectives

Long-Term Objectives

The capstone project had two long-term objectives. The first was to utilize a simulated learning experience to facilitate a successful transition, for beginning nursing students, from the classroom to the initial clinical experience. The second long-term objective was to evaluate the effectiveness of the simulated learning experience and to disseminate the findings to other nurse educators.

Short-Term Objectives

In order to achieve the two long-term objectives, several short-term objectives were necessary. The first was to develop a simulated learning experience, which mimicked a typical student nurses' clinical day by May 2014. The second short-term objective was to implement the simulated experience as part of the participants' initial clinical orientation in March 2015. The third short-term project objective was to evaluate the effectiveness of the simulated experience by measuring participants' anxiety, self-confidence, basic clinical competence, and exploration of students' reflective journal responses by August 2015.

Project Plan

Scope of Change

This capstone project was designed to provide beginning students with a simulated experience prior to the initial clinical experience. The simulation utilized SPs and was designed to mimic a typical day. The simulation included basic activities that students encounter during initial clinical experiences such as basic communication skills, fundamental psychomotor skills, and documentation. The clinical instructors participated in the simulation and assisted the students as in the actual clinical environment. The simulation was conducted with beginning students (n= 57) during spring semester 2015. Beginning nursing students (n=57) in the preceding 2014 fall semester received the traditional clinical orientation and served as the control group.

Four instruments served as tools for the study: The State-Trait Anxiety Inventory (STAI), the NLN Student Satisfaction and Self-Confidence in Learning tool, a clinical skills checklist, and student journaling. The control group completed the STAI before the traditional clinical orientation and after completion of the second clinical day. The treatment group completed the STAI before the simulation and again after completion of the second clinical day. The treatment group also completed the NLN Student Satisfaction and Self-Confidence in Learning tool after the simulation. Clinical faculty completed a clinical skills checklist during the fourth week of the clinical rotation for students in both the control and treatment group. Quantitative data was analyzed to identify any significant differences between the two groups. In addition, students in the treatment group completed reflective journal responses at the end of the clinical rotation. The reflective journal responses allowed for exploration of the students' perceptions of the simulation experience. The project outcomes and conclusions will be disseminated in order to change beginning nursing students' orientation and preparation for the initial clinical experience.

Setting

This capstone project consists of a simulated experience, which took place in the simulation laboratory, located within a mid-sized public university. This project targeted sophomore students within the university's undergraduate nursing department. The nursing department prepares students at the baccalaureate level. There are approximately 375 students, 26 full-time faculty members, and 40 part-time faculty members within the department. Approximately 60 undergraduate students are admitted to the program each fall and spring semester.

The personnel involved in this project included the Dean of the College of Health Professions; the Chair of the Department of Nursing; the Director of the BSN program; the Director of Simulation; and the clinical faculty for the beginning nursing students. The key stakeholders in this project were the beginning nursing students; the nursing faculty; the BSN Program Director; the Chair of the Department of Nursing; and the Dean of the College of Health Professions. Other stakeholders included potential employers or graduate programs for the students. The project leader, a doctor of nursing practice (DNP) student, and the clinical faculty served as facilitators for this project. The clinical faculty had to understand the scope of the project and be willing to participate.

The project leader also negotiated with the Director of Simulation. The Director of Simulation oversees the daily functioning of the laboratory, manages the laboratory schedule, and serves as gatekeeper for the laboratory. The project leader and the Director of Simulation worked together to set up and prepare the laboratory with the necessary supplies for the simulation to meet the learning objectives.

Group

The target group for this capstone project was beginning nursing students. The target students completed the first two semesters of general education courses and were enrolled in first semester nursing courses. The students began their first clinical rotation immediately after participation in the simulated experience. The project leader was one of the didactic professors for the target group and had access to the students throughout the semester. Because the simulation took place during the students' scheduled clinical day, the project leader did not anticipate any conflicts from the target group.

Tools/Measures

According to the Transitions Theory, consequences of a successful transition include decreased anxiety; increased confidence; mastery of skills; identify re-formation; and role mastery (Meleis et al., 2000). Therefore the tools which were used to evaluate the outcome of the capstone project included the 1) STAI; 2) NLN Student Satisfaction and Self-Confidence in Learning instrument; 3) a clinical skills checklist; and 4) reflective journaling. Each tool was used to measure a specific outcome of the participants' transition from classroom to initial clinical experience.

To evaluate anxiety regarding the clinical experience, quantitative data for the control group and treatment group was collected using the STAI. The STAI is a self-report tool, which measures the presence and severity of current symptoms of anxiety as well as the respondent's general tendency to be anxious (Spielberger, 1983). The STAI, developed by Charles D. Spielberger, was first published in 1970 and revised in 1983 (Spielberger, 1983). The STAI has been used in over 2,000 research studies and adapted in 30 different languages (Spielberger, 1983). The STAI contains two subscales, the State Anxiety (S-Anxiety) scale, and the Trait

Anxiety (T-Anxiety) scale. The S-Anxiety scale is designed to assess the respondent's level of anxiety induced by unavoidable real-life stressors. Participants may be directed to think about a specific upcoming event while completing the instrument (Spielberger, 1983). The T-Anxiety scale is used to measure a respondent's general tendency to be anxious (Spielberger, 1983). The STAI contains 40 items, 20 items per subscale (see Appendix B). Each item has a weighted score from one to four, with higher scores indicating greater anxiety (Spielberger, 1983). Once complete, the item scores are added to obtain total scores for each subscale. Reliability for the STAI was tested using Cronbach's alpha: S-Anxiety= 0.93; T-Anxiety= 0.90. A license to reproduce and administer the STAI was purchased from the publisher, Mind Garden.

To evaluate self-confidence following the simulated experience, quantitative data for the treatment group was collected using the NLN Student Satisfaction and Self-Confidence in Learning instrument. The NLN Student Satisfaction and Self-Confidence in Learning instrument was developed as part of the National League of Nursing (NLN)/Laerdal Project (NLN, 2013). The instrument consists of 13-items designed to measure students' satisfaction (five items) with the simulation activity and self-confidence in learning (eight items) (see Appendix C). The instrument uses a five-point scale. Reliability was tested using Cronbach's alpha: satisfaction= 0.94; self-confidence= 0.87 (NLN, 2013). Permission to use the NLN Student Satisfaction and Self-Confidence in Learning instrument was obtained from the NLN (see Appendix D).

The clinical skills checklist is a researcher-developed checklist designed to evaluate students' competency with basic clinical skills. The clinical skills checklist was developed using the Delphi method. Six clinical faculty, experienced in teaching clinical with beginning nursing students, completed a six-question survey (see Appendix E). Results from the initial survey were analyzed. The skills most frequently listed were used to create the second survey, which was

sent to the same six clinical faculty. The faculty were asked to rank each skill in order of importance (see Appendix F). Results from the ranking survey were used to develop the final checklist (see Appendix G). In addition to faculty input, the clinical skills checklist contains items based on the Quality and Safety Education for Nurses' (QSEN, 2014) knowledge, skills, and attitudes for undergraduate students.

In addition to quantitative measurements, participants in the treatment group completed reflective journaling at the end of the clinical rotation. The reflective journal questions were based on consequences of a successful transition (see Appendix H). The qualitative data was used to explore the students' perceptions of the transition experience.

In order to provide descriptive statistics for the control and treatment groups, demographic data was collected. The demographic tool collected data related to age, gender, and previous healthcare experience (see Appendix I).

Project Tasks

During the information phase, the project leader met with the Dean of the College of Health Professions; Chair of the Department of Nursing; Director of the BSN program; and Director of Simulation. The scope of the project was explained. Support from all above-mentioned personal was necessary for success of the project. Additionally, the project leader met with the clinical faculty responsible for teaching the beginning-nursing students. The clinical faculty were given detailed information and training related to the project, because they served as major facilitators of the project.

The project leader met with the Director of Simulation to design the simulation. Permission to the use STAI and the NLN Student Satisfaction and Self-Confidence in Learning tool were obtained. The fundamental skills competency checklist was designed based on the

Quality and Safety Education for Nurses (QSEN) competences and input from the clinical faculty, using the Delphi method. The project plan was submitted to the Institutional Review Board (IRB) for approval at Northern Kentucky University (NKU) and the University of Southern Indiana (USI). Once approval was obtained, the project leader advertised, secured and trained the SPs. Informed consent was obtained from students so their data could be used in the analysis.

The implementation phase of the project occurred during the students' first clinical day. Students in the treatment group participated in the simulated experience and debriefing. The student completed the remainder of their clinical day at their assigned facility obtaining an orientation and tour of the facility. Students completed the STAI before the simulation and again after the second week of clinical. Students completed the NLN Student Satisfaction and Self-Confidence in Learning tool immediately after the simulation. Clinical faculty completed a fundamental skills competency checklist during the fourth week of clinical. Students in the control group completed the STAI before the traditional clinical orientation and again after the second week of clinical. Clinical faculty completed a fundamental skills competency checklist during the fourth week of clinical. Students in the treatment group completed reflective journal responses at the end of the clinical rotation.

During the evaluation phase, the project leader hired a statistician to assist with data analysis and interpretation. Dissemination and publication of the project results are the final phase.

Resources and Supports

In order for this capstone project to be successful, the project leader needed support from administration within the College of Health Professions, the Department of Nursing and the

clinical faculty. The project leader explained the purpose of the project and the expected outcomes the project would achieve. Because the project directly affected the clinical faculty, an in depth discussion occurred so the clinical faculty understand the project and their role in the project's success.

In order to use SPs for this project, the project leader had to advertise and secure actors to play the role of the patients. The project leader anticipated the need for four to six actors. The actors were provided a written script and training prior to the actual simulation. The actors were volunteer undergraduate and graduate students. The graduate students used participation in the simulation as a way to fulfill required clinical hours. The project leader also needed funding for copying expenses. Copies of consent forms, demographic data sheets, and the measurement tools were necessary. The project leader secured a graduate research grant from USI to cover project-related expenses.

Risks and Threats

The risks and threats to this project included lack of support from the Dean of the College of Health Professions; Chair of the Department of Nursing; BSN Program Director; Director of Simulation; and the clinical faculty. The project leader communicated the capstone project to key supporters and full support was expressed. The target group, beginning nursing students, also needed to support the project. Although the target group participated in the simulation as part of their scheduled clinical day, lack of consent for data collection threatened the success of the project. Because the simulation utilized SPs, there was the risk the actors would not be present for the simulation or they may not follow the script which would have compromised the integrity of the simulation objectives.

The project needed to receive full IRB approval from NKU and USI. If full approval was not obtained the project leader would have made revisions to the project plan in order to obtain full approval. Because the project leader was also one of the didactic faculty members for the target group, it had to be made clear to the participants their decision to consent or refuse consent would not affect their course grade in any way. Also, participants needed to be aware they would not be evaluated on their performance during the simulation and their performance would not affect their course grade.

Marketing Plan

The setting for the capstone project is an institution of higher learning. The key stakeholders recognize the value of implementing projects to improve student-learning outcomes therefore the marketing plan for the capstone project was somewhat limited (see Appendix J). The project leader began by informing key stakeholders about the objectives and predicted outcomes for the project. The project leader discussed the idea for the capstone project with administration, which included the Dean of the College of Health Professions, the Chair of the Department of Nursing, and the BSN Program Director during the early planning phase of the project. This discussion took place in face-to-face meetings.

Because the capstone project requires use of the simulation laboratory, marketing the project to the Director of Simulation was necessary. The details of the project, including necessary supplies, laboratory time, and set up/take down were discussed in a face-to-face meeting.

Marketing the project to the clinical faculty was also necessary. The clinical faculty had an integral role in the project through participation in the simulated experience as well as evaluation of the students' clinical performance. The project leader sent a letter explaining the

project to the clinical faculty via email on January 27, 2014. In August 2014, during the annual clinical faculty orientation, the project leader conducted a face-to-face meeting to discuss the details of the project.

Because the simulated experience was designed to use SPs, it was necessary to advertise and hire individuals to fulfill the SP role. Advertising for SPs was done via an email sent to all undergraduate and graduate nursing students. Once the SPs were hired, the project leader provided written scripts and conducted face-to-face training sessions.

Although the project was a course requirement, marketing the project to student participants was necessary. Student participants needed to be aware the project would take place during their first clinical day and would not be used as an evaluation method.

Timeline

The goal was to submit the project proposal to IRB by June 2014 and begin implementation of the project in October 2014. See Appendix K for a detailed timeline.

1. Discuss the proposed capstone project with the Dean of the College of Health Professions; the Chair of the Department of Nursing; the BSN Program Director; the Director of Simulation and the clinical faculty, October 2013.
2. Obtain final approval for problem statement and project plan by December 10, 2013
3. Identify measurement tools for project by January 15, 2014
4. Develop survey for clinical faculty to complete by January 27, 2014
5. Email survey to clinical faculty by January 31, 2014
6. Compile results from clinical faculty survey, send back to clinical faculty to rank results by February 15, 2014

7. Meet with Burkhardt Consulting Center to review tools and discuss project on February 18, 2014
8. Compile results from clinical faculty ranking survey by March 1, 2014
9. Develop simulation, write scripts for standardized patients by May 31, 2014
10. Apply to IRB at NKU and USI by June 30, 2014
11. Advertise for actors to play the standardized patients by September 1, 2014
12. Consent control group by October 1, 2014
13. Administer STAI to control group one weeks before clinical begins, October 6, 2014
14. Provide students with traditional clinical orientation, third week in October 2014
15. Administer STAI to control group after second clinical day, November 3, 2014
16. Clinical faculty complete fundamental skills check list 4 weeks after initial clinical day November 11, 2014
17. Meet with actors to discuss project and review script by February 1, 2015
18. Consent intervention (simulation) group March 2, 2015
19. Administer STAI one week before clinical begins, March 2, 2015
20. Implement simulation, March 17 & 19, 2015
21. Administer Student Satisfaction and Self-Confidence in Learning tool to simulation group immediately after the simulation March 17 & 19, 2015
22. Administer STAI to treatment group after the second clinical day, March 30, 2015
23. Clinical faculty complete fundamental skills check list 4 weeks after initial clinical day, April 7 & 9, 2015
24. Submit data to Burkhardt Consulting Center, May 2015
25. Data analysis, May-August 2015

26. Poster presentation at USI, April 15, 2015
27. Podium presentation USI, April 13, 2016
28. Submit manuscript to *Clinical Simulation in Nursing*, April 2016

Financial Plan

The estimated cost for the capstone project was \$5,175.39. The actual cost was \$4,629.39, which included personnel, copies, equipment, food, use of the simulation laboratory, evaluation of data, dissemination of results, as well as “in-kind costs” (see Appendix L for the budget). Because the SPs were student volunteers, expenses for payment of hourly wages were eliminated.

The project leader was able to obtain a graduate student project grant to cover some of the expenses. The project grant covered costs incurred to provide incentives for the SPs and student participants during the simulation and hourly fees for the statistician. Because the project leader plans to present the results of the capstone project at a nursing conference, the Department of Nursing may support the dissemination costs as part of faculty development.

The “in-kind costs” were provided by the Department of Nursing and included salary and benefits for the Director of Simulation, project leader, and clinical faculty. In addition, the Department of Nursing provided necessary equipment to implement the simulation as well as use of the simulation laboratory.

Evaluation Plan

The evaluation plan for the capstone project was based on the long-term and short-term objectives (see Appendix M). The first long-term objective was to utilize a simulated learning experience to facilitate a successful transition, for beginning nursing students, from the classroom to the initial clinical experience. In order to evaluate if beginning-nursing students

experienced a successful transition, consequences of a successful transition were measured.

Quantitative data was measured using the STAI, the NLN Student Satisfaction and Self-Confidence in Learning tool, and a clinical skills checklist. Qualitative data was collected from reflective journal responses.

The second long-term objective was to evaluate the effectiveness of the simulated learning experience. In order to evaluate the effectiveness of the simulated learning experience, statistical analysis of the quantitative data was performed. Students in the control group completed the STAI one week before the initial clinical experience and again after completion of the second clinical day. Students in the treatment group completed the STAI one week before the simulated learning experience (treatment) and again after completion of the second clinical day. Statistical analysis was performed in order to compare the pre/post test scores from the control and treatment group to determine statistical differences in levels of anxiety. Students in the treatment group completed the NLN Student Satisfaction and Self-Confidence in Learning tool immediately following the simulated learning experience. Descriptive statistics were obtained to determine students' level of satisfaction with the simulation and perceived self-confidence in learning the concepts covered in the simulation. The clinical faculty completed the clinical skills checklist for students in both the control and treatment group during the fourth week of clinical. Results from the clinical skills checklist were statistically analyzed to determine differences in clinical skill competency between the control and treatment groups. Students in the treatment group completed reflective journal responses at the completion of the clinical rotation. Journal responses were explored for students' perception of their transition experience.

Three short-term objectives were utilized in order to meet the capstone project's two long-term objectives. Evaluation of the short-term objectives was based on set timeframes. Successful completion of the short-term objectives was necessary to successfully complete the capstone project.

The first short-term objective was to develop a simulated learning experience, which mimicked a typical clinical day. The simulation was designed using the NLN/Jeffries simulation framework (Jeffries, 2012). Development of the student learning outcomes for the simulated experience, written scripts for the standardized patients, and a written guide for the post-simulation debriefing was completed by May 2014.

The second short-term objective was to implement the simulated experience as part of the participants' initial clinical orientation. Each clinical group and clinical instructor participated in the simulated experience and post-simulation debriefing. Participation in the simulated experience took place in March 2015.

The third short-term objective was to evaluate the effectiveness of the simulated experience. The effectiveness of the simulation was measured using the STAI, the NLN Student Satisfaction and Self-Confidence in Learning tool, a clinical skills checklist, and exploration of students' reflective journal responses. The quantitative and qualitative data was analyzed in June 2015.

Human Subjects Protection

The Institutional Review Boards (IRBs) from USI and NKU granted approval for the capstone project to be conducted over two consecutive semesters (see Appendix N and Appendix O). Because the project leader was the didactic faculty for prospective participants, informed consent was obtained from a consenting faculty member not associated with the course. The

project leader provided the consenting faculty with a script that was used to inform prospective participants about the purpose of the research project, the nature of their participation, and potential benefits and risks to participation. Because the research activities were part of the participants' normal educational activities, participants were only consenting to allow the project leader to use their data for the study. Participants were informed their consent was voluntary and they may withdrawal at any time without penalty.

In order to maintain confidentiality, participants were assigned a code number that was used to identify data. Once data were coded, identifying information was removed. Only the project leader and the consenting faculty member had access to the data. Because the project leader was the didactic faculty for the participants, data was not analyzed until after course grades had been submitted to the registrar.

Results

Research Questions

The purpose of the capstone project was to determine the effectiveness of using simulation as a strategy to facilitate a successful transition for beginning nursing students from the classroom to the initial clinical experience. Based on the Transition Theory by Meleis et al. (2000), decreased anxiety, increased self-confidence, skill acquisition, and development of a new "sense of self" are indicators of a successful transition. Therefore, the quantitative research questions included: 1) Is there a difference in perceived anxiety levels between beginning nursing students who participated in the simulated experience and beginning nursing students who did not participate in the simulated experience? (2) How will beginning nursing students who participated in the simulated experience rate their self-confidence with the content taught during the simulation? (3) Is there a difference in ability to perform fundamental nursing skills between beginning nursing students who participated in the simulated experience and beginning-

nursing students who did not participate in the simulated experience? The qualitative data used reflective journal responses to explain and explore quantitative data and to identify participants' formation of a new "sense of self".

Design

The capstone project utilized a mixed-method quantitative dominant with concurrent qualitative supplemental design (Morse & Niehaus, 2009). Quantitative data was collected using the STAI, NLN Student Satisfaction and Self-Confidence in Learning tool, and a clinical skills checklist. The qualitative phase included open-ended reflection questions that allowed for an exploration of participants' perceptions of the benefits of the simulation experience and the identification of a new "sense of self"

Sample

Convenience sampling was used to recruit first-semester baccalaureate students over a two-semester time frame (n= 116). A total of 112 students consented to their data being used as part of the study. To limit contamination between groups, students in the fall semester were assigned to the control group and students in the spring semester were assigned to the treatment group. Data were not used from participants who participated in the pilot simulation during fall semester (n=6); were repeating the clinical course (n=3); or had incomplete data (n= 2). Usable data was obtained from 101 of 112 students.

Data Analysis

Quantitative data were analyzed using Minitab version 17. Descriptive statistics were used to summarize the demographic data and the NLN Student Satisfaction and Self-Confidence in Learning tool. Repeated measures two-way analysis of variance (ANOVA) was conducted to explore the impact of the simulation on participants' anxiety level and clinical skill performance.

Qualitative data were obtained using reflective journaling. Journals were examined for themes related to participants' perceptions of the impact participation in the simulation had on anxiety levels, self-confidence, clinical skill development, and formation of a new "sense of self". The project leader analyzed the qualitative data using the following method (1) data were read purposively with research questions in mind, (2) data were then examined line by line, (3) significant portions were highlighted and categories created, and (4) data were sorted and classified to identify common themes.

Demographic data. Participants completed a demographic survey during the consenting period that included age, gender, and work experience (see Appendix I). Descriptive statistics were used to summarize the demographic data (see Table 1). Participant ages ranged from 18-41 with the majority (86.1%) in the 18-23 year-old age group. The majority of the sample was female (87.1%) and the majority (72.3%) did not have any healthcare related work experience.

Table 1

Demographic Data (n=101)

Variable	N	%
Age (y)		
18-23	87	86.1
24-29	9	8.9
30-35	2	1.9
36-41	3	2.9
Gender		
Female	88	87.1
Male	13	12.9
Healthcare-Based Work Experience		
Yes	28	27.7
No	73	72.3

State trait anxiety inventory. The STAI was used to measure participants' self-rated anxiety levels pre and post simulation (see Appendix B). Repeated measures two-way ANOVA was used to compare mean anxiety levels between the control and treatment groups. Although the mean post-anxiety scores for the treatment group were lower than the Y1 (see Table 2), at the .05 level of significance, the difference between the control and treatment groups was not significant [$F(1, 95) = 0.96; p = 0.330$]. It should be noted participants' clinical instructor was not a significant variable with regard to perceived anxiety levels ($p\text{-value} = 0.57$).

Scores on the STAI can range from 20-80, with lower scores indicating lower levels of anxiety. Prior to data analysis, a decrease of 15 points from pre to post STAI was determined by the project leader as a reasonable measure of "success" (less anxiety regarding the clinical

experience). When comparing the control and treatment groups for the proportion of participants' anxiety levels that decreased by at least 15 points, the difference was closer to significant (p -value= 0.079). Additionally, when looking at a 95% confidence interval (-0.327, 0.017), the treatment group may be up to 33% more successful (less anxiety regarding the clinical experience). However a larger sample size is needed to confirm findings.

Table 2

STAI Descriptive Statistics

Variable	Group	N	Mean	SD	Minimum Score	Maximum Score
STAI Pre Y1	Control	43*	47.72	11.09	23	70
	Treatment	57	49.37	11.78	22	64
STAI Post Y1	Control	42*	39.90	10.88	22	77
	Treatment	55*	38.53	9.25	20	55
STAI Pre Y2	Control	43*	40.81	9.78	22	64
	Treatment	57	41.39	9.78	22	63
STAI Post Y2	Control	42*	39.76	10.99	23	74
	Treatment	55*	37.91	9.53	22	64

Although quantitative measures indicated statistically significant differences in anxiety levels between the control and treatment groups did not exist, key words and phrases from

students' reflective journals indicated the contrary. Major themes related to anxiety from the reflective journal responses included (1) more prepared for the actual experience, (2) less anxious/more calm, and (3) simulation was helpful. Comments such as "I really enjoyed having the chance to go to the lab before our first clinical. It helped me loosen up a little bit before going to clinical", "the simulation we did was a big help and made me more comfortable with entering a patients room", and "this helped me to prepare for the real thing, and lessen the anxiety about it" were threaded throughout the participants' journals.

Self-confidence in learning. The NLN Student Satisfaction and Self- Confidence in Learning tool was administered to determine how beginning nursing students who participated in the simulation experience rated their self-confidence with the content taught during the simulation (see Appendix C). Results from the 13-item tool are summarized in Table 3. Of particular interest is item number eight, which states, "I am confident that I am developing the skills and obtaining the required knowledge from this simulation to perform necessary tasks in a clinical setting". The majority of participants (98.2%) either "agreed" or "strongly agreed" with this statement.

Participant comments from the reflective journal responses supported the quantitative findings. Analysis of the reflective journals identified the theme "increased my confidence and comfort level". Participant comments that supported this theme included "This [the simulation] prepared me by making me more comfortable and confident. I was much more relaxed when I was in the hospital because of that experience" and "it [the simulation] gave me confidence to approach a real person, taught me how to communicate with the patient, and taught me what to sort of expect".

Table 3

NLN Student Satisfaction and Self-Confidence in Learning Survey (n=57)

Question Number	Rating N (%)				Percentage who rated (4 or 5)
	No one responded "1"				
	2	3	4	5	
Q1	0	1 (1.8)	10 (17.5)	46 (80.7)	98.24
Q2	1 (1.8)	4 (7.0)	14 (24.6)	38 (66.7)	91.23
Q3	0	1 (1.8)	18 (31.6)	38 (66.7)	98.25
Q4	0	1 (1.8)	14 (24.6)	42 (73.7)	98.24
Q5	1 (1.8)	1 (1.8)	15 (26.3)	40 (70.2)	96.50
Q6	2 (3.5)	8 (14.0)	36 (63.2)	11 (19.3)	82.46
Q7	1 (1.8)	8 (14.0)	21 (36.8)	27 (47.4)	84.21
Q8	0	1 (1.8)	31 (54.4)	25 (43.9)	98.25
Q9* (missing data)	1 (1.8)	0	14 (25.0)	41 (73.2)	98.21
Q10	0	3 (5.3)	14 (24.6)	40 (70.2)	94.74
Q11	0	1 (1.8)	13 (22.8)	43 (75.4)	98.25
Q12	0	4 (7.0)	17 (29.8)	36 (63.2)	92.98
Q13	5 (8.8)	19 (33.3)	17 (29.8)	16 (28.1)	57.89

Clinical skill performance. The clinical skills checklist was administered to assess participants' basic clinical skill performance four weeks after the simulation experience (see Appendix G). Descriptive statistics are presented in Table 4. An ANOVA was used to compare overall scores for the treatment group and control groups' clinical skill performance. At the .05

level of significance, there was no difference between groups [$F(1, 90) = .003; p = 0.0855$]. Additionally, at the .05 level of significance there was no evidence of difference between groups for the proportion of participants rated as “always” or “almost always” on each item (see Table 5). However, at the .05 level of significance, there was a difference in responses based on the participants’ clinical faculty ($p\text{-value} = < 0.001$). A Tukey Pairwise Comparison was completed to identify which faculty rated students highest and lowest. One clinical faculty consistently rated her students highest on all categories and one faculty consistently rated her students lowest on all categories on the clinical skills checklist.

Table 4

Clinical Checklist Descriptive Statistics

Variable	Group	N	Mean	SD	Median	Minimum	Maximum
Total score	Control	44	47.86	9.80	48	28	60
	Treatment	57	46.89	11.19	50	25	60

Table 5

Comparison of Participants rated as “always” or “almost always” for each item

Question	P-Value
Psychomotor Skills – Q1	0.649
Psychomotor Skills – Q2	0.642
Psychomotor Skills – Q3	0.089
Cognitive Skills – Q1	0.961
Cognitive Skills – Q2	0.382
Cognitive Skills – Q3	0.333
Behavior – Q1	0.437
Behavior – Q2	0.980
Behavior – Q3	0.588
Patient Safety – Q1	0.676
Patient Safety – Q2	0.114
Patient Safety – Q3	0.728

Although quantitative data did not support a significant improvement in clinical skills between the control and treatment groups based on clinical faculty assessment, the participants felt the simulation assisted with development of communication skills. Analysis of participants’ reflective journals identified the theme of “improved communication skills”. Comments such as “ I learned how to talk to a patient, and it really showed me that patients are not just a sick person. They are a human being, usually with a family and they deserve to be talked to and treated as a normal healthy human being”, “The simulation taught me how to be a better

communicator overall”, and “I think it [the simulation] prepared me with patient communication, because that was the one thing I was the most worried about” were threaded throughout the qualitative data responses.

Identity reformation. Qualitative data was collected to determine if participants were beginning to develop a new “sense of self”. Participants were asked, “How have you changed personally since beginning nursing school?” After analysis of the data five common themes emerged including (1) I am more compassionate, (2) I am more sensitive to others feelings, (3) I am more dedicated to my schoolwork, (4) I am working harder in my classes, and (5) I am confident that nursing is the right profession for me. Comments such as “I have always been dedicated to my school but being in nursing school has really pushed me and motivated me to be dedicated to my work and my grades”, “I've grown more confident and definitely more disciplined”, and “I have become more sensitive and a more caring person than I already was. Seeing real people in real situations at the hospital make you have feelings and make you really care for them” were written throughout participants’ journal entries.

Discussion

The long-term objectives for the capstone project were to utilize and evaluate a simulated learning experience to facilitate a successful transition for beginning students from the classroom to the initial clinical experience. In order to determine a successful outcome, consequences of a successful transition based on the Transitions Theory (Meleis et al. 2000) were utilized.

One of the consequences of a successful transition is decreased anxiety. Therefore, the first research question was to determine if participation in the simulated experience decreased participants’ anxiety regarding the initial clinical experience. Although the quantitative data did not show a significant difference in anxiety levels between the control and treatment groups,

themes identified from the qualitative data indicated a positive effect for participants. Comments from participants indicated participation in the simulation helped them feel more prepared for clinical and lessened their anxiety. These findings are consistent with the Transitions Theory, which states people transition better when they have preparation, knowledge, and are actively engaged in the process (Meleis et al., 2000).

The second consequence of a successful transition is increased confidence. The results of the quantitative data showed that 98.75% of the participants “agreed” or “strongly agreed” they were confident they were developing skills and obtaining the required knowledge from the simulation to perform necessary tasks in a clinical setting. The qualitative findings echoed these results. These findings are consistent with other studies that identified simulation as a method to improve students’ confidence (Bambini et al., 2009; Dearmon et al., 2013; Hope et al., 2011).

The third consequence of a successful transition is the ability to competently perform clinical skills. Again, the data quantitative analysis did not show a significant difference between the control and treatment groups. However, the participants stated working with the SPs during the simulation helped develop communication skills. Because the simulation utilized SPs and not manikins, participants were able to communicate in a more realistic way. One participant commented, “I learned how to talk to patients. Most patients want to know what you're doing to them and what exactly it all means. They like when you interact with them and get them involved”. These findings are consistent with other studies which also found the use of SP-based simulation improves students’ communication skills (Becker et al., 2006; Doolen, Giddings, Johnson, de Nathan, & Badia, 2014; Webster, 2014).

Clinical faculty completed the clinical skills checklist on the participants in their clinical group each semester. Data analysis identified significant differences based on the participants’

clinical faculty. The clinical faculty who consistently rated her students highest in all categories is adjunct faculty. The clinical faculty who consistently rated her students lowest in all categories is full-time faculty who also teaches in the clinical skills laboratory. Both instructors are masters prepared. While these results are based on a small sample of faculty (n=10), the findings suggest faculty who are familiar with the way clinical skills are taught and evaluated in the laboratory, may have higher expectations of students in the clinical setting as reflected in consistently lower scores.

An additional indication of a successful transition is formation of a new sense of self. Measurement of this outcome was qualitative in nature. Participants were asked to discuss how they had changed as a person since the beginning of their nursing education. The findings were consistent with the Transitions Theory, which states people experience critical points in a transition where they become aware that a change is taking place (Meleis, 2000). Many participants stated they had become more compassionate and sensitive towards others and they were becoming more dedicated to their course work. Transitions are complex and take place over a period of time (Meleis, 2000). The reflective journal responses indicated many students have started the process. It is expected the beginning students will continue to transition to the role of student nurse with time and experience.

Recommendations

As the DNP project moves forward, three major recommendations are suggested. First, although the DNP capstone project was designed for use with beginning nursing students, it is recommended to implement transition-focused simulations in all clinical courses. This would allow students at all levels of the nursing program to have a simulation experience prior to every

clinical course. The desired outcome would be increased preparation and decreased anxiety for students entering the clinical environment each semester.

Second, transition-focused simulations should include students from other health professions. All students in health care programs are expected to participate in experiential learning activities. Therefore, participating in transition-focused simulations would benefit all students, not just nursing. Participation in transition-focused simulations would also provide students from various health care programs the opportunity to collaborate with each other as well as develop teamwork and interdisciplinary communication skills. This recommendation supports the QSEN (2014) competency of “Teamwork and Collaboration” which strengthens the overall project.

Third, students from the university theater department should be recruited as SPs for the transition-focused simulations. The use of theater students would again allow for an interdisciplinary component to the project as well as provide theater students with an opportunity to practice improvisation and other acting skills. Additionally, utilization of theater students would provide a readily available pool of students, which would decrease time and effort needed for recruitment of SPs.

Lessons Learned

The capstone project relied heavily on adjunct clinical faculty. Because adjunct clinical faculty come to campus once during the academic year, the majority of information regarding the capstone project (such as the simulation schedule) was disseminated via electronic mail. Also, in order to collect the completed clinical skills checklist the project leader had to personally visit each clinical site, which proved to be time consuming for the project leader. As

the project moves forward and incorporates additional clinical groups, different methods of disseminating information and collecting data must be explored.

The project leader must also ensure all clinical faculty use the same criteria when assessing students' clinical performance. Data analysis identified significant differences in participants' scores on the clinical skills checklist based on individual faculty scoring of the tool. This would suggest more training is needed with regard to utilizing the clinical skills checklist.

Maintaining and Sustaining Change

According to the AACN Essentials of Baccalaureate Education for Professional Nursing Practice (2008), clinical experiences should prepare students to proficiently perform psychomotor skills, utilize professional communication skills, and develop a professional identity. However, students report stress and anxiety regarding lack of preparation for the initial clinical experience and fear of the unknown (Reeve et al., 2013). Assisting beginning nursing students with the transition from classroom to initial clinical experience is essential for students' continued success in nursing. Therefore continuation of the capstone project is necessary. Preparing students for the initial clinical experience is the responsibility of nurse educators who teach beginning nursing students.

Lewin's Change Management Theory provided the theoretical framework for maintaining and sustaining change created by the capstone project. Lewin's change theory, as described by Kaminski (2011), is a widely used change theory that is deemed useful for both personal and organizational change. Within the change theory, three distinct stages are described: unfreezing, change, and refreezing.

The first stage of Lewin's change theory is unfreezing of the status quo which will make it possible for people to let go of current practices (Kaminski, 2011). Prior to development and implementation of the capstone project, no formal clinical orientation existed. According to the BSN clinical coordinator, many students expressed high levels of stress and anxiety prior to the initial clinical experience and clinical faculty reported deficits in students' ability to perform basic clinical skills (J. Churchill, personal communication, September 23, 2013). The clinical faculty expressed support for the capstone project because they recognized the difficulties students have with the transition from classroom to initial clinical experience.

The second stage of Lewin's Change Theory involves the process of change (Kaminski, 2011). During the change stage, stakeholders will see value in the project and realize the new way is better than the old way. To maintain the capstone project, clinical faculty will need to support the project and recognize value in the student experience. Faculty recognition of students' decreased anxiety, increased self-confidence, and improvement in clinical performance will provide support for the project's continuation.

It will be necessary for the Dean of the College of Health Professions, the Chair of the Department of Nursing, the BSN Program Director, and the Director of Simulation to see value in maintaining project in order to receive financial support. Financial support for continuation of the project will consist of in-kind donations, including use of the simulation laboratory, supplies, and faculty salaries. In addition, financial support must include payment for the standardized patients (SPs). An alternative to paying an hourly rate for SP's would be to negotiate with the Department of Advanced Nursing studies to utilize graduate nursing students as SPs or to collaborate with the theater department to utilize theater students as SPs.

The third stage of Lewin's change theory is refreezing which will result in the change becoming the new status quo (Kaminski, 2011). To achieve this stage of the change process, a faculty member will need to assume the role of project leader. The project leader should be a full-time faculty member who is familiar with the first semester curriculum. The BSN clinical coordinator or a didactic faculty member who teaches beginning nursing students could assume this role. The project leader should have a good working relationship with the clinical faculty and be familiar with the clinical schedule. Because the project involves working with multiple clinical groups, the project leader and the Director of Simulation will need to work with the clinical faculty to schedule the simulations. The project leader will need to educate new clinical faculty regarding the project's objectives and intended outcomes. Because scripts for the SPs, simulation objectives, and guidelines for post-simulation debriefing are already developed, the project leader will only need to train new SPs. The project leader will also need to explain the simulation objectives and expectations to the participating students. Although data collection for the projects' outcomes is not necessary each semester, data will help support continuation of the project. The project leader should consider methods for continued data collection especially if the Department of Nursing absorbs the cost for continued implementation. Retention of a project leader increases the chance the change will become part of the clinical curriculum and an expectation of the faculty and students.

As with any change there will be perceived barriers, which can inhibit change. One barrier to maintaining and sustaining the project includes lack of support from stakeholders, including clinical faculty. This barrier can be eliminated by providing stakeholders with data, which demonstrates the benefits of the project for beginning nursing students. Because faculty workload is already high, another barrier will be maintaining a project leader. Once data is

presented to support continuation of the project, the chair of the Department of Nursing can provide reassigned time to the project leader. This would allow the project leader to incorporate organization and implementation of the project into their workload. Once stakeholders recognize the project facilitates a successful transition for beginning nursing students, the benefits will outweigh any perceived barriers.

Dissemination of Project and Outcomes

In order to advance the science of simulation and increase the body of nursing knowledge, a plan for dissemination of various phases of the capstone project was developed. The concept analysis, which was completed to provide an in depth understanding of the conceptual underpinnings of the capstone project, was submitted and accepted for publication in the peer-reviewed journal, *Nursing Forum*. The project leader plans to submit a manuscript describing the project's theoretical integration to the *Journal of Theory Construction and Testing*. The completed capstone project results will be submitted in manuscript form to the peer-reviewed journal, *Clinical Simulation in Nursing*.

Dissemination plans also include presentations. The capstone project proposal was presented at the University of Southern Indiana's "19th Annual Research, Evidence-based Practice, and Performance Improvement Conference" in Evansville, Indiana on April 15, 2015. The project proposal was also presented at the "Northern Kentucky Nursing Research Collaborative (NKNRC) Research Day" on April 27, 2015. The project leader will conduct a podium presentation of the completed project at the University of Southern Indiana's "20th Annual Research, Evidence-based Practice, and Performance Improvement Conference" in Evansville, Indiana on April 13, 2016. The project leader also plans to apply to present the

completed project findings at the International Nursing Association for Clinical Simulation and Learning (INACSL) conference in June 2016.

Conclusion

The literature clearly identifies the initial clinical experience as a significant aspect of students' nursing education. According to Andrew (2013), the quality of the initial clinical experience can be the reason a student thrives or fails to thrive in nursing. Students who have a negative initial clinical experience may choose to leave nursing education (Andrew, 2013; Andrew et al., 2009; Crombie et al., 2013). However, there is a gap in the literature regarding best practices for assisting students with the transition from classroom to initial clinical experiences. As leaders in academia, nurse educators must be the impetus for change (Schriener et al., 2010) and teaching strategies must be based in evidence (Billings & Halstead, 2012).

Overall, the long-term objective for the capstone project was met. Participation in the simulation helped participants feel more prepared for the initial clinical experience, which in turn decreased some initial anxiety and increased participants' confidence with the initial clinical experience. Additionally, the capstone project will benefit students after completion of nursing school. When students graduate and begin their career as registered nurses, they will experience other situational transitions. The skills the students learned during the initial transition experience will continue into their professional life. Because transitions are universal concepts, students will also be able to assist patients as they deal with many of life's transition experiences. The ultimate outcome of maintaining and sustaining the capstone project will be graduating students who are confident, competence nurses who are equipped to deal with their own transitions as well as assist patients with their transition experiences.

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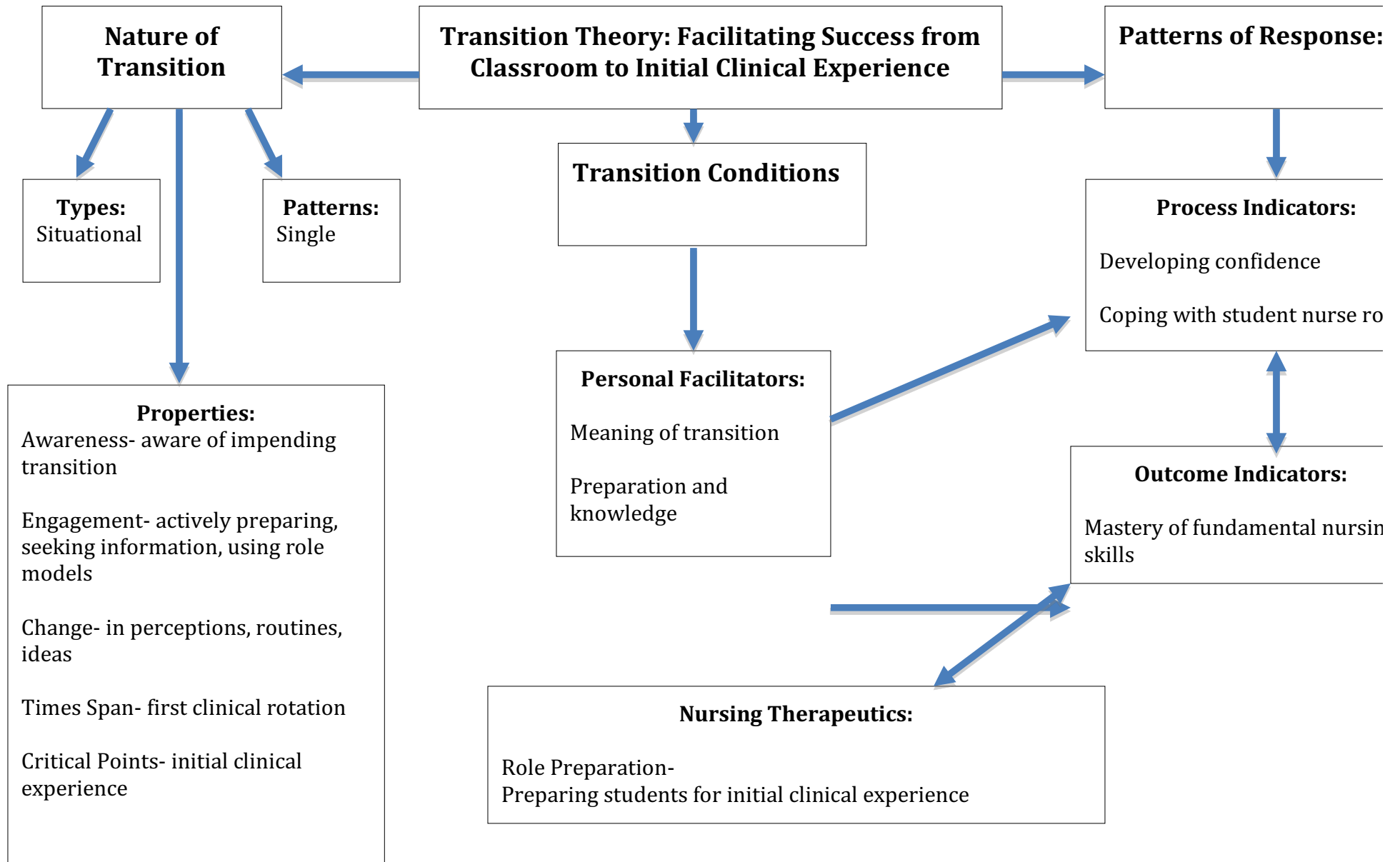
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Appendix A

Beginning Nursing Students' Transition Experience Integrated with the Transition Theory



Appendix B

State-Trait Anxiety Inventory

SELF-EVALUATION QUESTIONNAIRE STAI Form Y-1

Please provide the following information:

Name _____ Date _____ S _____

Age _____ Gender (Circle) **M** **F** T _____

DIRECTIONS:

A number of statements which people have used to describe themselves are given below. Read each statement and then circle the appropriate number to the right of the statement to indicate how you feel *right now*, that is, *at this moment*. There are no right or wrong answers. Do not spend too much time on any one statement but give the answer which seems to describe your present feelings best.

VERY MUCH SO
 MODERATELY SO
 SOMEWHAT
 NOT AT ALL

- | | | | | |
|--|---|---|---|---|
| 1. I feel calm..... | 1 | 2 | 3 | 4 |
| 2. I feel secure | 1 | 2 | 3 | 4 |
| 3. I am tense | 1 | 2 | 3 | 4 |
| 4. I feel strained | 1 | 2 | 3 | 4 |
| 5. I feel at ease | 1 | 2 | 3 | 4 |
| 6. I feel upset | 1 | 2 | 3 | 4 |
| 7. I am presently worrying over possible misfortunes | 1 | 2 | 3 | 4 |
| 8. I feel satisfied | 1 | 2 | 3 | 4 |
| 9. I feel frightened | 1 | 2 | 3 | 4 |
| 10. I feel comfortable | 1 | 2 | 3 | 4 |
| 11. I feel self-confident..... | 1 | 2 | 3 | 4 |
| 12. I feel nervous | 1 | 2 | 3 | 4 |
| 13. I am jittery | 1 | 2 | 3 | 4 |
| 14. I feel indecisive..... | 1 | 2 | 3 | 4 |
| 15. I am relaxed | 1 | 2 | 3 | 4 |
| 16. I feel content | 1 | 2 | 3 | 4 |
| 17. I am worried | 1 | 2 | 3 | 4 |
| 18. I feel confused..... | 1 | 2 | 3 | 4 |
| 19. I feel steady..... | 1 | 2 | 3 | 4 |
| 20. I feel pleasant..... | 1 | 2 | 3 | 4 |

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 Published by Mind Garden, Inc., 1690 Woodside Rd, Suite 202, Redwood City, CA 94061

STAI-P-AD Test Form Y
www.mindgarden.com

SELF-EVALUATION QUESTIONNAIRE

STAI Form Y-2

Name _____ Date _____

DIRECTIONS

A number of statements which people have used to describe themselves are given below. Read each statement and then circle the appropriate number to the right of the statement to indicate how you *generally* feel. There are no right or wrong answers. Do not spend too much time on any one statement but give the answer which seems to describe how you generally feel.

ALMOST NEVER
SOMETIMES
OFTEN
ALMOST ALWAYS

- 21. I feel pleasant..... 1 2 3 4
- 22. I feel nervous and restless 1 2 3 4
- 23. I feel satisfied with myself..... 1 2 3 4
- 24. I wish I could be as happy as others seem to be 1 2 3 4
- 25. I feel like a failure 1 2 3 4
- 26. I feel rested 1 2 3 4
- 27. I am "calm, cool, and collected" 1 2 3 4
- 28. I feel that difficulties are piling up so that I cannot overcome them..... 1 2 3 4
- 29. I worry too much over something that really doesn't matter..... 1 2 3 4
- 30. I am happy 1 2 3 4
- 31. I have disturbing thoughts 1 2 3 4
- 32. I lack self-confidence..... 1 2 3 4
- 33. I feel secure 1 2 3 4
- 34. I make decisions easily 1 2 3 4
- 35. I feel inadequate..... 1 2 3 4
- 36. I am content 1 2 3 4
- 37. Some unimportant thought runs through my mind and bothers me 1 2 3 4
- 38. I take disappointments so keenly that I can't put them out of my mind..... 1 2 3 4
- 39. I am a steady person..... 1 2 3 4
- 40. I get in a state of tension or turmoil as I think over my recent concerns and interests 1 2 3 4

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Appendix C

Student Satisfaction and Self-Confidence in Learning Instrument

Student Satisfaction and Self-Confidence in Learning

Instructions: This questionnaire is a series of statements about your personal attitudes about the instruction you receive during your simulation activity. Each item represents a statement about your attitude toward your satisfaction with learning and self-confidence in obtaining the instruction you need. There are no right or wrong answers. You will probably agree with some of the statements and disagree with others. Please indicate your own personal feelings about each statement below by marking the numbers that best describe your attitude or beliefs. Please be truthful and describe your attitude as it really is, not what you would like for it to be. This is anonymous with the results being compiled as a group, not individually.

Mark:

1 = STRONGLY DISAGREE with the statement

2 = DISAGREE with the statement

3 = UNDECIDED - you neither agree or disagree with the statement 4 = AGREE with the statement

5 = STRONGLY AGREE with the statement

Satisfaction with Current Learning	SDD		UNA	SA
1. The teaching methods used in this simulation were helpful and effective.	1	2	3	4 5
2. The simulation provided me with a variety of learning materials and activities to promote my learning the medical surgical curriculum.	1	2	3	4 5
3. I enjoyed how my instructor taught the simulation.	1	2	3	4 5
4. The teaching materials used in this simulation were motivating and helped me to learn.	1	2	3	4 5
5. The way my instructor(s) taught the simulation was suitable to the way I learn.	1	2	3	4 5
Self-confidence in Learning	SDD		UNA	SA
6. I am confident that I am mastering the content of the simulation activity that my instructors presented to me.	1	2	3	4 5
7. I am confident that this simulation covered critical content necessary for the mastery of medical surgical curriculum.	1	2	3	4 5
8. I am confident that I am developing the skills and obtaining the required knowledge from this simulation to perform necessary tasks in a clinical setting	1	2	3	4 5
9. My instructors used helpful resources to teach the simulation.	1	2	3	4 5
10. It is my responsibility as the student to learn what I need to know from this simulation activity.	1	2	3	4 5
11. I know how to get help when I do not understand the concepts covered in the simulation.	1	2	3	4 5
12. I know how to use simulation activities to learn critical aspects of these skills.	1	2	3	4 5
13. It is the instructor's responsibility to tell me what I need to learn of the simulation activity content during class time..	1	2	3	4 5

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Revised December 22, 2004

Appendix D

Permission to Use the Student Satisfaction and Self-Confidence in Learning Instrument

RE: Instrument request form 2/5/14, 3:11 PM

RE: Instrument request form
 Lindsey Fry [lfry@nlm.org] on behalf of NLN Research [nlm-research@NLN.ORG]
Sent: Wednesday, February 05, 2014 1:42 AM
To: Julie Hart
Attachments: Instrument 3_Simulation De~1.pdf (21 KB) ; Instrument 1_Educational P~1.pdf (20 KB) ; Instrument 2_Satisfaction ~1.pdf (30 KB)

It is my pleasure to grant you permission to use the "Educational Practices Questionnaire," "Simulation Design Scale" and "Student Satisfaction and Self-Confidence in Learning" NLN/Laerdal Research Tools. In granting permission to use the instruments, it is understood that the following caveats will be respected:

1. It is the sole responsibility of (you) the researcher to determine whether the NLN questionnaire is appropriate to her or his particular study.
2. Modifications to a survey may affect the reliability and/or validity of results. Any modifications made to a survey are the sole responsibility of the researcher.
3. When published or printed, any research findings produced using an NLN survey must be properly cited as specified in the Instrument Request Form. If the content of the NLN survey was modified in any way, this must also be clearly indicated in the text, footnotes and endnotes of all materials where findings are published or printed.

I am pleased that material developed by the National League for Nursing is seen as valuable as you evaluate ways to enhance learning, and I am pleased that we are able to grant permission for use of the "Educational Practices Questionnaire," "Simulation Design Scale" and "Student Satisfaction and Self-Confidence in Learning" instruments.

From: Julie Hart [mailto:hartj5@nku.edu]
Sent: Saturday, February 01, 2014 11:02 AM
To: NLN Research
Subject: Instrument request form

Dear NLN Research Department,

Attached please find my instrument request form. I would like to use the Student Satisfaction and Self-Confidence in Learning instrument for my DNP capstone project. My project is titled, *The Use of Simulation to Facilitate a Successful Transition from Classroom to Initial Clinical Experience*.

Please feel free to contact me with any questions.

Sincerely,

Julie Hart, MSN, RN, CNE
 DNP student, University of Southern Indiana
 Assistant Professor
 Northern Kentucky University

https://email.nku.edu/owa/?ae=Item&t=IPM.Note&id=RgAAAAAZacAaZ...11Wk2bKz1mjAADKfzymAAJ&a=Print&pspid=_1391630994480_290204415 Page 1 of 2

Appendix E

Clinical Skills Checklist Faculty Survey

Fundamental Skills Checklist Faculty Input Sheet

Dear Clinical Faculty,

Thank you for assisting me with the development of a fundamental skills checklist. This checklist will be used by clinical faculty as one of the measurement tools to determine the effectiveness of the simulated experience, which is designed to facilitate a successful transition from classroom to initial clinical experience.

Please answer the following questions.

1. Please identify at least 5 psychomotor skills you would like to see your students perform with basic competency by week 4 of the clinical rotation. (ie: student can accurately take vital signs).
2. Please identify at least 5 cognitive skills you would like to see your students perform with basic competency by week 4 of the clinical rotation. (ie: student can identify normal v. abnormal vital signs)
3. Please identify at least 5 behaviors you would like to see in your students by week 4 of the clinical rotation (ie: student can locate patient's MAR independently).
4. Please identify at least 5 behaviors related to patient safety you think is imperative for beginning students to consistently demonstrate by week 4 of the clinical rotation. (ie: student consistently identifies patients under 2 domains)
5. Please identify major struggles/issues you have seen with students in the past during the first clinical rotation. (ie: very anxious, hiding in the report room)
6. Please provide any additional information you feel I should know as I begin to prepare the simulated experience for the beginning-nursing students.

Appendix F

Clinical Skills Checklist Faculty Ranking Survey

Thank you for participating in the initial survey regarding clinical skills for beginning nursing students. After reading all the survey results I have listed the most frequent responses for each category. In order to finalize the checklist, which will be used as one of the measurement tools for the simulation project, I am asking for your feedback again. Although all skills are important, please rank the following items in order of importance based on your experience as a clinical instructor for beginning nursing students.

1. PSYCHOMOTOR SKILLS- Please assign each of the following skills a number (1,2,3,4,5 or 6) with 1 being least important and 6 being most important for beginning students to perform with competency by week 4 of clinical.

- _____ Takes vital signs (BP, pulse, respirations temperature, pulse ox)
- _____ Completes a basic head to toe assessment
- _____ Provides basic personal care (bath, mouth care, peri care, change occupied bed)
- _____ Administers medications using the 6 rights of medication administration
- _____ Assists with mobility (pulling patient up in bed, turning patient, assisting patient to chair, assist with ambulation)
- _____ Demonstrates correct method of drawing up medication into syringe

2. COGNITIVE SKILLS- Please assign each of the following skills a number (1,2,3,4,5 or 6) with 1 being least important and 6 being most important for beginning students to perform with competency by week 4 of clinical.

- _____ Identify abnormal vital signs
- _____ Identify abnormal assessment findings (they may not know what the abnormal finding is, but can recognize something is abnormal)
- _____ Accurately calculate medication dosages
- _____ Describe the pharmacokinetics and pharmacodynamics of medications to be administered
- _____ Clusters care to avoid unnecessary interruptions
- _____ Performs a pain assessment

3. BEHAVIORS- Please assign each of the following behaviors a number (1,2,3,4,5 or 6) with 1 being least important and 6 being most important for beginning students to perform with competency by week 4 of clinical.

_____ Locates patient's MAR

_____ Documents vital signs, assessments, medications, hourly rounds in a timely manner

_____ Locates supplies

_____ Feels comfortable going in to patient's room

_____ Communicates with patient's primary nurse (handoff report, any unusual findings/patient issues)

_____ Communicates effectively with patients

4. PATIENT SAFETY- Please assign each of the following skills a number (1,2,3,4,5 or 6) with 1 being least important and 6 being most important for beginning students to perform with competency by week 4 of clinical.

_____ Identifies patient under two domains before performing any care including medication administration

_____ Keeps patient's environment safe (bed in lowest position, call light within reach, side rails up X 2-3, keeps room free from clutter)

_____ Performs q2h safety checks, turns and incontinent checks

_____ Identifies self as student nurse before providing care

_____ Notifies clinical instructor immediately regarding patient problems

_____ Uses bed/chair alarm for high fall risk patients

Appendix G

Clinical Skills Checklist

Please complete one Clinical Skills Checklist for each student in your clinical group based on their clinical performance up to this point. You will be asked to evaluate each student's performance in four categories using the following Likert scale.

1= NEVER; 2= SOMETIMES; 3= OFTEN; 4= ALMOST ALWAYS; 5= ALWAYS

Please circle the number that best evaluates the student's clinical performance.

PSYCHOMOTER SKILLS	Never	Some-times	Often	Almost Always	Always
1. Student accurately takes patient's vital signs (BP, P, R, T)	1	2	3	4	5
2. Student correctly performs basic head to toe assessment	1	2	3	4	5
3. Student provides basic personal care	1	2	3	4	5
COGNITIVE SKILLS	Never	Some-times	Often	Almost Always	Always
1. Student is able to identify abnormal vital signs	1	2	3	4	5
2. Student is able to identify abnormal assessment findings	1	2	3	4	5
3. Student is able to perform a pain assessment <i>(QSEN competency: patient- centered care)</i>	1	2	3	4	5
BEHAVIORS <i>QSEN competencies: Patient-Centered Care, Teamwork and Collaboration, Safety</i>	Never	Some-times	Often	Almost Always	Always
1. Student feels comfortable going in to patient's room	1	2	3	4	5
2. Student communicates effectively with patient's primary nurse	1	2	3	4	5
3. Student communicates effectively with patients	1	2	3	4	5
PATIENT SAFETY <i>QSEN competency: Safety</i>	Never	Some-times	Often	Almost Always	Always
1. Student keeps patient's environment safe	1	2	3	4	5
2. Student identifies patient under 2 domains before performing any care	1	2	3	4	5
3. Student notifies clinical instructor immediately regarding patient problems	1	2	3	4	5

QSEN competencies adapted from: QSEN Institute. (2014). Pre-licensure KSAS. Retrieved from <http://qsen.org/competencies/pre-licensure-ksas>

Appendix H

Reflective Journal Questions

After reflecting on your first clinical experience, please complete the following questions.

1. Describe your level of anxiety before beginning your clinical experience?
2. Did your anxiety lessen as the clinical progressed? If so, what do you think caused your anxiety to lessen?
3. Describe your level of self-confidence prior to beginning your clinical experience.
4. Did your level of self-confidence improve as the clinical progressed? If so, what do you think caused your self-confidence to improve?
5. Did you feel prepared for your first clinical experience? Why or why not.
6. Before you started clinical, describe your thoughts about the role of the student nurse.
7. How did your thoughts about the role of the student nurse change as you progressed through your first clinical?
8. How have you changed personally since beginning nursing education?

Please reflect on the simulation and complete the following reflective questions.

1. (Simulation group only) What did you learn during the simulation?
2. (Simulation group only) How did this simulation prepare you for your first clinical experience?
3. (Simulation group only) How did what you learned from this simulation experience affect the patient care you delivered?

Appendix I

Demographic Data Sheet

To Study Participants,

The following demographic information is being collected as part of a research study regarding beginning nursing students and the transition from classroom to initial clinical experience. The information collected is anonymous and will in no way be used as part of your course grade. Please do not put your name on this form.

Please complete the personal information sheet. Please respond to all questions.

1. Age (please select one)

18-23 years old _____

24-29 years old _____

30-35 years old _____

36-41 years old _____

42-47 years old _____

48-53 years old _____

54 and older _____

2. Gender

Male _____

Female _____

3. Do you have any work experience in a healthcare setting?

Yes _____

No _____

If yes, please answer questions 4 and 5.

4. Please select the type of healthcare setting which best describes your experience.

Hospital _____

Home Health _____

Nursing Home _____

Other (please describe) _____

5. Please select the role which best describes your healthcare experience.

Nurse assistant (patient care assistant) _____

Clerical staff _____

Other (please describe) _____

Appendix J

Marketing Plan

Stakeholder	Message	Location	Timeline	Cost
Administration:				
<ul style="list-style-type: none"> • Dean • Department Chair • BSN Program Director 	Direct communication	College of Health Professions	October 2013	
Personnel:				
<ul style="list-style-type: none"> • Director of Simulation 	Face to face meeting to discuss the project	Department of Nursing	October 2013	
<ul style="list-style-type: none"> • Clinical Faculty 	Email to initially introduce the project	Department of Nursing	January 27, 2014	
	Face to face meeting to discuss details of the project	Department of Nursing	August 2014	
<ul style="list-style-type: none"> • Standardized Patients (SP) 	Advertising for SPs via email to undergraduate and graduate nursing students	Department of Nursing	September 2014	
Participants:				
<ul style="list-style-type: none"> • Nursing Students 	Face to face discussion during class to discuss simulation	Department of Nursing	March 2015	

Appendix K

Project Timeline

Task	Estimated Completion Date	Date of Completion
1. Discuss the proposed capstone project with the Dean of the College of Health Professions; the chair of the Department of Nursing; the BSN Program Director; the Director of Simulation; and the clinical faculty	October 2013	October 2013
2. Obtain final approval for problem statement and project plan	December 10, 2013	December 10, 2013
3. Identify measurement tools for project	January 15, 2014	January 15, 2014
4. Develop survey for clinical faculty to complete	January 27, 2014	January 27, 2014
5. Email survey to clinical faculty	January 31, 2014	January 31, 2014
6. Compile results from clinical faculty survey, send back to clinical faculty to rank results	February 15, 2014	February 15, 2014

7. Meet with Burkhardt Consulting Center to review tools and discuss project	March 1, 2014	February 18, 2014
8. Compile results from clinical faculty ranking survey	March 1, 2014	March 1, 2014
9. Develop simulation, write scripts for standardized patients	May 31, 2014	May 31, 2014
10. Apply to IRB at NKU and USI	June 1, 2014	June 1, 2014
11. Advertise for actors to play the standardized patients	September 1, 2014	September 1, 2014
12. Consent control group	October 1, 2014	October 6, 2014
13. Administer STAI to control group 1 week before clinical begins	early October 2014	October 6, 2014
14. Provide students with traditional clinical orientation	Third week in October 2014	Third week in October 2014
15. Administer STAI to control group after completion of second clinical day	November 2014	November 3, 2014
16. Clinical faculty complete fundamental skills check list 4 weeks after initial clinical day	November 2014	November 11, 2014

17. Meet with actors to discuss project and review script	February 1, 2015	February 1, 2015
18. Consent treatment (simulation) group	March 1, 2015	March 2, 2015
19. Administer STAI one week before clinical begins	March 2015	March 2, 2015
20. Implement simulation	3 rd week in March 2015	March 17 & 19, 2015
21. Administer Student Satisfaction and Self-Confidence in Learning tool to simulation group after the simulation	3 rd week in March 2015	March 17 & 19, 2015
22. Administer STAI to simulation group after completion of second clinical day	April 2015	March 30, 2015
23. Clinical faculty complete fundamental skills checklist 4 weeks after initial clinical day	April 2015	April 7 & 9, 2015
24. Submit quantitative data to Burkhardt Consulting Center	May 2015	May 7, 2015
25. Data analysis	May-August 2015	May-August, 2015
26. Podium presentation USI	April 2016	April 13, 2016
27. Submit manuscript to <i>Clinical Simulation in Nursing</i>	April 2016	May, 2016

Appendix L

Project Budget

Item	Budgeted Amount	In-Kind	Source of Funding	Total Cost
Personnel:				
Director of Simulation	\$31.00 x 6 hrs= \$186.00			
<ul style="list-style-type: none"> • 2hr/day x 3 days- set up/take down lab • Benefits 30% 	\$31.00 x .30= \$55.80		Department of Nursing	\$241.80
Project Leader	\$31.00/hr	\$31.00 x 24 hrs= \$744.00		
<ul style="list-style-type: none"> • 20 hrs for simulation • 4 hrs for SP training • Benefits 30% 	\$744.00 x .30= \$223.20		Department of Nursing	\$967.20
Clinical Faculty (10)	\$35.00 x 2.5= 87.50			
<ul style="list-style-type: none"> • \$35.00/hr x 2.5 hrs • Benefits 30% 	10 clinical faculty= \$875.00 \$875.00 x .30= \$262.50		Department of Nursing	\$1137.50
Standardized Patients (SP)	\$7.00/hr. x 2 hrs= \$14.00			
<ul style="list-style-type: none"> • \$7.00/hr • 3 SP/clinical group 	\$14.00/SP/group 3 SP/group		Project Leader	\$546.00

<ul style="list-style-type: none"> Blood pressure cuffs Oxygenation saturation device Linens/washcloths/towels Pyxis machine Bedside commode 		In-kind donation	
Food:			
<ul style="list-style-type: none"> Pizza & Snacks for SPs & students 	\$ 355.19	USI grant	\$355.19
Facilities:			
Use of simulation laboratory		In-kind donation	
Evaluation Costs:			
<ul style="list-style-type: none"> Data entry per project leader \$31.00/hr x 5 hours Benefits 30% 	$\$31.00/\text{hr} \times 5\text{hrs} = \155.00 $\$155.00 \times .30 = \46.50	Department of Nursing	\$201.50
<ul style="list-style-type: none"> Data Analysis per statisticians as Burkhardt Consulting Center 	$\$40/\text{hr} \times 3\text{ hrs} = \120.00	USI grant	\$120.00
Dissemination:			
<ul style="list-style-type: none"> Presentation at INASCL conference 		Project leader or	\$1400.00

• Registration	\$500	Department of Nursing
• Travel	\$500	
• Accommodations	\$400	
Total Estimated Expenses		\$5,175.39

Appendix M

Evaluation Plan

Objective	Measures	Indicator	Data Source	Timeline
Long-term: Utilize a simulated learning experience to facilitate a successful transition for beginning nursing students from classroom to the initial clinical experience.	Simulated learning experience is developed and implemented	Students report decreased anxiety, increased self-confidence, competency with basic clinical skills Evidence of successful transition reflected in journals	STAI, Student Satisfaction and Self-Confidence in Learning, Clinical Skills checklist Reflective journal responses	March 2015
Long-term: Evaluate the effectiveness of the simulated learning experience.	Data collection	Statistically significant decrease in anxiety, increased self-confidence and increase competency with basic clinical skills in the treatment group v. the control group	STAI, Student Satisfaction and Self-Confidence in Learning, Clinical Skills checklist	August 2015
Short-term: Develop a simulated experience which will mimic a typical clinical day	Development of a simulated learning experience	Simulation	Student learning outcomes for simulation developed, scripts for standardized patients, written guide for post-simulation debriefing	May 2014
Short-term: Implementation of simulated learning	Implementation of simulated learning experience	Simulation	Students participate in simulated learning experience	March 2015

experience				
Short-term: Evaluate the effectiveness of the simulated experience	Evaluation of quantitative and qualitative data	Students in the treatment group will report a significant decrease in anxiety, increase in self-confidence, increased competency with basic clinical skills compared to the control group.	STAI, Student Satisfaction and Self-Confidence in Learning, Clinical Skills checklist	August 2015
		Student in treatment group will show evidence of successful transition reflected in journals as compared to the control group.	Reflective journal responses	

Appendix N

University of Southern Indiana IRB Approval Letter



Office of Sponsored Projects and Research Administration
8600 University Boulevard * Evansville, Indiana 47712 * 812/465-1126
www.usi.edu/ospra - rcr@usi.edu

DATE: July 3, 2014

TO: Julie Hart

FROM: USI Office of Sponsored Projects and Research Administration

PROJECT TITLE: [597621-1] The Use of Simulation to Facilitate a Successful Transition from Classroom to Initial Clinical Experience

REFERENCE #: 2015-001-NH

ACTION: APPROVED

IRB APPROVAL DATE: July 3, 2014

REVIEW CATEGORY: TYPE 1 RESEARCH - Exempt Category#1

The above project has been approved by USI's IRB under the provision of Federal Regulations 45 CFR 46.

This approval is based on the following conditions:

1. The materials you submitted to the IRB (through the Sponsored Research Office) provide a complete and accurate account of how human subjects are involved in your project.
2. You will carry on your research strictly according to the procedures as described in the materials presented to the IRB.
3. You will report to the Sponsored Research Office any changes in procedures that may have a bearing on this approval and require another IRB review.
4. If any changes are made, you will submit the modified project for IRB review.
5. You will immediately report to the Office of Sponsored Projects and Research Administration any problems or adverse events encountered while using human subjects.

This project requires continuing IRB review on an annual basis. Please use the appropriate forms for this procedure. Your documentation for continuing review must be received with sufficient time for review and continued approval before the expiration date of May 8, 2015.

To renew this project or make a modification, please see the IRBNet User Manual on our website at usi.edu/ospra for step-by-step instructions on submitting the Continuing Review or Modification Form.

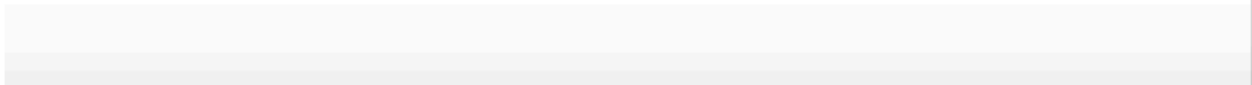
If you have any questions, please contact us at 812-228-5149 or rcr@usi.edu.

Please include your project title and reference number in all correspondence with this committee.

A black rectangular redaction box covers the signature of Dr. Katherine A. Draughon. The redaction is centered horizontally and positioned above the printed name.

Dr. Katherine A. Draughon
Executive Director - OSPRA

This letter has been electronically signed in accordance with all applicable regulations, and a copy is retained within The Office of Sponsored Projects and Research Administration's records.



Appendix O

Northern Kentucky University IRB Approval Letter

INSTITUTIONAL REVIEW BOARD

Notice of Approval Expedited Review



DATE: June 13, 2014
TO: Julie Hart, Nursing
CC: Constance Swenty, Nursing, University of Southern Indiana
FROM: Philip J. Moberg, NKU IRB Chair
RE: IRB Protocol Titled: *The Use of Simulation to Facilitate a Successful Transition from Classroom to Initial Clinical Experience*
 IRB Protocol: # 14-237

APPROVED: June 06, 2014

EXPIRES: June 05, 2015

The NKU Institutional Review Board (IRB) has reviewed and approved this research protocol for the period indicated.

Federal Requirements for Principal Investigators

Federal Regulations (45.CFR.46.) require that Principal Investigators (PIs):

Renew annually: PIs must reapply for IRB approval each year until the study is inactive. To renew, submit a request in writing to the IRB Administrator prior to the expiration date. If no changes have been made to the research project, simply complete the first two-pages of the IRB Application with signatures, mark the box labeled "Continuation", attach most recent CITI scores AND consent form and submit to the IRB Administrator in 724 of the Lucas Administrative Center. You will receive a pending expiration notice from the IRB Administrator approximately 80 days prior that date. IRB forms and information can be found at <http://rgsrs.nku.edu/research/rgc/irb/irb.html>

Report immediately: PIs must report any proposed changes in design, procedures, consent process or forms, recruiting announcements, risk to participants, or participant sample to the IRB for approval. Changes may be implemented only after IRB approval has been received, except to prevent immediate hazards to the participant. PIs also are required to report unanticipated problems to the IRB immediately.

Advise promptly: PIs must notify the IRB when the study is complete (data collection finished). You will receive a closure report that we request you complete and return.

Retain data / consent: PI's must retain all data and signed consent forms for three years after the end of the study. Data that includes HIPAA protected personal health identifiers must be retained for six years after the end of the study. (Subpart A: 46.115)

Submit reports: PIs must provide a copy of any audit, inspection report, or finding issued to them by any sponsor, funding agency, regulatory agency, cooperative research group, or contract research organization.

[Human Subject Research Federal Regulations](#)

Federal Wide Assurance #FWA00009011

Attachment: Documentation of Review and Approval Signatures

Northern Kentucky University
 Institutional Review Board (IRB) for the Protection of Human Subjects
 Office of Research, Grants & Contracts Attn: IRB Administrator, AC 724,
 Nunn Drive, Highland Heights, KY 41099
 859-572-5168 (Email: irb@nku.edu)

For IRB Committee Use Only
 IRB # 14-237
 Date Received 05.29.14
 Date Posted 05.30.14
 Alternate institution IRB # _____

APPLICATION FOR IRB REVIEW

Please type information directly into this form on your computer. Print your application, attach any documents and forward to the above address. NKU IRB requires original signatures on page 2. The remaining information may be emailed if preferred. Handwritten packets will be returned. Please do not staple, fold or fax. NOTE: Attach your CITI training completion certificate; review will not begin until this is received. CITI training scores must be 80% or above on each individual module –for more information see NKU CITI Webpage.

IRB Administrative Use ONLY

Approval Status/Campus Level Review - This Protocol for the use of human subject(s) has been reviewed by the Northern Kentucky University Institutional Review Board.

Exempt Review
 Expedited Review
 Full Review
 Certified
 Not Research

NKU IRB Member: _____ Date: 06/06/14

Application Type
 Check "New" to submit a study for the first time, "Revise" to change or modify a currently approved study, or "Continue" to extend or renew a currently approved study. For currently approved studies, enter the IRB number.

Choose One:

- New study
- Revise current active study IRB # _____
- Continue current study with no changes IRB # _____
- Continue study about to expire with changes IRB # _____

Complete if applicable:

- Funded research project # _____
- Teaching course # _____

Project Start & End Dates
 (Note - Research may not begin prior to IRB approval)

Estimated Start Date: 10/6/14 Estimated End Date: 5/9/15

PROJECT TITLE:

The Use of Simulation to Facilitate a Successful Transition from Classroom to Initial Clinical Experience

PRINCIPAL INVESTIGATOR (last name, first name)		Department (e.g., Dept. of Teacher Education)
Hart, Julie		Department of Nursing
Campus Address ("none" if applicable)	NKU Email	Personal Email (students only)
Albright Health Center 364	Hartj5@nku.edu	
Home Mailing Address (Street, City, State, ZIP)		Campus Phone (if none, enter home phone)
10235 Goldeneye Dr. Alexandria, KY 41001		859-572-1553
CITI Training completed? (check one) <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No Note: Scores of 80% required on each individual module; individual programs may require additional modules.		
Attach CITI Completion Certificate		