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Faulty Development in Simulation for Professional Nurse Educators

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Walden University 2020

Abstract

Faculty Development in Simulation for Professional Nurse Educators

by

Jill A. Johnson

MSN, Walden University, 2010
BSN, Virginia Commonwealth University, 2006

Project Study Submitted in Partial Fulfillment
of the Requirements for the Degree of
Doctor of Education

Walden University

October 2020

Abstract

There is a shortage of nursing faculty adequately prepared in the use of simulation technology. The purpose of this qualitative case study was to examine nursing faculty's experiences and perceptions regarding faculty development related to simulation technology. Benner's model of skill acquisition and Kolb's theory of experiential learning were the conceptual frameworks used to support the study. Research questions addressed the experiences and perceptions of faculty development and the improvement of nursing skills in simulation-based activities. Data were collected through semistructured interviews with 7 educators who had taught using simulation technology. Data analysis included organizing the data and reading it multiple times; developing codes, categories, and themes; and interpreting the study findings. All participants stated that they were pleased with their opportunities for faculty growth and development; however, they were concerned about the lack of formal simulation training. A white paper was designed for this project study. It was created for faculty members and senior nursing leadership to enhance their faculty development program regarding simulation training. It includes a set of recommendations based on the participants' responses. This study's results impact social change by serving as a model for faculty development programs and improving nursing graduates' preparedness to provide competent, safe care for the patients they serve.

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Dedication

This project study is lovingly dedicated to my Lord and Savior Jesus Christ and my husband, Raymond Johnson. They have been my constant source of inspiration and guidance, which has given me the drive, discipline, and enthusiasm to complete this task that has been set before me. I would also like to dedicate this study to Dr. Thomas McCune, M. D., who has been a constant source of medical support and guidance in maintaining my health throughout this research process. For without their love and support, this study would not have been possible.

Acknowledgments

To my God, who has guided me along this journey. To Dr. Lynne Orr, Dr. Paul Englesberg, Dr. Mario Castro, and all other Walden University faculty for their help, guidance, and encouragement to accomplish this project study. To my family, church family, and friends who were a great source of support and encouragement, I thank them all. To Dr. Thomas McCune M.D., Dr. Suresh Rijhwani M.D., Dr. Harlan Rust M.D., Dr. Robin Corbett M.D., Dr. Derrick Ridley M.D., Dr. Todd Wesiman M.D., and all the transplant nurses for their constant vigilance in monitoring my health status, I thank them all. For all those who have crossed my path and helped to light my way, I thank them.

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Section 1: The Problem

Introduction

Simulation is a significant educational technology used to ameliorate or enhance nursing education. Simulation has been proven a beneficial teaching strategy for students in nursing education (Roberts, Kaak, & Rolley, 2019). According to Loke, Lee, Noor, and Loh (2014), high-fidelity simulation is an essential teaching and learning strategy, which is based on the student's competency in communication, prioritization, teamwork, use of technology, and decision-making skills. Also, these technologies provide nursing students with much-needed clinical experience where clinical practicum sites are limited, which can occur because of the large number of nursing schools. Clinical practicum sites are pivotal to students' development in nursing and becoming qualified nursing professionals (Ford et al., 2016). Schultz, Krassa, and Jones (2019) stated that acquiring clinical practicum sites that promote the goal of cognitive, affective, and psychomotor nursing skills can be challenging in nursing education.

The use of simulation continues to increase in nursing education and curriculum development. Simulation is an "activity that reproduces a task environment with sufficient realism to serve a desired pedagogic goal" (Bruce & Johnson, 2019, p. 3). According to Demiray and Ilaslan (2019), one of the critical concepts in simulation is reality. Reality refers to the degree to which the simulation experience reflects a real-life situation. Simulations provide the learner with opportunities to practice clinical learning and decision-making through multiple real-life situational experiences (Kim, Park, & Shin, 2016). Also, simulation provides a controlled environment where nursing students

can practice their skills without causing harm to patients or themselves (Lewis, Strachan, & Smith, 2012). It is imperative that nursing students receive the most relevant and realistic clinical experience to enhance their learning and their careers in healthcare.

Faculty development is crucial for nursing educators so they can effectively integrate technology into their classrooms so that students can reap the full benefit of simulation technology (Parrish & Sadera, 2019). Faculty development is defined as a process by which nursing school faculty and clinical instructors systemically work to improve their nursing knowledge and skills. Faculty development allows teachers to use the simulation technologies effectively as a teaching and learning strategy. Nurse educators must bridge the gap between didactic learning and that of clinical practice. McNeill, Parker, Nadeau, Pelayo, and Cook (2012) suggested that it is imperative for educational institutions to develop strategies that will help educators link nursing theory to clinical practice for students. The appeal of using simulation as a teaching strategy arises from the ability to integrate various aspects of nursing practice in the learners' simulation activity (Kelly, Berragan, Husebo, & Orr, 2016).

Simulation is an innovative teaching strategy in nursing education. Still, there remains a shortage of nurse educators who are adequately prepared to use this type of technology (Taibi & Kardong-Edgren, 2014). Nursing educators need training to help them understand simulation pedagogy, educational theory, and how to use this technology effectively. The use of simulation in education will help to produce a safe and more efficient nursing graduate who is ready for nursing practice.

This section contains a definition of the problem and its rationale. This section will offer evidence that the problem exists at the local level and from current professional literature. Also, this section will contain the significance of the problem, the research questions that guided the topic of inquiry, and specific terms associated with this issue. Furthermore, a review of the current literature, implications for further research, and a summary of key points will be included.

The Local Problem

The local problem that prompted this study is the lack of adequately trained nurse faculty in the use of high-fidelity simulators (Taibi & Kardong-Edgren, 2014).

Simulation is one of the primary teaching strategies used in nursing education, healthcare, and other disciplines (Livesay, Lawrence, & Miller, 2015). In nursing education, many schools are using simulation as a teaching and learning tool, but faculty do not have the necessary training to use this technology effectively (Taibi & Kardong-Edgren, 2014).

Clinical nurse instructors understand the importance of simulation technologies as a source of education for students and encounter barriers to the use of this technology. Al-Ghareeb and Cooper (2016) commented that educators identified several obstacles, which included a lack of time, fear for using this technology, lack of training, lack of administrative support, and a shortage of human resources. Providing nurse educators with a summary of the simulation experience will prepare and orient them to the simulation activity and help decrease their fear and anxiety (Hughes & Hughes, 2019). Blazeck (2011) synthesized that nurse faculty exhibit acute anxiety regarding the use of simulation technology. Before simulation technologies can be used effectively, clinical

nurse teachers need to overcome this fear. Therefore, faculty development programs in the simulation are critical for the clinical nurse educator. Talcott, O'Donnell, and Burns (2013) summarized that nursing faculty are often referred to as *digital immigrants* because of their lack of experience in technology and the age difference between faculty and students.

Digital immigrants are usually individuals who struggle with technology and who were born preceding the arrival of technology (Riegel & Mete, 2017). Digital immigrants are those who prefer to use a telephone rather than email, will read a hard copy of a book rather than using the screen on their computer, and they print out documents rather than save them on a flash drive. Riegel and Mete (2017) stated that "these patterns focus on the importance of human connection in person as opposed to connecting to an individually electronically" (p. 50). It is imperative that administrators understand the barriers to the use of simulation technology by educators because it can negatively impact student learning (Hallmark, 2015). The lack of adequately prepared nurse educators in the use of this technology is due to several reasons (Talcott et al., 2013). Some educators may find it challenging to learn new techniques, and older faculty members are more hesitant in using modern technology than their younger counterparts (Talcott et al., 2013). Because of the rapid rate of change in technology development, some institutions of higher learning are resistant to change; therefore, they may not select this type of technology (Talcott et al., 2013). It is essential that nurse educators receive faculty development in simulation so it can be used as a teaching and learning tool. If faculty

development does not occur, students will not receive the full benefit of this technology or the clinical experience.

Rationale

Evidence of the Problem at the Local Level

At a 4-year private, nonprofit university in Northern Virginia, nursing faculty had difficulty demonstrating the required level of competency when performing simulation activities during a faculty development session (personal communication, February 11, 2013). Despite having simulator training at the beginning of the school year, faculty were still having difficulty in setting up the simulators and running difficult and complex scenarios (personal communication, March 16, 2015).

This institution has a significant problem in providing students with experienced nurse educators in the use of simulators. The nursing students do not acquire the appropriate experience to develop their nursing knowledge and skills, decision-making processes, and clinical judgment. Also, they do not function well in a real clinical setting, which is due to the lack of simulator experience exhibited by nursing faculty (personal communication, October 16, 2015). This research began 5 years ago, and the problem remains at this study site (personal communication, February 15, 2020). One of the primary goals of faculty development is to provide educators with the knowledge and skills needed to enhance student learning (Wall, Andrus, & Morrison, 2014). Therefore, it is imperative for institutions of higher education to initiate the development of formal faculty training programs for simulation technology. These programs will allow teachers

to become more efficient in the use of these technologies and thereby help improve student-learning outcomes.

Simulation technologies are sophisticated, and educators are not provided faculty development to use the technology correctly and efficiently. According to Dowie and Phillip (2011), many nursing educators use simulation technology, but they have not achieved the confidence of their training required to use it effectively. Also, some universities and colleges do not provide technicians or simulation coordinators to assist educators with simulation activities for nursing students. Al-Ghareeb and Cooper (2016) stated that there have been 14 studies conducted to explore barriers faced by educators in the use of simulation; a lack of professionally trained staff is only one of these barriers. Other obstacles faced by teachers include a lack of time, fear of new technologies, lack of administrative and financial support, deficiencies in space and equipment, and additional instructor workloads (Al- Ghareeb & Cooper, 2016).

Nursing faculty employed by other institutions of higher learning that offer little or no staff development in simulation training find different ways of learning about this technology. Some instructors attend workshops from other universities, read simulation manuals, or learn by trial and error (personal communication, January 5, 2016).

Anderson, Bond, Holmes, and Cason (2012) commented that many teachers have found they can receive the learning they require through other institutions that provide training through conferences and workshops. Furthermore, companies that supply simulation equipment also offer training with a minimal fee.

Evidence of the Problem From the Professional Literature

Nurse educators need a wide range of knowledge and training to use simulation technology skillfully and effectively (Dieckmann & Rall, 2019). Many institutions of higher learning move forward with the development of expensive clinical simulation laboratories, yet the nursing faculty lack the training to include these technologies efficiently. Therefore, these institutions should identify and create faculty development programs that will facilitate and implement best practices for the incorporation of simulation technologies in nursing education (Steinert et al., 2016).

Professional associations, such as the National League of Nursing, emphasize the importance of simulation in nursing education as a significant teaching strategy to prepare students for their role as professional nurses (Zapko, Ferranto, Blasiman, & Shelestak, 2018). The National League of Nursing offers training, online courses, and workshops in the use of simulation technologies for educators and students. The Quality and Safety Education for Nurses Initiative is another professional association that recognizes the importance of maintaining quality and safety in the clinical practice arena (Altmiller & Hopkins-Pepe, 2019). Also, it provides a foundation for professional nurses and promotes excellence, safe care. The Initiative is only concentrating on simulation training for the nursing student; a member of this association would like to be informed on the results of this project study.

Institutions of higher learning face several challenges regarding the use of simulation technologies. These problems may include a shortage of faculty, an aging faculty, inadequately trained faculty, budget constraints, maintaining competency, an

increase in complexities in nursing care, and limited clinical practicum sites (Parry & Fey, 2019). Though these challenges exist, institutions should equip nurse educators with faculty development in simulation for them to be able to provide their students with the best possible clinical experience.

Many nurse instructors are expected to apply simulation technology without any formal training. Waxman, Nichols, Shum and Forsey (2019) acknowledged that faculty might not be aware of their lack of proficiency in simulation and the training they need. It was concluded that nurse educators exhibit a negative attitude toward simulation training and do not feel comfortable in training their students.

Definition of Terms

Specific terms associated with this research are described and cited as follows:

Clinical practicum: A course designed to allow students to apply previously studied nursing theory in a direct clinical experience (Andersen, 2016).

Clinical simulation: An activity that provides the participant with clinical practice, typically seen in nursing education (Simko, Henry, McGinnis, & Kolesar, 2014).

Experiential learning: Creating knowledge through experience (Murray, 2014).

Fidelity: The degree to which simulators can imitate a human patient (Hamstra, Brydges, Hatala, Zendejas, & Cook, 2014).

High-fidelity simulation: A simulation that uses a computer-controlled manikin that provides a realistic clinical environment that teaches nursing skills, decision-making, and clinical judgment (Lewis et al., 2012).

Skill acquisition: A process used by nursing students to acquire new clinical skills (Meechan, Jones, & Valler-Jones, 2011).

Significance of the Study

Faculty development programs in a simulation are designed to increase the educators teaching knowledge and help to facilitate learning in undergraduate and graduate nursing students. Institutions of higher education seldom prepare faculty members in academia and clinical roles in simulation for their teaching responsibilities; "they lack formal teacher training" (Behar-Horenstein, Kuang, Tolentino, & Zhang, 2019, p. 77). Gore and Singh (2019) stated that nurse leaders are faced with a lack of expert faculty members in simulation training and should improve foundational simulation knowledge. Steinert (2020) suggested that, as educators, it is important to broaden the scope of faculty professional development and increase its teaching approaches. Faculty development program models can accomplish this. Strategies that can improve a faculty development program include faculty-learning communities, mentoring, a faculty development committee, and college-based centers (Parrish & Sadera, 2019). It is essential for nursing faculty to keep pace with new simulation technologies. New simulation techniques will allow teachers to provide their future nursing students with new knowledge and clinical skills to help them meet the challenges of their chosen profession (Hauze, Hoyt, Frazee, Greiner & Marshall, 2019).

The problem addressed in this research study was the lack of adequately trained nurse faculty regarding simulation training. Therefore, faculty development programs should define their purpose, role in nursing education, key priorities, and new directions

for the future (Beach, Sorcinelli, Austin, & Rivard, 2016). Insights from this research study have the potential to contribute to positive social change by promoting institutions of higher education worldwide with an increased understanding of the importance of professional faculty development regarding simulation.

Research Ouestions

The research questions that guided this study are as follows:

RQ1: What are the experiences of nurse educators at a 4-year private nonprofit university regarding faculty development in simulation?

RQ2: What are the perceptions of nurse educators at a 4-year private nonprofit university regarding their improvement of nursing skills in simulation-based activities?

Past research on the topic of faculty development in the use of simulation technologies is critically needed for nurse educators to be able to apply this technology effectively as a learning tool (McNeill et al., 2012). Simulation technology is used by many disciplines as a teaching and learning strategy. Although simulation training continues to increase, institutions of higher education continue to lack faculty developmental programs for nursing faculty. Also, these systems are inconsistent in implementing simulation programs into their nursing curricula, and they have limited financial resources for faculty development. Furthermore, there is a gap in research as to how to implement simulation programs into a nursing curriculum. According to Taplay, Jack, Baxter, Eva, and Martin (2014), organizational culture plays a critical role in the implementation of simulation in a nursing curriculum.

Several strategies can be used to help integrate simulation into a nursing curriculum. These strategies involve shared leadership roles among nursing administrators, which include "negotiating, navigating, and networking" (Taplay et al., 2014, p. 2). Nursing education is changing and undergoing an upheaval due to the addition of new technologies. Therefore, it is imperative that stakeholders such as nursing administrators, nursing leaders, and nursing faculty prepare for this change.

Review of the Literature

An analysis of the literature was conducted using a detailed search of journals, books, and electronic articles through the Walden University Library. The research data used to develop this review were published from 1984 to 2020, involving the use of high-fidelity patient simulation for faculty development. There were several search strategies used to conduct this literature review.

The first approach I used was searching in electronic databases, which included Medline, Eric, CINAHL, Science Direct, ProQuest Dissertation/Theses, Google Scholar, EBSCO, Nursing Ovid, and Academic Search Complete. The second strategy incorporated the use of primary search terms, such as high-fidelity patient simulation and faculty development, nursing education, simulation, simulation and healthcare, and the use of simulation. The final strategy included the use of peer-reviewed articles.

The literature search yielded over 100 articles and studies regarding simulation and faculty development and training. The books included the seminal work of the theorists, Benners' model of skill acquisition, and Kolb's theory of experiential learning. The search was performed until the point of saturation was reached by modifying the

Boolean operator *and* to *or*, which did not produce any additional useful articles regarding the topic of faculty development and simulation. The research revealed four consistent themes and patterns for this review that provided structure and support to the project findings impacting faculty development and simulation.

Conceptual Framework

The conceptual foundation for this research includes the theory of skill acquisition and the concepts of experiential learning. The theory of skill acquisition indicates that adults move through several levels of proficiency in the attainment and development of nursing competencies (Benner, 1984). The development of skill acquisition is based on established student achievement and their experiential learning (Benner, 2004). The concept of experiential learning focuses on knowledge and is grounded in experience (Kolb, 1984). It requires learners to take an active part in their education (Kolb, 1984). Experiential learning also focuses on how students learn, how they perceive their learning, cognition, and their behavior toward the learning (Kolb, 1984). The following is a description of the conceptual foundation for this research study.

Benner's theory of skill acquisition. The theory of skill acquisition is one of many methods and models intended to explain how adults learn, acquire, and develop their knowledge and expertise. The process of skill acquisition is based on the belief that adults gain specific skills through five stages of proficiency (Benner, 1984). The theory of skill acquisition is grounded in constructivist learning theory and supported by cognitive and behavioral learning theories (Siemens, 2005). According to Dennick (2016), constructivist learning theory emphasizes how learners construct their knowledge

and understanding of the world through experience. The cognitive learning theory focuses on how students make sense of their world (McSparron, Vanka, & Smith, 2019). The behaviorist learning theory focuses on learners' behavioral change in response to learning (Harasim, 2017).

Benner (1984) based her theory on the Dreyfus model of skill acquisition to clinical nursing. Dreyfus (2004) postulated that there are several stages of skill acquisition and development, including novice, advanced beginner, competent, proficient, and expert (Benner, 2004). The first stage of skill acquisition is a novice, which is a beginner who has no experience or understanding of the tasks they should perform in a nursing situation. The second stage of skill acquisition is an advanced beginner. This individual is a new graduate and can demonstrate the responsibilities inherent to their role as a nurse marginally. The third stage of skill acquisition is competent, which emphasizes the development of nursing knowledge and clinical skills that depend on experiential learning.

The fourth stage of skill acquisition includes an individual's proficiency on their way to becoming an expert in their chosen profession. The nurse is now able to visualize events that may occur in each situation and how to change or alter plans in response to these events. The fifth and final stage of skill acquisition is an expert. In this phase, the nurse no longer relies on rules and guidelines; they have a thorough understanding of a given situation and use an analytical approach and concrete experience in situational clinical events. The theory of skill acquisition combines these five stages to explain how nurses develop skills through formal instruction and experiential learning.

Dreyfus' developmental model is based on student performances in specific situations through active learning (Benner, 2004). In Benner's (1984) seminal work, she described how clinical nurses pass through these levels toward proficiency in their nursing skills. Nursing is a complicated discipline that requires nurses to develop excellent nursing skills and sound decision-making. Benner's (1984) model of skill acquisition allows nurses to move through the continuum across the stages toward expert proficiency. One of the critical concepts of Benner's model is that a nurse may be an expert in one area of practice, but a novice in another (Benner, 2004). Benner (1984) also showed that as nurses advance in their clinical skills, the more they become proficient in the clinical arena.

Kolb's theory of experiential learning. Experiential learning is a process in which students engage in active learning that helps them to acquire new knowledge and improve their clinical skills (Burch et al., 2014). This theory is based on the earlier works of Dewey, Lewin, and Piaget, who believed that "learning is the process whereby knowledge is created through the transformation of experience" (Kolb, 2014, p. 38). The experiential learning theory is grounded in the constructivist view that emphasizes how learners construct their knowledge and understanding from their experiences and then reflect on those experiences (Dennick, 2016). The theory of experiential learning is a belief that students transform the actual learning experience into new knowledge that can be used to strengthen the overall learning process. According to Adkins (2018), active learning supports a higher level of critical thinking and involves learning approaches, such as case studies, role play, and student debates. Many theorists believe that when

learners take an active part in the learning process, learning is improved (Smart & Csapo, 2007).

Learning activities that foster experiential learning are described as activities that require students to become active participants in their learning (Burch et al., 2014). An example of an event that fosters experiential learning would be practicing venipuncture on a high-fidelity human patient simulator. Another example of experiential learning would be practicing installing a nasogastric tube into the nose of the human patient simulator. Both instances provide the student with the opportunity to become active participants in the learning activity.

The experiential learning theory is described as a four-stage cyclical theory of knowledge construction (Kolb & Kolb, 2005). This approach provides a holistic view of education that combines the students' experience, perception, cognition, and behavior. The four stages of experiential learning include concrete experience, reflection observation, abstract conceptualization, and active experimentation (Kolb & Kolb, 2005). The first stage of the experiential learning approach is a concrete experience. In this stage, the learner actively experiences an activity such as drawing up medication into a syringe during a clinical lab session. The second stage of the experiential learning theory is reflection observation. In this stage, the learner should reflect on and observe the experience from different frames of reference. The third stage of experiential learning is abstract conceptualization. This step describes how the student attempts to form a concept or idea of a theory or model from observed experience. The fourth phase of the

experiential learning approach is active experimentation. In this stage, the learner is testing a theory or model that can be used to solve problems and involves risk-taking.

Learning styles are considered how an individual obtains knowledge and experience regarding experiential learning. Kolb (1984) revealed that there are four learning styles or classification of learners based on their approach to getting experience. These learning styles entitle students as the divergers, assimilators, convergers, and accommodators. Divergers look at situations from different frames of reference, and they generate ideas through brainstorming. Learners with an assimilating learning style focus on ideas, abstract concepts, and can create theoretical models. Individuals with a converging learning style prefer tasks that involve technology, and they have a scientific and logical mindset in the way they solve problems. The final learning style that exhibits Kolb's theory of experiential learning is accommodators. A learner that has an accommodating learning style takes an experiential approach to education and relies on logic.

Experiential learning provides vital insights into the way students gain knowledge and experience. Experiential learning is one of the best-known educational theories used in higher education. As educators, we should understand the experiential learning method's fundamental concepts to provide our students with a productive learning environment. Finally, for learning to be understood, we need to determine the nature of experience (Kolb, 1984).

Simulation and Faculty Development

A review of the literature revealed that institutions of higher education provide more support for simulation, but minimal support for establishing faculty development programs (Nehring, Wexler, Hughes, & Greenwell, 2013). Many educators develop their simulation skills through workshops, reading simulation manuals, observations, working with experienced teachers, and by trial and error (Nehring et al., 2013). There is an unparalleled increase in the use of simulation-based education in the clinical arena. The primary goal is to improve the quality and safety of the healthcare system and improvement in nursing education (Seaton et al., 2019).

The application of simulation to promote faculty development regarding nurse education is the ability to transfer clinical learning to didactical learning (Cilliers & Tekian, 2016). Effective faculty development is essential for preparing nurse educators for the onslaught of new and sophisticated simulation technologies. Therefore, it is crucial that institutions of higher education develop new and innovative ways to provide educators with updated information (Bryant, Aebersold, Jeffries, & Kardong-Edgren, 2019). The phenomena under study brought to the forefront key ideas, factors, and concepts that were present in current literature.

Clinical nurse faculty development. Clinical nurse faculties have inadequate faculty development for their role as clinical educators. A study found that 31% of teachers had no vocational training, and 38% had some experience in clinical teaching (Suplee, Gardner, & Jerome-D'Emilia, 2014). Clinical educators received 46% of their learning through workshops, 28% through reading the material, such as simulation

manuals, and 32% through evaluation from their peers. Also, 16% commented they did not receive any faculty development from their colleges or universities (Suplee et al., 2014).

Higher learning institutions should provide teachers with the appropriate training that they need so that their feelings of inadequacy, isolation, and a disconnect between their students will be minimized. Clinical instructors are better prepared for their role in the use of simulation as a form of faculty development. It is important to remember that simulation laboratories and related equipment are costly, and educational administrators may place added pressure on instructors to use the simulation before it is understood fully (Bland, Topping, & Tobbell, 2014). Eliadis and Verkuyl (2019) concurred that "the increased use of simulation centers has resulted in budget challenges" (p. 15). These challenges include a lack of supplies, simulation equipment, space, and inadequately trained personnel.

Emerging literature related to simulation was found on instructors, describing instructors that were more confident and comfortable in participating in simulation activities due to formal faculty development (O'Leary, Nash, & Lewis, 2015). Waxman, Nichols, Shum, and Forsey (2019) agreed that the current research found that simulation training impacts not only educators' confidence and competence but also nursing knowledge, acquisition of nursing skills, and their present and future nursing careers. Harder, Ross, and Paul (2013) surmised that the comfort and confidence levels for instructors to engage in simulation activities are just as important as the students' learning outcomes. Also, simulation training increased the instructor's preparedness in

the clinical environment and improved their clinical performance (O'Leary et al., 2015). Furthermore, simulation training had a positive impact on instructor's use of teamwork (O'Leary et al., 2015).

Current research revealed that there are obstacles to the use of simulation technology concerning faculty development (Al-Ghareeb & Cooper, 2016). Barriers include fear of technology, a lack of technical and administrative support, a lack of time to develop student activities, an increase in teacher workloads, a lack of regular development plans, costs, a lack of simulation equipment and mentors (Al-Ghareeb & Cooper, 2016; Hallmark, 2015; Kim, Park, & O'Rourke, 2016; Livesay et al., 2015; Nehring et al., 2013). Many educators have feelings of inadequacy, nervousness, discomfort, uncertainty, and are fearful due to their lack of experience in facilitating simulation. Also, nursing leaders should consider the age gap between teachers and students regarding their exposure to simulation technology. A study found that 40% to 60% of the clinical faculty were between 50 to 60 years of age, and the student's age is less than 30 (Harder et al., 2013). Therefore, educational institutions may need to use clinical coordinators as a strategy to help combat these problems.

Clinical coordinators. Research suggests that skilled simulation supervisors or coordinators should be placed in clinical labs to improve the learning environment (Harder et al., 2013). Supervisors help to contribute to the faculty's knowledge, enhance their clinical skills, and handle problems that may arise during a simulation activity (Flood & Robinia, 2014). Clinical coordinators and essential nursing staff that are needed to improve clinical experiences for the clinical educator and nursing students.

Coordinators have many responsibilities, which include prepare and host clinical meetings, foster effective communication between academic and clinical educators, develops faculty orientation, provides simulation tools, write scenarios and gather simulation materials (Flood & Robinia, 2014).

Faculty development in simulation provides the educator with a working knowledge of a simulation, which will help them to overcome these feelings of inadequacy (Hunt, Curtis, & Gore, 2015). The teachers' comfort and confidence levels increased when clinical coordinators were available to provide extra support during a simulation event. Also, the comfort and confidence levels of the educator had a positive effect on student learning. Another strategy that can be applied is communities of practice. Communities of practice are a group of teachers' who interact with one another regularly to share ideas, concerns, and engage in knowledge, collective learning, expertise, and educational practices (Abigail, 2016).

Faculty learning communities. The implementation of faculty learning communities can enhance faculty development. These communities are a group of teachers, administrators, students, and staff that engage in working collaboratively on teaching and learning topics or projects. These communities provide support, faculty encouragement, faculty development, and growth within educational institutions, teaching and learning scholarship and faculty and academic progress (Sicat et al., 2014). Steiner (2016) commented that nursing educators need faculty development programs designed for learning communities that will have a positive impact on teachers and the universities that they serve.

Faculty development is essential to the university's teaching and learning, the quality of education, and the academic success of graduate institutions. Faculty development can include a variety of activities such as teaching, curriculum development, conducting research, administration, and leadership. Universities and colleges should first identify the training needs of faculty members for simulation technology to achieve quality teaching and learning.

Abouelenein (2016) identified training that will help administrators build better training programs, develop training activities, improve training effectiveness, and identify clinical instructor performance challenges. As educators, we need to remember that learning communities are not the same. Still, they do improve teaching skills, the academic performance of students, enhance training needs, and help in the development of faculty development programs.

Including experiential learning in faculty development. There are times in which institutions of higher education select new and adjunct teachers that have no formal training as educators. In this instance, the events of faculty training programs are essential. For teachers to become competent instructors, teaching skills are imperative. Faculty development programs should include several key concepts, which include the use of experiential learning, opportunities for teacher feedback, positive relationships between facilitators and other teachers, the use of a variety of educational tools and technology, and the principles of teaching and learning. A faculty development program that includes these features will ensure that each faculty member will be adequately trained and prepared for their role as nursing educators (Merillat & Scheibmeir, 2016).

Also, college training programs should foster faculty motivation, self-improvement, self- assessment, and ongoing professional growth. According to Iwasiw and Goldenberg (2014), for faculty development to be successful, it should include training that involves the institution of education, professional organizations, and all faculty members. Faculty development is a process that enables the production of a learned society (Morales, 2016). It is crucial that educators become and remain the masters of nursing education. Instructors provide nursing students with guidance, encouragement, and knowledge that they require in their chosen professions.

For this reason, developers and facilitators of faculty training need to include concepts of Knowles' theory of andragogy. Several key concepts are associated with this model, consisting of the need for learning, experiential learning to problem-solve, and the assigned worth of the education. These concepts are essential to the development of quality teaching (Morales, 2016).

Educational institutions should make sure that faculty members understand and manage their perceptions of simulation technology. A study found that many clinical educators fear the use of simulation and the development of student activities (Livesay et al., 2015). Their concerns may include a lack of knowledge, clinical skills, administrative support, credibility, and an increase of student problems (Livesay et al., 2015). Faculty development can decrease these fears and help manage faculties' perceptions of simulation if all teachers have the same frame of reference to simulation-based learning (Livesay et al., 2015).

Faculty mentor programs. The creation of a formal faculty mentor program is a strategy that can help meet the needs of the faculty's development. A study concluded that mentors provided the mentee with positive relationships, support, training, and an increase in confidence levels of faculty, enhance faculty development in teaching skills, increased faculty motivation and collaboration (Haines, & Popovich, 2014). Mentors should have sufficient training and experience to meet the needs of the mentee. If this does not occur, then the faculty development program will not be successful (Haines & Popovich, 2014).

Berragan (2011) commented that students' competence and confidence levels also increased because of the positive effect that simulation had on the faculty's experiences. The simulation does not just include the technology itself, but also the clinical environment, the nursing student, and the educator. All four elements together produce an experience that is memorable for all simulation participants. High-fidelity simulation has become an innovative approach to nursing education. Therefore, it is imperative that educators become familiar with their attributes regarding teaching and learning. Simulation technology is a valuable educational tool for nursing students. It allows the learner to transform nursing theory into clinical practice.

Faculty development and simulation-based training are an essential component of successful simulation-based learning. Simulation-based training has become a crucial part of nursing and medical education. Current literature reveals that simulation-based training provides the necessary technical skills that can improve educator performance in

the clinical environment and is a useful model of teaching (Paige, Arora, Fernandez, & Seymour, 2015).

It has become increasingly accepted by the healthcare industry and nursing education to provide authentic simulation-based learning experiences. Simulation helps learners to develop crucial nursing skills in a hands-on environment that fosters active learning. Also, it allows students to improve their clinical performance, enhance their teamwork and communication skills (O'Leary et al., 2015).

A fundamental concept in active development and training is the ability of nurse educators to transfer their knowledge and learning (Rock, 2014). Simulation coordinators, who are developing faculty development programs for nursing educators, should conduct assessments to determine the effectiveness of the teaching.

Administrators can verify assessments by the instructors' desire to integrate new knowledge and practices into their classrooms or educational settings (Ignatavicius & Chung, 2016).

It is imperative that colleges and universities develop faculty programs that will help the teacher to find out how to transfer the knowledge learned in the classroom. Furthermore, faculty development programs can improve nursing skills, develop new approaches to teaching and learning, fosters creativity, provide teachers with opportunities for networking, and encourage an increase of enthusiasm for further changes in simulation-based learning and nursing education. Simulation training may overwhelm some faculty members. Therefore, it is crucial for simulation coordinators to be prepared for the practice. According to Hallmark (2015), there are four critical

elements in developing an effective faculty development program. These items include appropriate training materials, expert trainers, formulation of plan design and coordination, and implementation of the plan.

Faculty development programs can include practical online simulation training, which offers an alternative to in-person, hands-on training. As stated by Kim et al. (2016), there is inadequate faculty development and competence for simulation training, which is a significant barrier to university learning. Faculty development programs are vital as they strengthen teacher competence and motivation towards their knowledge (Kruger, Van Rensburg, & De Witt, 2016). New nursing faculty can combine online learning, traditional clinical training, and hands-on training, offering greater flexibility and convenience. As institutions of higher education continue to use simulation to augment nursing education, it is paramount for them to understand the professors' perceptions and whether they will continue to include this technology into their curricula.

Simulation is increasingly incorporated into nursing preparation instruction. Simulation offers creative approaches for the clinical nurse educator, that helps to produce graduates that can provide safe nursing care in a complex practice-based environment (LeFlore, & Thomas, 2016). New advancements in simulation equipment require continuous learning. The faculty needs to learn the latest equipment and technology to teach correctly. The purpose of simulation education is to provide faculty and students with opportunities for active learning, creativity and to improve upon problem-solving skills. The use of simulation in nursing education is encouraged by the development of new and improved technology (Bland, Topping, & Wood, 2011).

Potential Learning Opportunities for Faculty Simulation Training

Leaders for educational institutions can foster faculty development program models to advance and support the university's teaching and learning for simulation technology. These models include college-based centers, which offer a wide range of activities, but they can be too broad. A faculty development committee is a model that encourages faculty and staff to take part in the elaboration of the training program.

Mentoring is a model that is used to build relationships between nursing educators; these relationships occur between experienced and inexperienced educators (Parrish & Sadera, 2019). The disadvantage of this model is that it could produce a mismatched pair, which could create frustration (Parrish & Sadera, 2019). Finally, faculty-learning communities can be developed to help build an institution or the individual faculty member. The disadvantage of this model is that it can be expensive (Parrish & Sadera, 2019).

Universities of higher education, college administrators, and clinical faculty need to remember that there are essential factors that should be considered in the establishment of program development and evaluation regarding simulation. These factors include the creation of simulation policies, trained faculty who will function as facilitators, scenarios that will provide learning objectives, orientation schedules, trained coordinators, and clinical technicians (Coffman, Doolen, & Llasus, 2015).

Faculty development can enhance teaching and learning through collaboration for educational institutions to build successful faculty development programs; they should listen to all participants. They should also provide leadership and foster ownership.

Higher education institutions need to provide administrative support, develop relevant

principles, and promote an organizational culture. There should be opportunities for growth and encouragement for motivation and enthusiasm. The administration needs to foster an atmosphere of collaboration and measures for an acknowledgment (Lancaster, Stein, MacLean, Amburgh, & Persky, 2014).

Faculty development programs are designed to increase the departments' knowledge, clinical skills, and their attitudes towards simulation and new technologies. It also provides an avenue that improves teaching effectiveness for nursing education. Nursing leaders need to remember that some faculty development plans do not have sufficient evidence-based support for their programs. According to French and Hales (2016), faculty development lacks factual support for current development plans and do not meet the university's needs. Simulation technology is a significant innovation in medical and nursing education. A study revealed that 100% of medical schools, 85% of clinical programs, and 67% of physicians and nurses use simulation technology as a means of augmenting their clinical education (French & Hales, 2016).

As stated by Nordquist and Sundbery (2015), institutions that broaden faculty development programs need to practice learning theories, such as behaviorism, cognitive constructivism, and social constructivism, that will help in the effectiveness of the design of these programs. Nursing leaders need to remember that uniformity for faculty members involved in simulation technology and nursing education is crucial. Clinical simulations are a very effective strategy for augmenting the nursing students' learning in the clinical setting, especially since clinical practicum sites are limited. Nursing programs should remain proactive in the use of simulation technology as a teaching and learning

tool, which will prepare future nursing students for a healthcare system that is continuously changing (McNeill et al., 2012). Faculty development for nurse educators should continue for teachers to remain competent in the use of this technology and any other techniques developed in the future (Peterson, Watts, Epps, & White, 2017). Therefore, it is the responsibility of colleges and universities to plan, design, implement, and coordinate effective faculty development programs (McNeill et al., 2012).

Implications

Nursing programs primarily use simulation techniques in the form of case studies, role-playing, and to improve and practice clinical nursing skills. Also, simulation activities are useful in teaching physical assessment, developing critical thinking and decision-making skills (Loke et al., 2014). The challenge of enhancing faculty development in the use of simulation technologies is that higher learning institutions need to design new and improved teaching tools. The objective structured teaching exercise is one teaching tool that could be used to enhance faculty development.

Boillat, Bethune, Ohle, Razack, and Steinert (2012) suggested the objective structured teaching exercise is a teaching and learning strategy that involves scenarios and feedback that can be included to enhance faculty development for simulation technology. The objective structured teaching exercise is an education and learning tool used in medical and nursing education for many years. It offers several advantages that include a broad range of teaching situations, control over a clinical environment, opportunity to improve teaching and nursing skills, and provides immediate feedback with debriefing (Boillat et al., 2012). It is essential that educational programs continue to

evolve and improve their teaching practices and collaboration among all members for faculty development (Painter & Clark, 2015).

A possible direction for this project could involve the development of an online faculty program. This program could combine a face-to-face component, which would allow teachers the opportunity to practice their nursing skills with simulation technology. The advantages of this type of program would allow access for all faculty members; provide time to attend regardless of their teaching schedules and first-hand experience with online learning. Also, higher learning institutions may find that the significant disadvantage of this program is that it could be time-consuming to develop and expensive to maintain (Herman, 2012).

Future research based on anticipated findings of the data collection and analyses continues in the direction of determining the best methods for integrating simulation programs into the nursing curriculum. Also, more research needs to be conducted to ascertain strategies, which could be used to structure effective training programs to enhance faculty development in simulation technologies. Furthermore, research needs to continue into other possible methods that could be included in delivering clinical education (Murray, 2014).

Summary

The use of simulation technologies in nursing education is expanding, and many institutions of higher learning are not providing adequate faculty development in the use of this technology. It is essential that nurse educators receive this training, as it will prevent the nursing student from reaping the full benefit of the clinical experience.

Faculty development programs enable nurse educators to continue to develop and hone in on their nursing skills, which can help to improve the simulation-based learning for their students. This study was undertaken to explore the nursing faculty's experiences and perceptions regarding faculty development related to simulation technology.

Consequently, due to a lack of faculty development, many educators have a negative disposition regarding their level of competence and confidence in the use of this technology as a teaching tool. Despite the previous information, a more detailed understanding of this topic of inquiry will be provided in the following sections, which includes the methodology, the project, reflections, and the conclusion. The methodology will describe the research method, the data collection, and analysis process. The project will explain in detail how the problem was addressed. Reflections will provide the reader with project strengths and limitations in dealing with the issue. The conclusion will give a summary of all considerations.

Section 2: The Methodology

Introduction

Simulation technologies are used in many institutions of higher learning to augment the clinical experience for nursing students. For students to achieve an optimal experience with simulation activities, clinical nurse educators should be highly trained in these technologies to use them as an effective teaching and learning tool. Universities and colleges support the use of simulation technology as a source of education for the health sciences; however, educational institutions do not provide as much technical training as needed for faculty development in the use of these technologies (Nehring et al., 2013). Waxman et al. (2019) stated that educators do not have formal faculty developmental training and are unaware of their lack of training in clinical simulation.

The local problem that prompted this study is the lack of nurse faculty adequately trained in the use of high-fidelity simulators. In this research study, I explored the perceptions of nurse educators' faculty development regarding the use of simulation technologies. According to Koh, Chai, and Lim (2017), educators are implementing ways of learning in this 21st-century era by integrating technology in faculty and student teaching and learning environments.

Research Questions

The research questions that guided this inquiry involved the nurse educators' personal experiences in faculty development regarding the use of simulation technologies.

RQ1: What are the experiences of nurse educators at a 4-year private nonprofit university regarding faculty development in simulation?

RQ2: What are the perceptions of nurse educators at a 4-year private nonprofit university regarding their improvement of nursing skills in simulation-based activities? The qualitative research design used to address this problem was an instrumental case study. Case studies are used to create a more in-depth understanding of a phenomenon in its natural setting. Crowe et al. (2011) stated that an instrumental case study is one that seeks to "gain a broader appreciation of an issue or phenomenon" (p. 2).

Research Method

Merriam (2009) suggested that qualitative research designs are naturalistic, interpretive, holistic, descriptive, inductive, and used to gain an understanding of an issue or phenomenon. Schoepp (2003) presented seven tenets that make for proper qualitative research:

- 1. The goal of the examination should be aligned with the methodology, as it will allow the research findings to be logical and based on fact.
- 2. Qualitative research should have a comprehensive literature review. A work of literature provides the researcher with a foundation that will help build ideas, support the research findings, and determine if the research is justified.
- 3. The researcher should provide transparency; biases must be presented to the reader.
- 4. A researcher should be reflective. Reflexivity offers a strategy for the researcher to recognize bias and helps in guiding the research.

- 5. Qualitative research should include triangulation. Triangulation is a strategy that uses multiple data sources that support the internal validity of a study.
- 6. Qualitative research should provide full descriptions to the reader. A thick description allows the reader the feeling of being part of the phenomenon being investigated.
 - 7. The study's conclusions should support qualitative research.

For a novice researcher and scholar-practitioner, a qualitative approach has several limitations. These limitations include qualitative research depending on the investigators' skill, and bias may play a role in the research findings. The qualitative research method may not always be generalizable (Kennedy & Montgomery, 2018).

Also, the reliability and validity of the results in the investigation are harder to maintain (Anderson, 2010). Furthermore, the conclusions in the qualitative research method should be designed thoroughly (Kennedy & Montgomery, 2018).

The problem that prompted this research study was the lack of faculty development for nursing educators related to simulation technologies. I selected a case study approach to gain insight and understanding into the complexities of this issue of interest from the participants' point of view. Crowe et al. (2011) stated that a case study approach allows the researcher to explore a phenomenon or issue under study to gain a deeper insight and an in-depth understanding of a topic of inquiry.

Yin (2013) identified that case studies are used when the researcher has no control over the situation or event and wants to study a phenomenon in its real-life context. The strengths of a case study include the ability of the researcher to perform a detailed, in-

depth review of a problem. Cronin (2014) summarized that a case study approach could also provide further insight into a phenomenon and allow the issue to be studied in its natural setting. The limitations of the case study design include the possibility of researcher bias, and ethical issues could develop, which may affect the research findings.

The case for this research study was the small amount of faculty development for nurse educators in simulation technology. The boundedness or boundary of this research is the faculty development program for nurse educators at a school of nursing located in the eastern region of the United States. According to Yazan (2015), boundedness refers to an entity that the researcher wishes to explore or study. It is essential because it shows the researcher the boundaries of the phenomenon or issues investigated.

An instrumental case study was selected because I wanted to gain insight and understanding into the issue of faculty development for clinical nurse faculty in simulation technology. Stake (1995) commented that there are several types of case studies: intrinsic, instrumental, and collective. An intrinsic case study focuses on acquiring a better understanding of an issue or phenomenon. An instrumental case study provides the researcher with better insight into a problem, can be used to redefine theory, and the topic itself is dominant. A collective case study is a study made up of several instrumental case studies.

Qualitative designs such as an ethnographic study, grounded theory, or phenomenological study were not selected for this project because they could not provide me with the insight and understanding needed to design and implement a training program. Ethnographic research focuses on different cultures or communities, and it is a

design of inquiry taken from anthropology. Grounded theory research focuses on theory building of a process, which is rooted in the participants' perspectives, and it is a design of inquiry taken from sociology. A phenomenological research design is taken from philosophy and psychology; its focus is on the participants' perspective of a lived experience (Creswell, 2014). The primary purpose of this study was to increase the body of knowledge on the importance of professional development for the use of simulation technologies as a teaching and learning tool for nurse educators.

Participants

The criteria for selecting participants was as follows: nursing faculty who teach in either the clinical or classroom settings providing educational services for either a bachelor of science in nursing program or a master of science in nursing program. All faculty participants had experience or training in the use of simulation and may be either full-time or adjunct faculty members. In this study, I interviewed the participants to gain a more in-depth insight and a better understanding of the perceptions of nurse educators regarding faculty development related to high-fidelity simulation and other simulation technologies. To obtain a greater understanding and achieve data saturation, I intended to have a sample size of 12 to 15 informants. But, due to the limited number of educators at the study site institution, and the shortage of nursing faculty in general, seven participants were chosen who have experience in faculty development in simulation. All participants met the above research criteria and were from the same institution. Data saturation was achieved through the data collection process.

To gain access to the members, I developed a relationship with the dean of the nursing school and the director of the clinical learning center, which acted as my gatekeepers. The clinical learning center director provided me with a list of potential nurse educators who met the above study criteria. I offered a recruitment letter that discussed the purpose of the study, the goals of the study, and the data collection method via email. I also provided a form requesting consent to participate in the research project. This form provided my contact information, the purpose of the study, the procedures for selecting the research data, and a confidentiality statement. A purposeful homogenous sampling technique was used for this research study. I decided on this sampling method to identify participants that had similar experience and knowledge with the human patient simulator and other simulation technologies (Creswell, 2014).

To establish a researcher-participant working relationship, I secured an agreement for participation in the research project (see Appendix C). I treated each participant with acceptance, mutual respect, and reassured them that they had power and control over their involvement in the research study. I fostered an open and honest communication and presented a welcoming attitude. Furthermore, I was mindful of the participants' thoughts and feelings regarding this research project with a non-judgmental disposition.

Research Site

The chosen research site for this project study was a four-year private nonprofit university located in the Eastern United States. All personal interviews for data collection were conducted via Skype telephone conferences. Procedures for accessing the research site and access to the study participants are as follows.

Once the IRB from Walden University approved the proposal, I contacted the director of the nursing school. There was no professional relationship between myself and the head of the nursing school or the dean. Also, I obtained an IRB application from the university's research committee. Furthermore, I supplied an explanation of the study focus, the purpose, and what was to be accomplished by the research study. All the above information was made available to the participants and the university's administration.

Ethics and Confidentiality

I discussed confidentiality issues and potential harm that might arise from this project study, such as mistrust among members and loss of relationships between study participants. Also, I explained to all involved on how the confidentiality of the collected data was maintained. Furthermore, there was minimal disruption caused by this research to faculty and student activities.

I provided clarification on what was done with the study findings, the reasons why this research site was selected, and possible benefits to the college. The above procedure fostered an environment of openness and honesty among all study members, which created a positive working relationship. Measures for ethical protection of the subjects involved the use of informed consent that was provided to all research participants. The consent form provided study objectives and all aspects of the research process. All information received from the participants and study data was protected using codes that substituted for participant identifiers, which maintained confidentiality. I stored all the information and data in a locked desk in my office at my residence. I am the only individual who has access to the research data.

All research participants were protected from psychological, physical, social, and financial harm. Also, I maintained an open and honest relationship with the members concerning the research and avoided all deception. Furthermore, an explanation was provided to all participants regarding their right to withdraw from the research study at any time during the study without repercussions, coercion, or being pressured.

Data Collection

The informants received a recruitment letter that provided them with an explanation of the study purpose, expectations for confidentiality, my contact information, and a description of the interview process via email. The qualitative data collection method included informal, semistructured one-on-one interviews. I used a series of pre-established, broad, open-ended questions related to the topic of inquiry. Also, I collected and reviewed all training materials, such as simulation manuals. The justification for the data collection method was that it provided me with an in-depth understanding of the problem under investigation. The participants' experiences, beliefs, attitudes, and perspectives on faculty development in simulation technologies were very beneficial to the elaboration of the purpose of the study and answered the research questions.

I selected a sample size of seven participants because this facilitated a close relationship with the respondents, and the fewer the number of participants helped me to gain a more in-depth inquiry from each subject. I interviewed each informant with the aid of an interview guide, which was researcher produced (see Appendix D). The anticipated duration of each meeting was approximately 30 to 45 minutes. After obtaining IRB

approval and participant consent, I scheduled the dates and times for each session. The interviews were recorded on different days, for the convenience of the informants. During the interview process, I documented detailed descriptive field notes during and immediately after each interview. Data collection began after approval from Walden Institutional Review Board (IRB# 04-02-18-0132956).

Also, there was a possibility that I could miss essential aspects of the one-on-one interview during the documentation process. For this reason, all participant interviews were audiotaped with a hand-held device, which provided an accurate and permanent record of each meeting. An audiotaped interview allowed a precise summary of the interview process. It also allowed me to observe the participants' verbal communication, body language, and tone of voice. There were no follow-up interviews, but I did solicit feedback from each faculty member at the end of the study. Summarization of all information was emailed to each participant, which allowed them the opportunity to question and determines the accuracy of the research findings.

I created an interview guide that contained 10 interview questions specific to the topic of inquiry. Also, an interview protocol was established. Interview Questions 1, 2, 3, 4, 5, and 6 addressed the participants' experiences with faculty development related to simulation were in alignment with RQ1. Interview Questions 7, 8, 9, and 10 focused on the participants' clinical skills and the improvement of their level of confidence and competence in simulation training, which addressed RQ2.

The tracking system that I used for the research data and emerging understandings was a reflective journal. A reflective journal was a way of critically thinking and

analyzing research data retrieved from the interview process. It allowed me to document insights, understandings, experiences, obstacles and challenges, mistakes, and choices made, and actions taken throughout the research process.

My position was one of an interviewer, and I had no current professional role at the study site. I had no past or present professional relationships established with the study participants. Also, I had no prior contact with the program head. Therefore, the lack of professional associations at this institution of higher learning did not affect data collection, nor did it change my experiences or biases to the topic under investigation.

Data Analysis

The data analysis focused on the nurse educators' perceptions of faculty development that they received in their institution. I transcribed all research data verbatim, within 24 hours after each completed interview. All transcriptions were read, re-read, and examined for recurrent themes that emerged. This process aided in the avoidance of bias, misinterpreted information, and maintaining data integrity (Lodico, Spaulding, & Voegtle, 2006). All field notes about participant interviews were organized with each interview transcription and stored in my office. I analyzed all data manually after the transcription process without the use of software programs. Next, while listening to the audiotapes and reading the transcriptions, I took notes on the interview content. Once a general understanding of the information was retrieved from each interview; the coding process began.

During the coding process. I reviewed all the audiotapes and transcripts from the interview process. Each piece of data was analyzed and placed in its corresponding code

category for patterns, themes, and relationships (Creswell, 2009). During the coding process, I initially assigned each code a three-digit number, which made the coding process difficult. For this reason, each code was assigned a color. The use of color-coding organized similar information into smaller groups, which condensed it into more manageable bits and helped in achieving saturation of themes.

The thematic analysis provided insight into the nurse educators' perceptions of faculty development related to simulation technology. This process made it easier to derive meaning from the information retrieved from the data. Coding is an essential fundamental process that enables the analysis of the research data to take place and subsequently provides the steps that aid the study purpose (Williams & Moser, 2019). Saldana (2013) suggested that a code is a word or short phrase to identify and organize specific information found in research data.

Assuring accuracy and credibility. Several steps were performed to ensure and enhance the accuracy and reliability of the research findings (Creswell, 2012).

Triangulation was achieved by reviewing transcriptions from each personal interview, field notes, institutional training materials, and the simulation curriculum related to faculty development. Accuracy and credibility were verified by member checking. A copy of the interview transcript was emailed to each participant to confirm accuracy.

Also, I critically reflected upon any biases regarding the topic of inquiry.

Strengthening the validity of the research. To enhance the validity of the study findings, I analyzed all study data, including discrepant or negative cases. Negative case analysis involves searching for research evidence that does not support the results of the

study (Merriam, 2009). It is essential for the researcher to examine the supporting and discrepant data thoroughly. The use of discrepant cases will broaden and confirm emerging themes that will arise.

Limitations

There are limitations to all qualitative research studies. According to Simon (2011), restrictions are considered constraints that are beyond a researcher's control and can affect the outcome of the study findings. I identified one weakness in the study as being the research setting. The setting only consisted of one school of nursing, which would be difficult for generalization to a larger population. Also, because the study was voluntary, educators could choose to withdraw from the study at any time. During the data collection phase, two of the educators were new to the field of education. Therefore, their interviews were not as forthcoming regarding data as the other participants'. Furthermore, qualitative methods may miss the study context and target more on the meanings and experiences in the study (Rahman, 2017).

Reliability and Credibility Procedures

Credibility and reliability are two critical aspects of qualitative designs; research should be trustworthy and valid. According to Hussein (2015), triangulation is a strategy that can be used to maintain credibility and reliability in qualitative research. Member checks or respondent validation is an approach that can be used to assure the accuracy and reliability of the research findings (Houghton, Casey, Shaw, & Murphy, 2013).

Merriam (2009) stated that the researcher's position or reflexivity is another strategy that is used to maintain credibility. The first strategy that I used was

triangulation, which involved collecting data from multiple sources, including personal interviews, field notes, institutional training materials, and the simulation curriculum-related to faculty development. Second, I used the strategy of member checking, whereby the participants were asked to evaluate the research conclusions of the study to determine if they were plausible.

The final plan that I used was the researcher's position or reflexivity, which involved the process of critically reflecting on my biases or viewpoints regarding the topic under investigation. Discrepant cases or negative case analysis was another approach that was used to maintain credibility, which involved challenging the research data (Merriam, 2009). I purposefully searched for data that could disconfirm or disprove the research evidence that did not support the research findings from the emerging data analysis.

Data Analysis Results

After IRB approval was obtained, potential informants were recruited, and dates and times for the interview were arranged for seven participants. Before the interview process, each participant could verbalize any concerns they may have about the interview process. During the data collection process, an interview guide was included to guide the discourse to affirm each research question.

Interviews were transcribed within 24 hours, recorded with a hand-held device with participant permission. This ensured accuracy of the information that was revealed. The audio recordings were transcribed verbatim and were read several times before the coding process. The transcribed information allowed me to gain more insight and a

deeper understanding of the research data. I copied each of the interviews manually, without the use of a software program.

After each interview, I reflected on my thoughts and feelings and recorded them in my field notes. I emailed each participant a copy of their transcript and asked them to evaluate and verify my interpretation of the information that was revealed. In qualitative research, this process is known as member checking and helps to improve the accuracy and validity of the accumulated data (Houghton et al., 2013). All the participants verified that the information that was gathered agreed with my interpretation of their interview. I analyzed all coded data manually without the use of software or computer programs. Seven nurse educators from one university revealed their perceptions of the following research questions in extensive one-on-one interviews with the investigator.

The data acquired from the discussions with the informants were coded, analyzed, and revealed three major themes. Those themes were: (a) faculty-initiated professional development, (b) learning through simulation-based education, and (c) benefits of simulation for teaching and learning. Most of the participants' responses from the interview questions related to RQ1 were coded as *faculty-initiated professional* development and learning through simulation-based education. The theme benefits of simulation for teaching and learning were identified from participant responses related to RQ2. The information that was revealed during the interview process could be coded as addressing more than one theme, thus providing a bounty of data for the university administrators

Theme Description and Supporting Factors

Theme 1 Faculty-Initiated Professional Development

Theme 1 addressed RQ1. The theme revealed a general trend of the overall views and perceptions of faculty members about the importance of faculty development and how they felt about faculty-initiated professional development and simulation training. The analysis of the interview data revealed that the participants were pleased with seeking their opportunities for faculty development. Also, they realized that their growth and development helped to improve their teaching excellence, thereby promoting an increase in student learning.

Opportunity for faculty development. Faculty development opportunities for professional growth that are sought out provides the educator with improved perceptions of teaching, how they taught, and how they viewed teaching as a profession. Also, seeking out their development was most beneficial to their research, motivation, and enthusiasm for nursing education and simulation training. Participant 1 voiced that finding her own sources of faculty development had increased her motivation and her independence to improve upon her learning. Participant 1 stated:

You need to seek out your own opportunities for professional development and growth, continuing education and training that is of interest and value to you. But largely, it's self-motivating, a very independent process. I do not feel like we have formalized simulation training.

Moreover, Participant 2 disclosed that faculty development is the foundation for educational excellence, but there are times when educators should pursue their growth

and development opportunities. Participant 2 stated, "Sometimes we have to seek out our own opportunities for growth and professional development." Also, Participant 3 revealed that researching subjects that are interesting to you as an instructor is an approach to acquiring professional development. Participant 3 explained, "I am an adjunct instructor, for most of my professional developmental training comes from my research and my own need and desire to learn more." Furthermore, many nurse educators rely on themselves and others for the faculty development that they need. Participant 4 acknowledged,

There really isn't any formalized training; I believe we rely on ourselves and the individuals that have more than experts in the simulation. And we can go to training if we want too. I mean, there are places to go to and things to do, and you can ask for that as part of your development. It all depends unfortunately on the budget and those types of things. Learning it overall, I would say there isn't any formalized training. It's hit or miss.

Promoting faculty development. Supporting faculty development is essential as it will help educators to become more active and competent teachers in the teaching and learning process. It will also provide institutions of higher learning with the academic excellence that is needed to keep them competitive with other institutions. It was reported that faculty members should have access to teacher-improvement approaches such as workshops, seminars, retreats, or mentoring. Participant 5 stated,

So, there is kind of an informal orientation process that you get when you are hired at the school. And that involves hooking up with people who may be

teaching or doing research or doing service in areas that you are interested in.

There isn't any formal training.

In short, promoting faculty development is as relevant today as it was years ago. It helps to empower teachers to transcend ordinally teaching and establishes a more dynamic academic learning community. Educators should be provided with the training that they require becoming successful nursing instructors.

Theme 2: Learning Through Simulation-Based Education

Theme 2 addressed the RQ2. To answer the first research question, the theme revealed a general trend of the overall views and the faculty members' perceptions concerning the use of simulation-based education. The analysis of the interview data revealed that the participants used several simulation-based models and techniques in their teaching and learning. Simulation-based learning in the nursing discipline is critical for the development of highly skilled nursing students (Aebersold, 2018). This technique is used to develop the students' nursing knowledge, skills, their attitudes towards nursing while keeping them in a safe, realistic environment.

Simulation models and techniques. Participant 5 found that by using low-fidelity simulations, it provided her students with the clinical experience that they needed to make critical decisions. Participant 5 stated, "we have done low fidelity simulation for things like health assessments, check-offs, and high-fidelity as they work their way through the program; throughout all courses." She also revealed that they use standard patient actors as well. The research findings affirmed that the use of the standardized

patient was one of the most common types of simulation that were applied for communication (Beaird, Nye, & Thacker, 2017). Participant 4 indicated,

We have used the standardized patient for communication simulation, and we did not record it, but we did use it. Students are a little hesitant about what's going on in one-on-one conversations. We have used a standardized patient and using a birth simulator combined, which was great. We have a neonatal simulator called DOBE, and we have used that for listening, auscultating breath sounds and heart sounds.

The standardized patient is extensively used in nursing education; it provides students with physical, psychological, and emotional aspects in the clinical setting (Rutherford-Hemming, Alfes, & Breymier, 2019). Participant 7 commented, "Yes, we use standardized patients. We use two different types. One, we use professional actors from the school of medicine that come over to help us in the simulation. We also use volunteers that come who really just role play."

Standardized patient simulation can be used for different procedures, which allows the learner to practice different nursing techniques until they are proficient.

Participant 1 acknowledged, "We are doing standardized patients. I also teach the nurse practitioner student procedures class, as the whole class is a simulation. Anything from biopsy, punch biopsy, shave biopsy, and cryotherapy." There have been opportunities for educators and actors from other medical and nursing schools to come and participate in the standardized patient simulation. Brekk confirmed,

We do have standardized patients. Through the medical school, we do have a group of actors who play patients, and they come over and do some Sims with us also. We do have a group of mostly nursing alumni and stuff that come back and act as actors for standardized patients.

Some of the other techniques that were discussed included, role-playing, and debriefing, but it appears the educators rely heavily on standardized patients for student learning. Participant 6 revealed,

I have also used role-playing that allows the nursing student to act out an event that was given to the student. Debriefing is another method that I use, which helps the student to explain and consolidate the simulation experience that they have just had with the knowledge that they have already gained.

Role-playing and debriefing are integral to simulation-based learning and are useful teaching strategies and are active learning approaches that consolidate knowledge and skills for nursing students. Both also play vital roles in student discussions, critical thinking, and clinical judgment.

Theme 3 Benefits of Simulation for Teaching and Learning

Theme 3 addressed RQ2. The third theme includes the perceived benefits of simulation-based activities to their teaching and learning practices. It was concluded that simulation was very beneficial to their confidence and competence.

Instructor-related benefits. Simulation and simulation-based activities can increase the confidence and capability of an instructor. Participant 4 found that as a new educator, the help that she received from other more experienced educators was critical

regarding simulation, and it helped to increase her confidence as an educator. "So, for me, my confidence has increased because of simulation and good friends that really helped me. And I think my experience as a nurse educator has made a difference too."

The use of simulation-based activities can also increase an educator's confidence and preparedness. Participant 1 acknowledged, "I think any time that you can practice and teach others in the simulation, it increases your confidence. And I think it also increases your feelings of preparedness when you are going into those experiences." Educators have found that simulation and its techniques have increased their nursing knowledge and understanding concerning simulation. Daphne reported,

I think I have been able to improve not only in my knowledge in simulation, but also the science behind it. I am better able to serve as a mentor to new faculty.

And, I am even more comfortable with the approach of new faculty training even though we do not have something that's mandatory in place now.

Participant 5 found that simulation training helped to improve her confidence and competence in her teaching practice. "I think the initial going out to conferences and the journals, and the literature helped to improve my confidence and competence in the simulation." Many nurse educators concluded that their confidence and competence in their nursing practices were attributed to simulation training (Kiernan, 2018). Participant 2 confirmed the same sentiment, "So, as far as using simulation and stuff, it has increased my confidence and competence. So, I think the training that I received helps me to be a much better instructor." Finally, Participant 6 stated,

Well, I think the training helps from a confidence perspective because I know what's expected of me. And the training has helped educate me on basically the state of science around simulation. So, I feel more confident about going in knowing those things and then having the practical application as well. I would often say yes to a competence perspective. I have been fortunate where I am, and in addition to the training during simulation issues, almost always, there's someone to ask. So, I feel like that has helped my competence as well.

In the final analysis, the educators found that the instructor-related benefits that were most important to them were their confidence and ability related to the use of simulation technology. They acknowledged that their growth and development as nursing educators in the clinical arena depended on the learning and experiences that they received from simulation training regarding their faculty development.

Review of the Findings

In this section, I present a review of the study findings, described in detail in the previous sections. Likewise, I discuss those findings regarding the literature, conceptual framework, the accuracy of the reported data, and the project. Also, I included my thoughts on determining what project to pursue.

Several types of simulation can be used to enhance the learning process. These models include task-trainer simulation, which involves an artificial body part that allows for repeated practice of a nursing skill. Standardized patient regarding simulation is defined as a simulated patient. A person simulates an illness of a patient or an actual patient who presents his or her ailment (Ignacio et al., 2015). Virtual reality simulation is

a model that uses three-dimensional objects to create a realistic learning environment.

Tissue-based simulation allows the learner to practice procedural skills such as working with tissue from a biopsy. Manikin-based simulation, which is a technique that is commonly used to practice nursing skills with the aid of a computer-based model, and it can be either low or high fidelity.

Role-playing is a technique that is used to build confidence, improve communication, and problem-solving skills. It is "a teaching method that has been used widely for experiential learning" and that "provides an imaginary context in which issues and behaviors may be explored by participants who take on a specific role or character" (Ching, 2014, p. 295). Debriefing is another technique that is used to promote student reflection and provides feedback on the student's deficits regarding his or her performance (Cheng et al., 2015)

Research has found that two of the critical advantages of simulation-based training is the transformation of one's confidence and competence regarding clinical learning (Wright et al., 2018). Simulation training is a critical educational tool used in nursing education. It is an essential component of the nursing curriculum that promotes confidence and competence for the nurse educator. The clinical educator's confidence and competence are created and enhanced using current and future simulation technologies. Confidence and expertise in clinical nursing lead to an advanced nurse practitioner who will promote confidence-building behaviors in their students, which leads to increased student competencies. Therefore, faculty members should have time to

learn this technology and have access to simulation experts to integrate this educational tool into their teaching curricula.

In summary, the findings in this research study revealed that nursing educators were passionate about promoting excellence in the delivery of nursing education. And they acknowledged the importance of quality faculty development programs in achieving this lofty goal. The educators disclosed that the faculty development needs of the nurse educator are critical due to the nursing shortage and the vulnerability of qualified registered nurses in education and the healthcare system. The educators agreed that it is a priority to establish and cultivate faculty development plans to enhance and empower educators so that they can help develop communities of teaching and learning.

The study showed that educators had to seek out their opportunities for simulation training, and it was a positive path to their professional growth. The faculty members voiced that seeking out their training was an independent process. This process increased their motivation to learn new ways of teaching, which helped to improve their teaching excellence. The faculty members described several training opportunities that they sought after, which included simulation conferences, simulation workshops, and other nursing subjects that they desired to learn.

Despite their satisfaction with seeking out their opportunities for professional development, the educators were concerned with the lack of formal simulation training. Many of the educators relied on themselves and other faculty members that had some experience with simulation to get the training that they required. Some of the faculty members were new to the educational arena and did not have experience with simulation

education. Therefore, this made them apprehensive concerning this type of training. During the interviews, some of the educators voiced that if faculty members remain inadequately trained, simulation technology will not be sufficiently incorporated into training. Also, the lack of formal simulation training can have a negative impact on simulation pedagogy.

Furthermore, it was widely recognized by the educators that the simulation training they did receive from other faculties, did help to increase their learning and confidence in simulation, and it enabled them to include this technology in some of their educational levels. The use of formal simulation training will help to improve the professional development program. Based on these study findings, I concluded that the research questions posed by this study were answered successfully. In the final analysis, these results directed the development of the project for this research study, which I predict can help to improve and enhance the current faculty development program at this institution of higher learning.

Findings Related to the Conceptual Framework

I selected the theory of skill acquisition as proposed by Patricia Benner (1984) and Kolb 's (1984) theory of experiential learning as the conceptual framework for this research study. An analysis of the participants' responses indicated that through faculty development, their nursing knowledge and skills increased toward proficiency; there was an instructor-related benefit to learning as they sought out their learning opportunities for their simulation-based experiences. Skill acquisition implies that adults move through various stages of competence toward achievement and improvement in nursing

knowledge or any behavior that needs to be changed by practice. Experiential learning suggests that learners need to engage in active learning, which helps them to gain new knowledge, which is a transformative process (Beaird, Nye, & Thacker, 2017; Rutherford-Hemming, Alfes, & Breymier, 2019; Kiernan, 2018). Educators who continued to attend faculty development sessions and took part in simulation-based experiences acknowledged their knowledge base, clinical competencies, and overall confidence as teachers, researchers, and scholars increased.

Findings Related to the Literature

To conduct this literature review for the project study, I searched in EBSCOhost, International Journal of Nursing, International Journal of Management Education, JSTOR, SAGE Journal Online databases, and Education Resource Information Center. I searched in these databases for studies conducted in the United States between 2013 and 2019. The key search terms that were used included *simulation, simulation technology, simulation-based learning, David Kolb and experiential learning theory, Patricia Benner and skill acquisition theory, nursing education, professional development, faculty development, and simulation pedagogy.*

The conclusions of this investigation are supported in the existing literature for this study. The educators in this study were faced with providing continued opportunities for enhancement to their current faculty development program regarding simulation and simulation-based learning. The use of simulation technology in faculty development is being used in all educational levels for schools of nursing. The research data that I obtained from the interviews revealed that the educator's perceptions of simulation as an

educational tool are critical for the development of successful classroom learning and improved clinical practice. Existing literature showed that simulation is a teaching methodology that is recommended by most nursing instructors and educational institutions (Shin, Park, & Kim, 2015). A meta-analysis conducted by Shin et al. (2015), found that a simulation is a practical approach to real-world situations that promotes learning and provides practice for psychomotor skills.

The educators expressed that simulation is a teaching technology that provides them with realistic environments for teaching, learning, training, and improvement in their clinical growth. Also, the educators voiced that they sought out their opportunities for professional growth regarding simulation training. And that many of them sought out simulation learning through collaboration with other educators from different universities. According to the educators, teacher engagement in collaboration provided them with more support for new teaching ideas, provided other resources, which improved their teaching, and it helped to promote interpersonal relationships. Teacher collaboration does have a positive effect on teacher performance and student achievement (Ronfeldt, Farmer, McQueen, & Grissom, 2015). Reeves, Pun, and Chung (2017) suggested that educators that collaborate with other teachers found that they had opportunities to reflect on their teaching methods which, allowed them to determine what activities would be successful or unsuccessful in the classroom and clinical setting.

Guidelines for standards of best practices related to simulation are needed to help provide the educator with knowledge and skill to apply it efficiently. Therefore, faculty development programs are even more essential. Results from previous studies have

shown that faculty development continues to be paramount in faculty learning, skill development, and ways to provide practical, life-changing, and prolific learning for the educators and their students (Prestridge, 2017). Faculty development is widely recognized as a fundamental part of the nurse educator's growth and development (Brody et al., 2016). However, faculty development programs for nurse educators continue to be insufficient and are not as comprehensive as they should be, which prevents teachers from becoming successful in the learning environment (Johnson, Hewapathirana, & Bowen, 2019). Current literature revealed that the primary focal point for faculty development is the advancement of teacher effectiveness (Steinert et al., 2016).

All the educators in this study were interested in the benefits of participating in a faculty development program, especially for simulation training. The benefits that they voiced included positive behavior changes, increased motivation for teaching, growth in nursing knowledge, and an increase in faculty confidence (Elliott, Rhoades, Jackson, & Mandernach, 2015). In contrast, challenges to a faculty development program could include an educator's resistance to change, a lack of faculty commitment, a decline in incentives to participate in learning activities, and the increased cost for designing and implementing an effective program (Fraser, Stodel, Jee, Dubois, & Cahaput, 2016). Educators in this study faced challenges in simulation, and they said that they and other instructors lacked confidence in themselves when using this technology. Nonetheless, it does take time for educators to develop their confidence and competence in the use of this technology (Aldridge, 2016).

The Accuracy of Data Reported

When a researcher conducts qualitative studies, they need to address all verification of the study data. Confirmation of the study data was achieved through personal interviews, field notes, and institutional training materials. The institutional training materials were reviewed, and they included simulation software. The first one was related to basic simulation training, and it defined simulation, theories behind it, the integration of it, and the simulation process.

The second simulation software was linked to debriefing basics, and it discussed vital elements of a successful simulation debriefing and provided a review of debriefing techniques. I also reviewed a document regarding simulation technology. It contained information on the SimMan 3G, which is the patient simulator that is used extensively for teaching and learning in the simulation lab at the school of nursing. I initially wanted to review the simulation curriculum related to faculty development as part of the triangular process, but it was unavailable due to policy updates. All data collected from each nurse educator were tantamount and themed well-matched with no discrepancies.

Summary

In this section of the research study, I have furnished a description of the study methodology, the data collection, the coding, and the analysis process. I initiated measures for gaining admission to the informants at the study site and provided procedures for maintaining ethical standards and confidentiality for all participants. I interviewed seven participants, including broad, open-ended, semistructured interviews with the aid of an interview protocol, which was researcher produced. I completed the

data collection and analysis process by conforming to the procedures presented by Creswell (2012).

Also, I performed reliability and credibility procedures to ensure that the study findings were trustworthy. My research data revealed three primary themes, which were supported by direct quotes. The coding methods based on Creswell's (2009) principles helped to achieve saturation of themes and provided the critical concepts revealed from the data analysis.

Section 3 of this research study will submit a review of current literature, goals, and guidelines for the position paper, and recommendations for enhancing a faculty development program. I will also describe plans for disseminating the study findings, and finally, I will explain the project implications and possibilities for positive benefits to society.

Section 3: The Project

Introduction

The goal of this project was to disclose nursing educators' views and perceptions about their current faculty development program and simulation training. The results of this project will furnish the university's senior leadership and faculty members with information that will help them to enhance their current faculty development plan. I proposed a project that was going to be a professional development opportunity designed specifically for the nursing faculty at the school of nursing that served as the research site for this study. But, after the research data were collected and analyzed, I found that the nursing school did offer some opportunities for professional growth and development. Still, there was a lack of formal simulation training.

The aim of the position paper for this research project was to enlighten, appraise, and prompt the senior administrative leadership concerning the state of their current faculty development program and simulation training. My role as the researcher was to show and eloquently convey the background of this case study regarding the problem of a lack of faculty development and simulation training at universities, present the research findings, and provide the leadership team with recommendations for program improvement.

For this reason, I developed a position paper to provide the senior nursing leadership with recommendations on how to strengthen their current faculty development program. I created this project to give the senior administration and the faculty members the results of the research study. The white paper will be in brochure-like form; this will

help to organize all pertinent data and relevant materials, which will clarify and provide an understanding of the study findings (Merriam & Tisdell, 2016). The position paper is presented in Appendix A, and it provides recommendations that should augment and enhance the faculty development program.

The Audience

As the researcher, it was helpful for me to determine what the audience believes about the issue, where they stand, how they are involved, and what type of evidence would be useful to them. The audience for this position paper was the senior administrative leadership and faculty members for the school of nursing. To provide support for my data, I emphasized key findings and included direct quotes from the research participants.

For this position paper, leading stakeholders were contacted to obtain their authorization to convey the results of the study findings (Creswell, 2012). I received an acknowledgment from the senior administrative leadership at the university to introduce and distribute the study findings to the faculty members in the school of nursing once my project study is approved by Walden University. My goal for this position paper was to introduce the information in ways that would help to engage the faculty, provide understanding, and furnish recommendations for the topic of inquiry.

Project Goals

Faculty development concerning simulation training continues to be a crucial component of the teaching and learning process. Simulation training remains a valid resource for nursing education, and it provides an invaluable opportunity for faculty and

student learning. The use of simulation-based education in the healthcare system requires faculty members to broaden their teaching practice and faculty development. Institutions of higher learning should continue to push for new steps to provide quality developmental training for their educators and, thereby, provide quality student clinical learning. The primary goal of the position paper was to supply the faculty members and the senior nursing leadership with recommendations on measures to improve their current faculty development program.

Rationale

The focal point of this study was on faculty development concerning simulation training and simulation-based learning. Simulation, as it pertains to the healthcare system and in nursing education, continues to be immeasurable. According to Gardner, Waters, and McLaughlin (2017), faculty development is any activity that can be used to help educators in their roles as teachers. Despite studies (Almeida et al., 2018) that indicate the importance of simulation techniques and the use of simulation-based learning is positive for educators and student learning, many higher education institutions do not provide enough formal simulation training and faculty development for their clinical educators.

Nevertheless, simulation as a teaching and learning strategy in nursing education is increasing and is replacing realistic experiences in the real world. Nurse educators need to remember that simulation is and continues to be an invaluable resource for their acquisition of nursing knowledge and skills. Therefore, it is essential that educational

institutions continue to develop or enhance their current faculty development programs regarding simulation.

Review of the Literature to Support the Position Paper

I conducted a literature review to achieve two goals: to review the suitability of the genre to the local problem and to perform a comprehensive analysis of how the investigation supported the position paper. I used numerous databases to achieve saturation in the literature. I reviewed Walden University library's databases, such as Academic Search Complete, ERIC, and Ebscohost. I also examined CINAHL, Science Direct, Google Scholar, MIDLINE, Nursing Ovid, and ProQuest Central for the literature search. I searched for peer-reviewed journal articles that were published in the past 5 years and focused on identifying the faculty members' perceptions about faculty development and simulation training. The primary search terms that I used were faculty development, professional development, simulation technology and benefits, simulation pedagogy, train the trainer program, nursing education, simulation-based learning, simulation technology, and barriers, position papers in qualitative research, position paper and case study, white paper in qualitative research, white paper, position paper, and writing a white paper.

Position Paper Goals and Guidelines

In the position paper developed for this study, I made recommendations on ways to improve the ongoing faculty development and training for the use of simulation technologies as an instructional approach for educators. Historically, a position paper is an official report or a proposal that guides and informs an organization about a complex

issue; it supports an opinion or conveys a position on a topic (Purdue University, 2015). It is also an official government document that can be used as a marketing and educational tool. According to Coburn, Hill, and Spillane (2016), white papers are an essential influence in the educational domain. As stated by Graham (2013), "a white paper is a persuasive essay that uses facts and logic to promote B2B product, service, technology, or methodology" (p. 58). Its purpose is to help an organization to understand a topic or problem, make decisions, provide a resolution to that problem, institute authority, or build awareness of an issue or problem (AIC Position Paper Guidelines, 2013). A position paper's focus is problem and solution-based (Mattern, 2013). The white paper also needs to be objective, logical, truthful, and based on facts (Graham, 2013).

There is an array of approaches used to present a position paper. Many researchers acknowledge that a white paper should be able to engage the audience and provide information that can be used to increase their knowledge and persuade them to select the specified recommendations for their organization (Rotarius & Rotarius, 2016). It is essential that the position paper is tailored to the target audience so that the desired outcome can be met (Graham, 2013). Also, all research findings should be documented in a clear and concise matter, to the point (Creswell, 2014).

Presenting Research Findings Through the Position Paper

A review of the scholarly literature conducted showed that many sectors—such as healthcare, education, and technology, to name a few—use white papers to address complex issues and provide solutions or recommendations for a variety of subjects

(Graham, 2013). A white paper can give substantial information on a specific topic, but it cannot do everything. Therefore, it is imperative that the author selects the primary goal and sticks to it. Also, the use of white papers can effect change through an active and influential informational source (Hoffman, 2019).

According to Bala et al. (2018), a position paper should display a cooperative or consolidated tone that points to a resolution of a problem or issue. A white paper should depict more than the opinions or interests of the author; it should speak for the entire body of an organization. It should present the viewpoints and ideas of the whole institution, through current research and evidence-based practices. The current study stated that uniformity in the position paper is necessary or required to maintain its credibility, and this will help to prevent any misunderstandings or misinterpretations in the publication process. According to the Purdue Online Writing Lab (n.d.), white papers should always include information that is detailed, relevant, and lacks bias; this will aid in its credibility and validity.

A qualitative exploratory case study was primary in the data collection process, data analysis, and data interpretation (Yin, 2017). All themes that emerged and recommendations for enhancing or improving faculty development will be included in the position paper and are found in (Appendix A). I furnished the senior leadership team with suggestions that were developed from the insights that I gathered from the faculty members and supported by prevailing literature. Graham (2013), stated that the recommendations or solutions for a problem in the white paper should be backed by

"credible facts, convincing proof, and logical arguments" (p. 144). I built a plausible case for the recommendations or solutions for the perceived problem.

Faculty Development and Nursing Education

Faculty development continues to be paramount in nursing education, as it is needed to provide educators with the learning, skills, and approaches that are required to ensure active, transformative, and productive learning for themselves and their nursing students (Prestridge, 2017). Therefore, educators need faculty development and training to help them learn how to transfer the knowledge that they have gained in their teaching professions. A transfer is an ability to include the knowledge that is learned in education, in which a student applies the learning in unique and innovative ways (Culyer, Jatulis, Cannistraci, & Brownell, 2018). The transfer of knowledge that the nurse educator receives reflects their teaching and learning effectiveness. Teaching strategies that can influence the transfer of learning include simulation, reflection, small groups, and casebased and problem-based learning (Culyer et al., 2018). Faculty development is the educators' personal and professional development; based upon the goals, vision, and mission of the institution in which they serve (Bigbee, Rainwater, & Butani, 2016). Faculty development opportunities regarding nursing education acknowledged as a significant component of growth and development for all educators in health science disciplines (Brody et al., 2016). Developmental opportunities for faculty members are still too few and lack the comprehensive approach that is needed for them to become successful educators in the learning environment (Johnson, Hewapathirana, & Bowen, 2019).

Institutions of higher learning should recognize that faculty development is a shared responsibility of each faculty member, the senior leadership team, and the university. Faculty development in nursing education should be receptive to both the educator and the educational institution (Rizzuto, 2017). According to Steinert et al. (2016), the focus of faculty development activities should be on the improvement of teacher effectiveness. Also, faculty development should include the concepts of teaching, different approaches to learning, the acquisition of nursing skills, and the growth of the educator's achievements or accomplishments. Faculty development enables nursing schools to acquire and update their current nursing knowledge and skills, which allows them to remain competitive with other educational institutions.

Educational institutions of higher learning should make their nurse educators aware of the benefits, as well as the challenges to faculty development, as it could affect the overall outcome of the developmental program. Interests include promoting behavior change and attitudes with the faculty members and provide a motivational increase for teaching and learning. Also, it produces an increase in developmental knowledge and skills regarding nursing; it can also promote organizational change within the institution, increase faculty retention, faculty confidence, and credibility (Elliott et al., 2015).

Challenges to a faculty development program could include the faculty's resistance or hesitance to change, lack of time for faculty engagement, little or no incentives to participate in faculty development activities, and the cost of designing and implementing a program (Fraser et al., 2016). Strategies that could help to improve or enhance faculty development include online, self-paced learning, workshops, faculty collaboration, the

formation of learning communities, and activities that provide active, hands-on learning (Elliott et al., 2015).

Study's Frameworks: Skill Acquisition and Experiential Learning

Researchers have found that education for nursing faculty is achieved through skill acquisition and experiential learning (Bennett, Grimsley, Grimsley, Rodd, 2017; Cheng et al., 2015). Faculty members should also continue to improve their nursing knowledge and skills in the classroom and clinical setting. It will provide their students with the nursing experience, decision-making capabilities, and nursing expertise to prepare them for their roles as registered nurses. According to Almeida et al. (2018), nurse educators are compelled to acclimate to the ever-changing healthcare environment and new, rapidly changing learning technologies.

Benner's model of skill acquisition has revealed that educators and their students both obtain their learning and knowledge through the five-stage progression of acquisition and development of nursing skills. The five-stage sequence of skill acquisition includes "novice, advanced beginner, competent, proficient, and expert" (Murray, Sundin, & Cope, 2019, p. 201). The area of skill achievement mirrors revision in three aspects: (a) the student moves from general assumptions to concrete experiences, (b) the student no longer views nursing situations in many chunks, yet holistically, (c) proceeds from being isolated to an active learner (Benner, 2001). Faculty members need both nursing theory and nursing experience to advance along with their nursing skills continuums (Hemingway, Osgood, & Mannion, 2018).

Researchers have found that experiential learning in an educator's faculty development focuses on their experiences in the improvement of their nursing practice, and this is related to the classroom and the clinical setting (Girvan, Conneely, & Tangney, 2016). Experiential learning allows the educator to focus on approaches to current and past hypothesis related to education, and experimentation with new practices and strategies for nursing education (Girvan et al., 2016). Experiential learning regarding faculty development is pivotal in the teachers' growth and development, as it involves the use of active learning contemplation (Camburn & Han, 2015).

According to Blair (2016), experiential learning should not be introduced into a faculty development program without a pedagogical framework because it will not benefit the educator. It also emphasizes the use of existing knowledge and experiential teaching approaches (VanSchenkhof, Houseworth, McCord, & Lannin, 2018). Examples of the educator's approach to experiential learning could be case studies, simulation activities, and role-playing. Experiential learning has been and continues to be a crucial component in health courses and the healthcare profession (Grace, Stockhausen, Patton, & Innes, 2019).

The Use of Simulation in Faculty Development

Researchers have found that the use of simulation in faculty development has aided the nurse educator tremendously in nursing programs. However, it does take time for educators to develop confidence and competence in the application of simulation (Aldridge, 2016). Research has also revealed that simulation is a teaching methodology that is efficient and favored by the educator and the nursing student (Shin et al., 2015).

Nevertheless, some faculty members are concerned about the time that is needed to create and implement a useful simulation activity. If the faculty members are given sufficient support and training, the amount of time that is required to invest in the simulation can be reduced (Shin et al., 2015).

According to Faz, Van Sell, and Sheriff (2014), there are hardly any guidelines that are needed to provide the educator with the skills and knowledge that are required to include simulation effectively; therefore, faculty development is even more imperative. A review of the literature found that the professional development and training that is needed by the nurse educator is inconsistent among schools of nursing at universities of higher learning (Gonzalez & Kardong-Edgren, 2017). Also, there has not been adequate competencies developed to train faculties on the principles of using simulation as a teaching and learning tool.

A study performed by the National Council of State Boards of Nursing suggested that faculty development regarding simulation training should include simulation pedagogy (Hayden, Smiley, Alexander, Kardong-Edgren, & Jeffries, 2014). The major components in implementing simulation programs are appropriately preparing the nurse educator and providing adequate faculty development resources. And simulations that are being developed by guidelines established by the standards of best practice (Decker et al., 2015; International Nursing Association of Clinical Simulation and Learning 2013; Lioce et al., 2015). There are several strategies that faculty members prefer for simulation training. These approaches include self-training, mentoring, attending conferences, online training, and training within the educational institution. Educational institutions should

continue to use experts regarding initial simulation training to ensure that quality is maintained and the guidelines for standards of best practices adhere too (Jeffries, Dreifuerst, Kardong-Edgren, & Hayden, 2015).

Project Description

Recommendations for Enhancing Faculty Development

The educator participants determined that faculty development regarding simulation was crucial to their development as advanced practice nurses and their roles as teachers. The educators shared experiences in simulation and faculty development as being beneficial to their teaching and learning, and it helped in achieving their student outcomes, but improvement is necessary. I developed several recommendations based on the participants' responses, which were supported by literature that served as the foundation for the position paper.

Successful teaching and learning require education and expertise not only in the classroom but also in the clinical setting that prepares the educator and the student with the complex needs in the healthcare system and academic arena (Phillips, Bassell, & Fillmore, 2019). Also, faculty members in all stages of experience are chosen to teach in an ever-changing complex nursing and academic environment. Educational institutions are looking for ways to promote student learning, and this usually entails quality faculty development (Carpenter, Morin, Sweet, & Blythe, 2017).

Simulation training, coupled with faculty development, is a compelling and useful teaching and learning tool. It provides opportunities for communication, problem-solving techniques, teamwork, improved nursing and management skills, and leadership (Ng &

Ruppel, 2016). Simulation technology is a technique, and it has become widespread, and nursing educators are relying more and more on simulation programs (Lateef, 2010; Clapper, 2010; Cook et al., 2012, 2013). It is crucial that universities of higher education develop simulation programs that are based on evidence-based practices (Ng & Ruppel, 2016).

My recommendations included in the white paper are as follows:

- Simulation pedagogy
- Train the trainer program
- National simulation conference
- Technology-enhanced simulation training
- Mentorship program
- Interprofessional collaborative workshop
- Faculty learning communities

Simulation pedagogy. Educators and other professionals refer to simulation as pedagogy, but literature revealed that this is not correct (Erlam, Smythe, &Wright-St Clair, 2017)). Simulation is not a pedagogy; it is a profoundly engaging foundation that guides the teaching and learning process (Erlam et al., 2017). Simulation has developed at an extraordinary rate, and the nurse professionals conclude that this has resulted despite an absence of pedagogical research (Erlam et al., 2017). Pedagogy focuses on theoretical concepts and the practice of teaching (Erlam et al., 2017). The educators voiced that simulation training has helped them to improve their nursing skills and also their nursing practices. They disclosed that simulation training had enabled them to

become a better classroom and clinical educator. A participant stated, "...the training that I received helps me to be a much better instructor." They revealed that even though they are teachers, their learning through faculty development needs to continue.

The educators articulated that simulation helped them to connect nursing theory to the clinical practice for their students. The primary target for simulation in nursing education is the technical skills or psychomotor skills that are taught to the students (Eggenberger, Krumwiede, & Young, 2015). The educators acknowledged that simulation has increased quickly and has improved their learning and expertise in teaching, and they are better able to facilitate simulation activities. Faculty development programs are designed to develop or enhance education, nursing skills, and approaches to the development, implementation, and facilitation of simulation activities (Watkins, 2016). This recommendation could be implemented during a scheduled simulation activity such as the proper placement of venipuncture that would provide educators with new knowledge and learning that may improve this nursing skill.

Train-the-trainer program. A train-the-trainer program is an educational approach where educators are trained to teach, mentor, or train another nursing faculty member or members (Anderson & Vanderbilt, 2018). A train-the-trainer approach helps to provide the educator with needed support and knowledge that allows them to improve their nursing skills and maintain their evidence-based practices (Yarber et al., 2015). A train-the-trainer model is extensively used in education to disseminate nursing knowledge and skills to educators efficiently and effectively. The focus of this teaching design is to

develop interactive approaches to teaching and learning through workshops, seminars, discussion groups, or courses that are led by an expert (Anderson & Vanderbilt, 2018).

Faculty members who decide to become trainers in this approach should be experts to teach others in the simulation (Jeffries, 2008). Educators reported that many schools of nursing promote professional learning for their educators as their first concern for faculties. There is a three-step approach to the train-the-trainer model to teach or instruct nursing faculty in simulation (Lane & Mitchell, 2013). The first is to identify the educators that are the experts in their institution and will be performing the simulation teaching. Second, it involves training the expert in simulation and increasing their knowledge base. Finally, the simulation expert will incorporate their role, teaching faculty members, and promote change (Lane & Mitchell, 2013).

A participant revealed that the train-the-trainer approach related to simulation had increased feelings of confidence when clinical instructors performed simulation activities. Also, educators voiced that they were more at ease when conducting simulation activity due to the learning that they had received. Furthermore, this instructional approach provided educators with the essential support that they needed for their nursing education. The train the trainer approach could be implemented during an instructor development workshop, as it provides trainees with new nursing skills and up-to-date simulation training.

National simulation conference. Nurse educators cannot disregard the importance of attending professional meetings concerning faculty development and professional growth. Nursing conferences can provide current educational practices and

technologies that are crucial in educational training (Shellenbarger, 2015). Also, the conference is an excellent opportunity for networking, which allows the educator an opportunity to learn from other nursing colleagues. Meetings and other faculty development opportunities can provide the educator with the current practices in simulation and other nursing topics (Walker, 2018). Conferences can give the nurse educators with opportunities for continuing education credit hours, which can be useful, especially if it is time for licensure renewal (American Association of Critical Care Nurses [AACN], 2015).

The national simulation conference is hosted by the National League of Nursing and the simulation innovation resource center, which is an interactive global simulation community (National League of Nursing [NLN], 2019). It is an essential educational resource for nurse educators who provide simulation teaching and learning for themselves and their students. The resource center for simulation gives some courses such as simulation pedagogy, simulation research, and curriculum development and integration (NLN, 2019). It also provides nurse educators with workshops, forums, seminars, and webinars, all of which are based on simulation and are online or off-site. The theme for this conference is promoting simulation excellence and engaging in an innovative and transformative culture (NLN, 2019). Educators disclosed that simulation conferences are beneficial as they provide up-to-date simulation technologies and new nursing techniques. The educators revealed that the meetings could be local or international; it all depends on the budget.

Technology-enhanced simulation training. Emerging technologies in nursing education offer educators active learning and useful teaching tools. Nurse educators practice in a technology-rich environment that aids their teaching and learning (Bleich et al., 2018). The use of technology is focused in various ways and is now a regular part of the teaching and learning process, and it reinforces the retention of knowledge (Scheckel, 2016). The use of state-of-the-art technology such as simulation has helped the nurse educator to increase knowledge acquisition and enhances their teaching abilities (Bleich et al., 2018). Simulation has been approved as the approach that has bridged the gap between nursing theory and clinical practice. Due to the technology-enhanced environment used in the educational arena, educators should not overlook the new techniques that are used.

The new technologies that are used in some schools of nursing and the healthcare arena include the *body explorer*, which is a simulator that incorporates high-fidelity figures of the human body (Foronda et al., 2017). *Augmented reality* is another technology, which integrates digital and physical mediums that use digital imagery and allows the learner to view the real world (Dagleish & Laurenson, 2019). *vSim* is a virtual simulation technology that helps the student, educator, or healthcare professional the opportunity to practice nursing skills in a virtual environment (Foronda et al., 2018).

Emerging technology in nursing education and faculty development has provided an interactive learning environment for the educator as well as the student. Current technological advancements in the use of simulation have contributed significantly to teaching and learning. Technology-enhanced simulation has become an integral part of

faculty development and nursing education. New technology has extensively provided educational experiences that have strengthened the didactical and clinical learning (Bleich et al., 2018).

The educators acknowledged that technology-enhanced simulation training is needed to provide them with new experiences that help to improve academic and clinical learning for themselves and their students. The application of new technology related to simulation is included when designing structured learning activities. Technology-enhanced simulation training can be implemented when new simulation techniques are presented at a faculty developmental workshop.

Mentorship program. The primary goal of a professional development program is to provide educators with needed support in their growth and development so that they can promote student learning. Faculty development is a vital element in educational excellence (Steinert et al., 2016). Faculty development plays a significant role in teaching because it highlights the importance of continued nursing education, faculty, and student learning needs, and it maintains competencies (Billings & Halstead, 2015). Therefore, a strategy should be developed to improve professional development programs. A faculty mentorship program is an approach that could improve a professional development plan. Mentorship is a relationship that occurs between two or more experienced educators that guide other less experienced educators in a similar area of expertise (Burgess, van Diggele, & Mellis, 2018).

According to Burgess et al. (2018), the development of a mentorship program helps to "enhance workforce performance and engagement, promote learning

opportunities, and encourage multidisciplinary collaboration" (p. 197). Also, a mentorship program provides mentees with feelings of empowerment, increased confidence, and provides opportunities for networking. Mentorship programs support faculty development and require mentors to encourage mentees in self-reflection, especially regarding competencies (Wulf, Hurtubise, Brod, & Binkley, 2018). Competency-based assessments for educators are imperative because they evaluate teaching and learning and skill development. Therefore, mentors should provide feedback to their mentees so that there will be no missed target areas for faculty improvement.

Aspects of an effective mentoring program in higher education include a conceptual framework, faculty participation, excellent communication skills, mentor and mentee relationships, which is often a challenge, especially if mistakes were made in the matching. Other aspects of a mentoring program are the encouragement of university administrators and furnish opportunities for open feedback (Fountain & Newcomer, 2016). It is the priority of the educational institution to provide mentorship and faculty development. Mentorship improves or enhances the abilities of faculty members; it helps to determine the personal and professional goals of the mentee, and it fosters an understanding of the need for faculty development.

Educators voiced that mentoring is essential because it provides the less experienced or new faculty member with new knowledge and experiences from the occasional faculty member. Also, one participant said that mentoring is always an asset to you. A significant criterion for a mentorship program is to match the right mentor with the right mentee as this will help to achieve an effective and productive relationship.

Interprofessional collaborative workshop. Interprofessional education is an integral part of interprofessional collaboration. It is a strategy that is used to introduce simulation technologies for faculty development. Olenick, Flowers, Munecas, and Maltseva (2019) commented that, "interprofessional education is an experiential learning and socialization collaborative process between and among health care disciplines" (p. 1). A plan to introduce new simulation technologies for faculty development is the use of an interprofessional collaborative workshop. Interprofessional collaboration's purpose is to bring educators together "to learn about, from and with each other, to enable them to collaborate effectively" on addressing a common goal (Ratka, Zorek, & Meyer, 2017, p. 1). An interprofessional collaborative workshop for educators can improve their knowledge, confidence, skill level, and attitudes toward new simulation technology. Educators who are working collaboratively on a simulation technique develop educator relationships with other professional disciplines, promote team-building, provides feedback from participants, and increases networking.

Also, collaborative learning can help to identify the knowledge gap that may be present in an educator's scope of practice. I have found that when participating in interprofessional collaboration with other faculty members, positive feelings and attitudes about the learning experience evolve. Furthermore, Johnson, Sparkman-Key, and Kalkbrenner (2017) found that educators who engage in an interprofessional experience were "more likely to have positive perceptions about collaborating with other professionals" (p. 10). Interprofessional education is an approach that provides educators

with a wide array of nurse professionals who work collaboratively to enhance their teaching and learning practices through faculty development programs.

The faculty members acknowledged that inter-professional collaboration provided them with much-needed improvement with their faculty relationships and their relationships with other educators from different healthcare disciplines. The educators also revealed that inter-professional collaboration helped to improve their communication skills between faculty members and students, and enabled them to work cohesively as a team. It is an active and interactive learning process that occurs between different healthcare professionals.

Faculty learning communities. A strategy that could enhance professional development includes faculty learning communities. Learning communities consists of a group of educators, administrators, staff members, and students who regularly work together to improve faculty and student learning needs. According to Trninic, Swanson, and Kapur (2018), learning communities "aim to expand the collective knowledge of the group" (p. 622). These communities foster a collaborative approach to learning (Tan & Caleon, 2016). They are also considered partnerships for educators who provide and support learning (Kane, Shaw, Pang, Salley, & Snider, 2016).

Learning communities promote excellence in teaching, academic performance, enhance training, improve connections among faculty members, and aid in the improvement of faculty development programs. According to Schaap and de Bruijn (2018), they also "promote a sense of connectedness" (p. 123). Communities of learning regarding higher education, "have established their niche as one of the key drivers in

teacher professional development" (Tan & Caleon, 2016, p.127). Incorporating learning communities as a strategy to enhance faculty development is central to the teaching and learning process. It improves learning experiences, develops new instructional tools, and it changes the professional culture of nursing education.

The implementation of faculty learning communities provide nursing educators with encouragement, support, and they create experiential learning opportunities and provide a collaborative learning environment. The educators acknowledged that they used faculty learning communities at times, as they were central to their simulation training, and they promoted a sense of cohesiveness to the nursing faculty.

Potential Resources and Existing Support

An energetic partner is the director of the learning center at the school of nursing located within the study site. The director is an advocate for simulation technology and persists in advancing professional development for nursing faculty. Throughout my research investigation, I have received positive encouragement, reassurance, and support from the assistant dean, the director of the learning center, departmental chairs, and the faculty members. Also, the director of the learning center worked very closely with me and indicated that she was looking forward to the research findings, which may improve their current faculty development program. I sought out her help regarding the presentation of the research findings, and she was responsive to including the research study, and the position paper at their next staff meeting. I plan to email the director a copy of the research study and position paper so that it will be available for the next staff

meeting. Accordingly, a potential resource for the position paper could be for the nursing staff, who may find insights from the participants engaging.

Potential Barriers

I do not foresee any potential barriers in presenting the position paper at the school of nursing for the university. Nevertheless, educators often confront challenges that may or may not directly affect the use of simulation technology in the faculty development program. For this institution of higher learning, there is an existing simulation lab, and there should not be any significant financial barrier. The faculty development program that exists at the university is sufficient, but there is a need for improvement and enhancement. To maintain a simulation lab, a reduction in simulation specialists and experts due to the nursing shortage could serve as a potential barrier for adequately staffing the simulation laboratory. Also, there could be a financial barrier to update the equipment and to send faculty to professional development opportunities. Furthermore, the faculty members have voiced that they have had concerns about the new faculty members and their lack of teaching experience.

Project Implementation and Timetable

My goal for establishing and propagating this position paper is to inform and communicate knowledge to all stakeholders in the school of nursing on the importance of faculty development related to simulation technology. The director of the learning center for the school of nursing has expressed to me to share the position paper. Throughout the personal interviews, all the participants voiced that they were interested in my research results and would like to review the position paper once completed. Therefore, I will

present the white paper once approval obtained and the white paper shared with the faculty members during a staff meeting. The staff meetings are usually held every third month within the academic year. Upon university approval, the project study and the white paper will be presented to essential educational stakeholders.

Roles and Responsibilities

My primary responsibility will be the presentation of the research findings and the white paper, as shown in Appendix A. I will communicate with the dean of the school and the director of the learning center via email. I will schedule a meeting to let them know that I have completed my study as a doctoral student at Walden University. After a face-to-face meeting with the dean of the school of nursing and the director of the learning center, I will provide an overview of the study findings and the recommendations for improving and enhancing their faculty development program presented in the position paper. I will also solicit feedback and answer any follow-up questions. During the face-to-face meeting, I will ask the director of the learning center for her opinion on how to inform the faculty members on the summary report.

Project Evaluation Plan

The exploratory case study approach used to inform this project was to examine the educators' perceptions and perspectives on their faculty development plan regarding simulation and its technologies. According to Stufflebeam (2016), project evaluations are crucial and have a far-reaching influence because they prove and improve the value of a project. Also, a project evaluation helps to target, design, and conduct current and future projects (Stufflebeam, 2016). Because of the strengths of this study were based on the

participants' perceptions and insights, I believe this project illustrates an opportunity for this evaluation to guide the senior leadership's team decisions in their strategies to improve their faculty development program.

The evaluation plan will include a 6-month follow-up to determine if any of the recommendations were implemented. I will develop a survey without the use of software; to receive feedback from the educators. In the review, I will also question the faculty members about the benefit of the suggested recommendations to their current faculty development program. The proposed project survey is included in (Appendix B). The assessment will be conducted immediately after the project presentation, and it will be given to all educators, and staff members who attend.

Project Implications

The school of nursing at the local university is in the process of finding new strategies to promote active faculty development for new and current faculty members. Overall, the participants in the research study viewed simulation technology as a positive outcome regarding teaching and learning. The use of technology in the teaching and learning process allows the faculty members the ability to revitalize their clinical teaching methods for themselves and their student's educational needs.

Faculty development regarding the implementation of simulation technology has been steadily increasing over recent years and has had a significant impact on schools of nursing and has the probability of altering some of the current teaching methods (Aldridge, 2016). As educational technologies unveil new simulation tools, the study suggests that faculty members and the senior leadership team will begin to investigate

more modern teaching and learning approaches and will continue to search for revolutionary innovations for faculty development. A potential benefit to society, due to this research will promote traditional clinical and educational practices that are far-reaching, and have an array of technological tools that will drastically impact the educational needs of the faculty, and the learning needs of their students. Also, this research study will provide a positive benefit to society by offering the university's senior leadership team an exceptional plan for faculty development.

Conclusion

In conclusion, this project study with my recommendations emerged from an established problem and the data analysis which occurred from the research findings that addressed the strategies that could be implemented to improve and enhance faculty development regarding simulation technologies for nursing educators. Section 3 contains justification for the use of the position paper as the genre for the research project, a review of the literature supporting the appropriateness of the position paper and the project development, and the significance of the recommendations suggested in the article (see Appendix A). Section four of this research study will provide the strengths and limitations of the project and provide recommendations for current nursing practices and future research.

Section 4: Reflections and Conclusions

Introduction

The local problem that prompted this study is the lack of nurse faculty adequately trained in the use of high-fidelity simulators. I interviewed seven nurse educators; I sought to obtain their perceptions of their experiences in simulation and their acquisition of nursing skills regarding their growth and development as teachers. Also, I attempted to explore their views and perspectives on technology as a useful learning tool for themselves and their students and their perceptions on the gap between theory and nursing practice. The final section of this investigation will include the strengths and limitations of the research project and my proposed suggestions for alternative approaches for faculty development improvement. Furthermore, I will reflect on the significance of my investigation and what I have accomplished as a scholar throughout this doctoral journey. Finally, I will present study implications, applications for positive social change, and recommendations for future research.

Project Strengths and Limitations

Designing a position paper with recommendations for the improvement or enhancement of a faculty development plan regarding simulation and other technologies was the genre I chose as my project deliverable. A position paper serves as an educational, authoritative, or informational tool. It helps an individual understand a specific topic, solve problems, and aids in decision-making. In this section, I will discuss the strengths and limitations identified with this genre and provide possible choices for the dissemination of the research.

Strengths

The primary strength of this research project, which is presented in the form of a position paper, is the potential for disseminating to a broad audience of nursing educators. The audience who are specific to this position paper can retrieve and profit from its examination, without actually attending the presentation. I plan to email a copy of the position paper to all stakeholders and faculty and staff, which will broaden the audience reached. Another strength of the position paper is that it can provide a method for presenting my research findings to the audience that can meet their needs for teaching and learning regarding the research topic. Also, the school of nursing may plan to support and endorse some or all the recommendations I stated in the position paper.

Likewise, the position paper will provide the audience with new knowledge into this research topic. The position paper provided invaluable and far-reaching information based on the choices I made to encompass the background information regarding this issue, such as the study findings, data analysis, and the recommendations or the solutions, based on supporting evidence from current literature. Providing this amount of information promotes an understanding of the significance of the research problem that prompted this investigation. The senior leadership of this educational institution could use this position paper to acquire financial support for faculty development opportunities and new technologies to improve the simulation laboratory. Nevertheless, the position paper allows me to present the project information in a clear and straightforward format that helps the reader recognize its challenges and to inaugurate discussion regarding the solutions to the problem.

Limitations

A limitation of introducing the solutions or recommendations in the position paper might be promoting some stakeholder buy-in, especially the chief financial officer and senior leadership of the university, which will have an economic component. These high-level management individuals may not understand the seriousness of improved faculty development opportunities and the installation of new and enhanced simulation technologies. In this case, the implementations of the recommendations may meet with opposition and refusal. Also, educators and staff members who do not attend the presentation may lose interest or enthusiasm in a comprehensive and thorough document.

Recommendations for Alternative Approaches

There are several alternative methods for disseminating research findings. The approach I decided upon was to develop and conduct a faculty development seminar. The main aspects of the workshop would include:

- Integrating simulation across the entire nursing curriculum to facilitate the development of essential curricular nursing concepts;
- Establishing mentorship programs, pairing mentor facilitators with junior faculty members;
- Recommending faculty engagement in professional development programs; appraising the faculty's views on potential educational topics;
 and
- Introducing the study findings and themes retrieved from the data analysis.

The workshop would be challenging due to the planning process, which includes the number of attendees, potential financial cost, relocation of participants, especially when they should maneuver to different activities, time for breaks, and arranging an appropriate environment that is conducive to learning.

Scholarship, Project Development and Evaluation, and Leadership and Change

In this section, I will conduct my self-reflection and appraisal of myself and share my thoughts and feelings on my growth and development as a scholar-practitioner during this doctoral journey. As a doctoral student, faith in myself, and my abilities were a significant obstacle for me during this adventure. The learning that I have received in this research study has helped me to see myself in a different and more positive light. I acknowledge that it is essential to remember my past accomplishments, discuss problems that I may have in my learning with other colleagues, set realistic goals, and do not blame myself for purposes that were not accomplished. Also, I always reflect on my completed goals and, most importantly, is never give up; be persistent.

Self as Scholar

Through this doctoral process, I have grown as a scholar, and enhanced my appreciation for scholarship. Currently, I am not working in academia as an educator because I wanted to spend more of my time on completing this research project. Now that I am almost at its end, I plan to return to academia as a mentorship facilitator and a tutor in nursing education. When I finished this project, I have a wealth of knowledge recognizing peer-reviewed journal articles, an appropriate way to conduct a research study, how to perform data collection, data analysis, project evaluation, and methods in

which the information can be delivered. Also, I know how to write a literature review, which was very difficult at the beginning of the doctoral process, but now I had no problem with writing the second literature review.

Through this doctoral process, I have learned how to interview research participants and transcribe the interview data and code the data for emerging themes. I am no longer apprehensive or frightened in conducting continued research in the future. The doctorate program has provided me the assurance, determination, and confidence that I needed to describe myself as a scholar even though I am still a novice researcher. I have learned to write correctly and appropriately in a scholarly fashion.

My writing has improved since I undertook this doctoral process. I no longer find errors in my writing, such as misspelled words, improper grammar, sentence punctuation, though I still have problems when or if a comma is needed. Moreover, I can now recognize correct sentence structure and style with the use of the Writing Center furnished by Walden University. The learning that I have received provided me the confidence needed to write and express my thoughts and feelings clearly and eloquently.

Practitioner

As a nurse educator, I have noticed a change in my clinical nurse practice. I reflect on the knowledge that I have gained and the improvements that I have made in teaching and learning. The doctoral process has broadened my expectations and outlook for myself and my nursing students. I am compelled to provide them with an approach, which is learner-centered and hands-on, that contains an active learning clinical environment. When I return to my academic position, I plan to achieve this approach

through simulation activities, whole simulation scenarios, case studies, and conferences with practical or actual experiences in the real world, which is fully interactive.

Also, I am fully informed of the educational approach that I use in the clinical environment, and I will continue to incorporate past and present teaching strategies that I have learned to enhance my teaching abilities and my students' nursing skills, self-confidence, and their drive to learn. I am also aware of the students' opportunities for growth through new learning methods that engage them in experimentation, which allows them to create new ideas, include different learning practices and activities, which will encourage them to appreciate and comprehend the importance of their nursing education.

Project Developer

As the project developer, I understand that it is essential to present my study findings and the suggested recommendations or solutions to the problem; that I should keep in mind the needs of my audience, which will be nurse educators. There is the possibility that the school of nursing will not recognize or label this problem as an issue regarding the improvement or enhancement of their faculty development plan. Therefore, this research project will not be brought to a successful conclusion. The fulfillment or realization of this project will be contingent upon my limitations as a researcher and the readiness to pursue help from the institutions' senior leadership team, educators, staff members, and skilled and knowledgeable researchers.

Reflection on the Importance of the Work

Researcher reflections on the importance of the work demonstrate that it takes serious thought or consideration to provide the appropriate groundwork for an efficient

faculty development program. Improvement or enhancement for faculty development regarding simulation involves experts in simulation technology, administrative support, and educators who are interested in simulation as an instructional approach. The literature revealed that there is an affluence of research regarding simulation and its advantages in nursing education, and faculty members' approach to simulation. Still, there was a limited amount of literature regarding faculty development and training. Despite the amount of research, the simulation continues to be invaluable as it delves into the educator's perception of faculty development and the evolution of simulation training. The research conclusions are advantageous because they provide recommendations based on the feedback that was given by the educators who have teaching experience in the use of simulation technologies, which were supported by evidence-based practices.

Implications for the future of this research study would be to reproduce this investigation a year after the endorsed recommendations presented in the position paper to determine if there had been any reversal of the educator's perceptions regarding simulation education and faculty training or modifications in the faculty development program. The length of time of one year will furnish an opportunity for endorsement of the suggestions and the educators to achieve more proficiency in the application of simulation technologies as a frame of reference. The research study findings revealed the importance of the school of nursing administration; the academic and clinical component of nursing education continues to examine and pursue approaches that will improve or augment faculty development and advanced simulation technology, which will help to promote teaching and learning. Static or inactive faculty development in the nursing

profession is critical concerning teaching and learning because it continues to evolve and plays a significant role in faculty growth and development.

Implications, Applications, and Directions for Future Research

I achieved data saturation in this research study after interviewing seven nurse educators. I focused on the individual experiences and perceptions of the nurse educators in this inquiry, further the small sample size, in which the research findings could not be generalized to other educators. Nevertheless, the analysis of the research data does summate to the actual and current body of knowledge that supports the significance of faculty development in simulation and the educator's acquisition of skills in simulationbased learning. A quantitative approach to this research study and broadens the sample size could consist of additional educators that would generate the generalizable study findings to a larger population. Future researchers may contemplate the usage of another possible choice, or maybe numerous research sites to safeguard all aspects that contribute to the growth and improvement of faculty development programs related to simulation and its current technologies are studied and considered. Researchers can also interview lab coordinators and the simulation directors of learning centers for the educators to determine the accomplishment of the faculty members with or without improved faculty development opportunities.

Faculty development related to simulation and simulation-based learning is an efficient and useful approach to aid educators in their growth and development as teachers in their educational processes. The educational institution needs to consider several components when developing an educational simulation program. These

considerations consist of developing a simulation foundation; the initial training should include simulation experts, foster teambuilding, and reevaluate simulation for all faculty members (Jeffries et al., 2015).

For this research study, I concentrated on simulation training through the improvement or enhancement of a faculty development program and on the exploration of potential alternatives to promote simulation education for the clinical and academic educator. The preeminent implication of this research project is the contribution to social change. The project will initiate necessary discourse to reevaluate nursing curriculums and to organize and incorporate evidence-based practices in simulation for nursing education and the best practices for effective faculty development programs. The widespread influence related to this project will deepen the faculty members' interest and involvement in teaching and necessitate significant positive learning outcomes for the teacher and the student.

Conclusion

Faculty development has a considerable impact on the way educators teach and cultivate their nursing skills. Educators cannot merely be placed in a clinical or academic setting and anticipate them to be a productive and successful educationist. The potential effect of the recommendations that I suggested could bring about changes in the way the senior leadership team offers, conducts, and implements faculty development programs in the future. The project is invaluable and depends on the capacity of the position paper to pinpoint the issue and the possible resolution through the perspectives of the educators

who have lived through these experiences and recognize and understand the importance of faculty development programs.

Faculty development furnishes instructors with an education that is active and effective for their roles as teachers. In this section, I offered my self-reflection on the research method and conveyed the limitations and strengths of the project deliverable. Also, I provided suggestions for alternative approaches, project implications, ideas for future research, and a reflection of myself as a scholar and novice-researcher. The farreaching societal change implications of this research study promote the nursing educational research base, increase curriculum development regarding simulation, and provides nursing educators with the knowledge and skill to be successful in all areas of nursing education.

References

- Abigail, L. K. M. (2016). Do communities of practice enhance faculty development? Health Professions Education, 2(2), 61–74. doi:10.1016/j.hpe.2016.08.004
- Abouelenein, Y. A. M. (2016). Training needs for faculty members: Towards achieving quality of university education in the light of technological innovations.

 Educational Research and Reviews, 11(13), 1180–1193.

 doi:10.5897/err2015.2377
- Adkins, J. K. (2018). Active learning and formative assessment in a user-centered design course. *Information Systems Education Journal*, *16*(4), 34–40. http://isedj.org/default.html
- Aebersold, M. (2018). Simulation-based learning: No longer a novelty in undergraduate education. *OJIN: The Online Journal of Issues in Nursing*, *23*(2). doi:10.3912/OJIN.Vol23No02PPT39
- American Institute for Conservation. (2013). AIC position paper guidelines. Retrieved from https://www.culturalheritage.org/docs/default-source/administration/governance/position-paper-guidelines.pdf?sfvrsn=14
- Aldridge, M. D. (2016). How can nurse educators perform patient simulation efficiently? *Teaching and Learning in Nursing, 11*(1), 8–14. doi:10.1016/j.teln.2015.09.001
- Al-Ghareeb, A. Z., & Cooper, S. J. (2016). Barriers and enablers to the use of high-fidelity patient simulation manikins in nurse education: An integrative review.

 Nurse Education Today, 36, 281–286. doi:10.1016/j.nedt.2015.08.005
- Almeida, R. G. d. S., Jorge, B. M., Souza-Junior, V., Mazzo, A., Martins, J. C. A., Negri,

- E. C., & Mendes, I. A. C. (2018). Trends in research on simulation in the teaching of nursing: An integrative review. *Nursing Education Perspectives*, *39*(3), E7–E10. doi:10.1097/01.NEP0000000000000292
- Altmiller, G., & Hopkins-Pepe, L. (2019). Why quality and safety education for nurses (QSEN) matters in practice. *The Journal of Continuing Education in Nursing*, 50(5), 199–200. doi:10.3928/00220124-20190416-04
- American Association of Critical-Care Nurses. (2015). Why attend NTI? Retrieved from http://www.aacn.org//wd/nti/content/nti-what-and-why-pcms?menu=nti2016
- Andersen, E. (2016). Enhancing the clinical reflective capacities of nursing students.

 Nurse Education in Practice, 19, 31–35. doi:10.1016/j.nepr.2016.04.004
- Anderson, C. (2010). Presenting and evaluating qualitative research. *American Journal of Pharmaceutical Education*, 74(8), 1–9. doi:10.5688/aj7408141
- Anderson, M., Bond, M. L., Holmes, T. L., & Cason, C. L. (2012). Acquisition of simulation skills: Survey of uses. *Clinical Simulation in Nursing*, 8(2), e59–e65. doi:10.1016/jecos.2010.07.002
- Anderson, P. M., & Vanderbilt, A. A. (2018). Bridging the gap between physician and medical student education: Using the train the trainer model to improve cultural competence training in the clerkship years of medical school. *Advances in Medical Education and Practice*, *9*, 495–498. doi:10.2147/AMEP.Sl63485
- Bala, M., Kashuk, J., Moore, E., Catena, F., Leppaniemi, A., Ansaloni, L., ..., Kluger, Y. (2018). Establishing position papers by the WSES. *World Journal of Emergency Surgery*. *13*(1). doi:10.1186/s13017-018-0163-8

- Beach, A. L., Sorcinelli, M. D., Austin, A. E., & Rivard, J. K. (2016). Faculty development in the age of evidence: Current practices, future imperatives.

 Sterling, VA: Stylus Publishing.
- Beaird, G., Nye, C., & Thacker, L. R. (2017). The use of video recording and standardized patient feedback to improve communication performance in undergraduate nursing students. *Clinical Simulation in Nursing*, *13*(4), 176–185. doi:10.1016/j.ecns.2016.12.005
- Behar-Horenstein, L., Kuang, H., Tolentino, L. A., & Zhang, H. (2019). Faculty development in the health professions: A review of the literature. *The Journal of Faculty Development, 33*(2), 7795. Retrieved from https://search.proquest.com/openview/7e9b7120a9c19cd45c2c66f4783385b3/1?p q-origsite=gscholar&cbl=39886
- Benner, P. (1984). From novice to expert: Excellence and power in clinical nursing practice. Menlo Park, CA: Addison-Wesley.
- Benner, P. (2004). Using the Dreyfus model of skill acquisition to describe and interpret skill acquisition and clinical judgment in nursing practice and education. *Bulletin of Science, Technology & Society, 24*(3), 188–199.

 doi:10.1177/0270467604265061
- Benner, P. (2001). From novice to expert: Excellence and power in clinical nursing practice. Upper Saddle River, NJ: Prentice-Hall Health.
- Benner, P., Sutphen, M., Leonard, V., & Day, L. (2009). *Educating nurses: A call for radical transformation*. San Francisco, CA: Jossey-Bass.

- Bennett, L. L., Grimsley, A, Grimsley, L., & Rodd, J. (2017). The gap between nursing education and clinical skills. *Association of Black Nursing Faculty Journal*, 28(4), 96–102. Retrieved from http://tuckerpub.com/abnf.htm
- Berragan, E. (2011). Simulation: An effective pedagogical approach for nursing? *Nurse Education Today*, *31*(7), 660–663. doi:10.1016/j.nedt.2011.01.019
- Billings, D. M., & Halstead, J. A. (2015). *Teaching in nursing-e-book: A guide for faculty*. Amsterdam, Netherlands: Elsevier Health Sciences.
- Blair, D. J. (2016). Experiential learning for teacher professional development at historic sites. *Journal of Experiential Education*, *39*(2), 130–144. doi:10.1177/1053825916629164
- Bland, A., Topping, A., & Tobbell, J. (2014). Time to unravel the conceptual confusion of authenticity and fidelity and their contribution to learning within simulation-based nurse education: A discussion paper. *Nurse Education Today, 34*(7), 1112–1118. doi:10.1016/j.nedt.2014.03.009
- Bland, A. J., Topping, A., & Wood, B. (2011). A concept analysis of simulation as a learning strategy in the education of undergraduate nursing students. *Nurse Education Today*, *31*, 664–670. doi:10.1016/j.nedt.2010.10.013
- Blazeck, A. (2011). Simulation anxiety syndrome: Presentation and treatment. *Clinical Simulation in Nursing*, 7(2), 57–60. doi:10.1016/j.ecns.2010.05.002

- Bleich, M. R., Jackson, C., Werner, S. H., Hines, D., Stuart, N., & Nelson, A. (2018).

 Beyond high-fidelity simulation: Emerging technologies in leadership development. *The Journal of Continuing Education in Nursing*, 49(3), 105-108.
- Boillat, M., Bethune, C., Ohle, E., Razack, S., & Steinert, Y. (2012). Twelve tips for using the objective structured teaching exercise for faculty development. *Medical Teacher*, *34*(4). 269-273. doi: 10.3109/0142159X.2011.599891
- Brody, A. A., Edelman, L., Siegel, E. O., Foster, V., Bailey, D. E., Bryant, A. L., & Bond, S. M. (2016). Evaluation of a peer mentoring program for early-career gerontological nursing faculty and its potential for application to other fields in nursing and health sciences. *Nursing Outlook*, *64*(4), 332-338.
- Bruce, G., & Johnson, S. (2019). Nursing technology: The application and development of scene simulation in nursing education. *Language*.
- Bryant, K., Aebersold, M. L., Jeffries, P. R., & Kardong-Edgren, S. (2019). Innovations in simulation: Nursing leaders' exchange of best practices. *Clinical Simulation in Nursing*, *41*(1), 32-40. doi:10.1016/j.ecns.2019.09.002
- Burch, G. F., Batchelor, J. H., Heller, N. A., Shaw, J., Kendall, W., & Turner, B. (2014).

 Experiential learning-What do we know? A meta-analysis of 40 years of research.

 Developments in Business Simulation and Experiential Learning, 41.
- Burgess, A., van Diggele, C., & Mellis, C. (2018). Mentorship in the health professions:

 A review. *The Clinical Teacher*, *15*(3), 197-202. https://doiorg.ezp.waldenulibrary.org/10.1111/tct.12756
- Camburn, E. M., & Han, S. W. (2015). Infrastructure for teacher reflection and

- instructional change: An exploratory study. *Journal of Educational Change*, 16(4), 511-533.
- Carpenter, R., Morin, C., Sweet, C., & Blythe, H. (2017). The role of faculty development in teaching and learning through high-impact educational practices.

 *Journal of Faculty Development, 31(1), 7.
- Cheng, A., Grant, V., Dieckmann, P., Arora, S., Robinson, T., & Eppich, W. (2015). Faculty development for simulation programs: Five issues for the future of debriefing training. *The Journal of the Society for Simulation in Healthcare*, 10(4), 217-222. doi: 10.1097/SIH.00000000000000000
- Ching, Y. H. (2014). Exploring the impact of role-playing on peer feedback in an online case-based learning activity. *International Review of Research in Open and Distance Learning*, 15(3), 292-311. ISNN: 1492-3831
- Cilliers, F. J., & Tekian, A. (2016). Effective faculty development in an institutional context: Designing for transfer. *Journal of Graduate Medical Education*, 8(2), 145-149. http://dx..doi.org/10.4300/JGME-D-15-00117.1
- Clapper, T. C. (2010). Beyond Knowles: What those conducting simulations need to know about adult learning theory. *Clinical Simulation in Nursing*, *6*, e7-e14. http://dx.doi.org/10.1016/j.ecns.2009.07.003
- Coburn, C. E., Hill, H. C., & Spillane, J. P. (2016). Alignment and accountability in policy design and implementation: The common core state standards and implementation research. *Educational Researcher*, *45*(4), 243-251. doi: 10.3102/0013189X16651080

- Coffman, S., Doolen, J., & Llasus, L. (2015). Program development and evaluation of the concierge model of simulation. *On-Line Journal of Nursing Informatics*, 19(2), 1-12.
- Coleman, P., Dufrene, C., Bonner, R., Martinez, J., Dawkins, V., Koch, M., Schumann,
 R., Norman, G. (2011). A regional partnership to promote nursing instructor
 competence and confidence in simulation. *Journal of Professional Nursing*, 27(6),
 28-32.
- Cook, D. A., Brydges, R., Hamstra, S. J., Zendejas, B., Szostek, J. H., Wang, A. T., ... & Hatala, R. (2012). Comparative effectiveness of technology-enhanced simulation versus other instructional methods: A systematic review and meta-analysis.

 Simulation in Healthcare, 7(5), 308-320.

 http://dx.doi.org/10.1097/SIH.0b013e3182614f95
- Cook, D. A., Hamstra, S. J., Brydges, R., Zendejas, B., Szostek, J. H., Wang, A. T., ... & Hatala, R. (2013). Comparative effectiveness of instructional design features in simulation-based education: Systematic review and meta-analysis. *Medical Teacher*, *35*, e867-e898. http://dx.doi.org/10.3109/0142159X.2012.714886
- Creswell, J. W. (2009). *Research design: Qualitative, quantitative, and mixed methods* approaches. (3rd ed.). Los Angeles, CA: Sage Publication, Inc.
- Creswell, J. W. (2012). Educational research: Planning, conducting, and evaluating quantitative and qualitative research. Boston, MA: Pearson Education.
- Creswell, J. W. (2014). Research design: Qualitative, quantitative, and mixed methods approaches. (4th ed.). Los Angeles, CA: Sage Publications, Inc.

- Cronin, C. (2014). Using case study research as a rigorous form of inquiry. *Nurse Researcher*, 21(5), 19-27.
- Crowe, S., Creswell, K., Robertson, A., Huby, G., Avery, A., & Sheikh, A. (2011). The case study approach. *BMC Medical Research Methodology*, 11(1), 100.
- Culyer, L. M., Jatulis, L. L., Cannistraci, P., & Brownell, C. A. (2018). Evidenced-Based teaching strategies that facilitate transfer of knowledge between theory and practice: What are nursing faculty using? *Teaching and Learning in Nursing*, 13(3), 174-179. https://doi.org/10.1016/j.teln.2018.03.003
- Dagleish, K., & Laurenson, M. (2019). Practical learning in virtual worlds: Confronting literature with health educators' perspectives. *Journal for Virtual Worlds**Research, 12(1).
- Decker, S. I., Anderson, M., Boese, T., Epps, C., McCarthy, J., Motola, I., ... & Scolaro, K. (2015). Standards of best practice: Simulation standard VIII: Simulationenhanced interprofessional education (sim-IPE). *Clinical Simulation in Nursing*, 11(6), 293-297. Retrieved from http://dx.doi.org/10.1016/j.ecns.2015.03.010
- Demiray, A., & Ilaslan, N. (2019). Standardized patient simulation usage in nursing education and evaluation of outcomes by Kirkpatrick model. *Scholar Journal of Applied Sciences and Research*, 2(8), 10-18.
- Dennick, R. (2016). Constructivism: Reflections on twenty-five years teaching the constructivist approach in medical education. *International Journal of Medical Education*, 7(1), 200-205.
- Dieckmann, P., & Rall, M. (2019). Considerations on the training of simulation

- educators. In *Clinical Simulation* (pp. 847-855). Academic Press. https://doi.org/10.1016/B978-0-12-815657-5.00056-5
- Dow, A. W., Salas, E., & Mazmanian, P., E. (2012). Improving quality in systems of care: Solving complicated challenges with simulation-based continuing professional development. *Journal of Continuing Education in the Health Professionals*, 32(4), 230-235.
- Dowie, I., & Phillip, C. (2011). Supporting the lecturer to deliver high-fidelity simulation. *Nursing Standard*, *25*(49), 35-40.
- Dreyfus, S. E. (2004). The five-stage model of adult skill acquisition. *Bulletin of Science, Technology & Society, 24*(3), 177—181.
- Eggenberger, S. K., Krumwiede, N. K., & Young, P. K. (2015). Using simulation pedagogy in the formation of family-focused generalist nurses. *Journal of Nursing Education*, *54*(10), 588-593.
- Eliadis, M., & Verkuyl, M. (2019). Balancing the budget in the simulation centre.

 *Clinical Simulation in Nursing, 37, 14-17.

 https://doi.org/10.1016/j.ecns.2019.06.005
- Elliott, M., Rhoades, N., Jackson, C. M., & Mandernach, B. J. (2015). Professional development: Designing initiatives to meet the needs of online faculty. *Journal of Educators Online*, 12(1), 160-188.
- Erlam, G. D., Smythe, L., & Wright-St Clair, V. (2017). Simulation is not a pedagogy.

 Open Journal of Nursing, 7, 779-787. https://doi.org/10.4236/ojn.2017.77059
- Faz, R., Van Sell, S., & Sheriff, S. (2014). Simulation teaching: Developing instructor

- confidence. *International Journal of Nursing*, 1(2), 49-63. http://doi.org/10.15640/ijn.v1n2a5
- Flood, L. S., & Robinia, K. (2014). Bridging the gap: Strategies to integrate classroom and clinical learning. *Nurse Education in Practice*, *14*(4), 329-339.
- Ford, F., Courtney-Pratt, H., Marlow, A., Cooper, J., Williams, D., & Mason, R. (2016).

 Quality clinical placements: The perspectives of undergraduate nursing students and their supervising nurses. *Nurse Education Today, 37*, 97-102.

 https://doi.org/10.1016/j.nedt.2015.11.013
- Foronda, C. L., Alfes, C. M., Dev, P., Kleinheksel, A. J., Nelson Jr, D. A., O'donnell, J. M., & Samosky, J. T. (2017). Virtually nursing: Emerging technologies in nursing education. *Nurse Educator*, *42*(1), 14-17.
- Foronda, C. L., Swoboda, S. M., Henry, M. N., Kamau, E., Sullivan, N., & Hudson, K. W. (2018). Student preferences and perceptions of learning from vSim for nursing. *Nurse Education in Practice*, 33, 27-32.
- Fountain, J., & Newcomer, K. E. (2016). Developing and sustaining effective faculty mentoring programs. *Journal of Public Affairs Education*, 22(4), 483-506.
- Fraser, A. B., Stodel, E. J., Jee, R., Dubois, D. A., & Cahaput, A. J. (2016). Preparing anesthesiology faculty for competency-based medical education. *Canadian Journal of Anesthesia*, 63(12), 1364-1374.
- French, H. M., & Hales, R. L. (2016). Neonatology faculty development using simulation. *Seminars in Perinatology*, 40(7), 455-465. WB Saunders.
- Gardner, A. K., Waters, V., & McLaughlin, R. J. (2017). What do faculty in health

- professions need to be competent educators? Results from a school-wide needs assessment. *Journal of Allied Health, 46*(4), 77E-80E.
- Girvan, C., Conneely, C., & Tangney, B. (2016). Extending experiential learning in teacher professional development. *Teaching and Teacher Education*, *58*, 129-139. http://dx.doi.org/10.1016/j.tate.2016.04.009
- Gore, T., & Singh, O. B. (2019). Development of a foundations of simulation teaching course for nurse educators. *Nursing Education Perspectives*, 40(3), 179-180. doi: 10.1097/01.NEP.00000000000000347
- Gonzalez, L., & Kardong-Edgren, S. (2017). Deliberate practice for mastery learning in nursing. *Clinical Simulation in Nursing*, *13*(1), 10-14.
- Grace, S., Stockhausen, L., Patton, N., & Innes, E. (2019). Experiential learning in nursing and allied health education: Do we need a national framework to guide ethical practice? *Nurse Education in Practice*, *34*, 56-62.
- Graham, G. (2013). White papers for dummies. Hoboken, NJ: John Wiley & Sons, Inc.
- Haines, S. L., & Popovich, N. G. (2014). Faculty development: Engaging external senior faculty members as faculty mentors. *American Journal of Pharmaceutical Education*, 78(5), 1-6.
- Hallmark, B. F. (2015). Faculty development in simulation education. *Nursing Clinics of North America*, *50*(2), 389-397.
- Hamstra, S. J., Brydges, R., Hatala, R., Zendejas, B., & Cook, D. A. (2014).

 Reconsidering fidelity in simulation-based training. *Academic Medicine*, 89(3), 387-392.

- Harasim, L. (2017). *Learning theory and online technologies*. (2nd ed.). New York, NY: Routledge.
- Harder, B. N., Ross, C. J. M., & Paul, P. (2013). Instructor comfort level in high-fidelity simulation. *Nurse Education Today*, *33*(10), 1242-1245.
- Hauze, S. W., Hoyt, H. H., Frazee, J. P., Greiner, P. A., & Marshall, J. M. (2019).
 Enhancing nursing education through affordable and realistic holographic mixed reality: The virtual standardized patient for clinical simulation. In *Biomedical Visualisation* (pp.1-13). Springer, Cham.
- Hayden, J. K., Smiley, R. A., Alexander, M., Kardong-Edgren, S., & Jeffries, P. R. (2014). The NCSBN national simulation study: A longitudinal, randomized, controlled study replacing clinical hours with simulation in prelicensure nursing education, *Journal of Nursing Regulation*, *5*(2), 1-66.
- Hemingway, M., Osgood, P., & Mannion, M. (2018). Implementing a cardiac skills orientation and simulation program. *The Association of periOperative Registered Nurses Journal*, 107(2), 215-223. http://dx.doi.org.ezp.waldenulibrary.org/10.1002/aorn.12023
- Herman, J. H. (2012). Faculty development programs: The frequency and variety of professional development programs available to online instructors. *Journal of Asynchronous Learning Networks*, 16(5), 87-106.
- Hoffman, S. (2019). How to write a white paper: A closer look at white paper definition.

 Hoffman Marketing Communication. Retrieved from

 http://www.hoffmanmarcom.com/docs/Closer Look white paper definition.pdf

- Houghton, C., Casey, D., Shaw, D., & Murphy, K. (2013). Rigour in qualitative casestudy research. *Nurse Research*, 20(4), 1-15.
- Hughes, P. G., & Hughes, K. E. (2019). Briefing prior to simulation activity. In *StatPearls [Internet]*. *StatPearls Publishing*.
- Hunt, C. W., Curtis, A. M., & Gore, T. (2015). Using simulation to promote professional development of clinical instructor. *Journal of Nursing Education*, *54*(8), 468-471.
- Hussein, A. (2015). The use of triangulation in social sciences research: Can qualitative and quantitative methods be combined? *Journal of Comparative Social Work*, *4*(1), 1-12.
- Ignacio, J., Dolmans, D., Scherpbier, A., Rethans, J. J., Chan, S., & Liaw, S. Y. (2015). Comparison of standardized patients with high-fidelity simulators for managing stress and improving performance in clinical deterioration: A mixed-methods study. *Nurse Education Today*, *35*(12), 1161-1168.
- Ignatavicius, D. & Chung (2016). Professional development for nursing faculty:

 Assessing transfer of learning into practice. *Teaching and Learning in Nursing*,

 11(4), 138-142.
- International Nursing Association of Clinical Simulation and Learning. (2013). Standards of best practice: Simulation. *Clinical Simulation in Nursing*, *9*(6S), Si-S32.
- Iwasiw, C. L., & Goldenberg, D. (2014). *Curriculum development in nursing education*. Jones & Bartlett Publishers.
- Jeffries, P. (2008). Getting in S.T.E.P. with simulations: Simulations take educator preparation. *Nursing Education Perspectives*, *29*(2), 70-73. doi: 10.1043/1094-

- 2831(2008)29[70:QRGISW]2.0.CO;2
- Jeffries, P., Dreifuerst, K. T., Kardong-Edgren, S., & Hayden, J. (2015). Faculty development when initiating simulation programs: Lessons learned from the national simulation study. *Journal of Nursing Regulation*, *5*(4), 17-23.
- Johnson, K. F., Sparkman-Key, N., & Kalkbrenner, M. T. (2017). Human service students' and professionals' knowledge and experiences of interprofessionalism: Implications for education. *Journal of Human Services*, *37*(1), 5-13.
- Johnson, K. R., Hewapathirana, G. I., & Bowen, M. M. (2019). Faculty development for online teaching. In *Handbook of Research on Virtual Training and Mentoring of Online Instructors*, 40-55. IGI Global.
- Kane, R., Shaw, M., Pang, S., Salley, W. & Snider, B. (2016). Faculty professional development and student satisfaction in online higher education. *Online Journal of Distance Learning Administration*, *14*(2), 1-12. https://search-ebscohost-com.ezp.waldenulibrary.org/login.aspx?direct=true&db=eue&AN=117762710&site=ehost-live&scope=site
- Kelly, M. A., Berragan, E., Husebo, S. E., & Orr, F. (2016). Simulation in nursing education—international perspectives and contemporary scope of practice. *Journal of Nursing Scholarship*, 48(3), 312-321.
- Kennedy, L. A., & Montgomery, A. (2018). Exploring qualitative research. *Centre for Effective Services: The Teaching Council*.
- Kiernan, L. C. (2018). Evaluating competence and confidence using simulation

- technology. *Nursing*, 48(10), 45-52. doi: 10.1097/01.NURSE.0000545022.36908.f3
- Kim, J., Park, J. H., & Shin, S. (2016). Effectiveness of simulation-based nursing education depending on fidelity: A meta-analysis. *BMC Medical Education*, *16*(1), 152.
- Kim, S., Park, C., & O'Rourke (2016). Effectiveness of online simulation training:

 Measuring faculty knowledge, perceptions, and intention to adopt. *Nurse Education Today*.
- King, C., Moseley, S., Hindenlang, B., & Kuritz, P. (2008). Limited use of the human patient simulator by nurse faculty: An intervention program designed to increase use. *International Journal of Nursing Education Scholarship*, *5*(1), 1-17.
- Koh, J. H. L., Chai, C. S., & Lim, W. Y. (2017). Teacher professional development for TPACK-21CL: Effects on teacher ICT integration and student outcomes. *Journal of Educational Computing Research*, 55(2), 172-196.
- Kolb, D. A. (1984). Experiential learning. Experience as the source of learning and development. Englewood Cliffs, NJ: Prentice-Hall.
- Kolb, D. A. (2014). Experiential learning: Experience as the source of learning and development. (2nd ed.). Upper Saddle River, NJ: Pearson Education.
- Kolb, A. Y. & Kolb, D. A. (2005). Learning styles and learning spaces: Enhancing experiential learning in higher education. *Academy of Management Learning and Education*, 4(2), 193-212.
- Kruger, C. G., Van Rensburg, O. J., & De Witt, M. W. (2016). Meeting teacher

- expectations in a DL professional development programme A case study for sustained applied competence as programme outcome. *International Review of Research in Open and Distributed Learning*, 17(4), 50-65.
- Lancaster, J. W., Stein, S. M., MacLean, L. G., Amburgh, J. V, & Persky, A. M. (2014).

 Faculty development program models to advance teaching and learning within health science programs. *American Journal of Pharmaceutical Education*, 78(5), 99.
- Lane, A. J. & Mitchell, C. G. (2013). Using a train-the-trainer model to prepare educators for simulation instruction. *Journal of Continuing Education in Nursing*, 44(7), 313-317. doi: 10.3928/00220124-20130515-33
- Lateef, F. (2010). Simulation-based learning: Just like the real thing. *Journal of Emergencies, Trauma and Shock*, *3*(4), 348.
- LeFlore, J. L., & Thomas, P. E. (2016). Educational changes to support advanced practice nursing education. *The Journal of Perinatal and Neonatal Nursing*, *30*(3), 187.
- Lewis, R., Strachan, A., & Smith, M. M. (2012). Is high fidelity simulation the most effective method for the development of non-technical skills in nursing? A review of the current evidence. *The Open Nursing Journal*, *6*, 82-89.
- Lioce, L., Meakim, C. H., Fey, M. K., Chmil, J. V., Mariani, B., & Aliner, G. (2015).

 Standards of best practice: Simulation Standard IX: Simulation Design. *Clinical Simulation in Nursing*, 11(6), 309-315. Retrieved from http://dx.doi.org/10.1016/j.ecns.2015.03.005
- Livesay, K., Lawrence, K., & Miller, C. (2015). Making the most of simulated learning:

- Understanding and managing perceptions. *International Journal of Nursing Education Scholarship*, 12(1), 17-26.
- Loke, J. C., Lee, B. K., Noor, A. M., & Loh, S. (2014). High fidelity full-sized human patient simulation manikins: Effects on decision-making skills of nursing students. *Journal of Nursing Education and Practice*, 4(7), 31-40.
- Lodico, M. G., Spaulding, D. T., & Voegtle, K. H. (2006). Methods in educational research: From theory to practice. San Francisco, CA: Jossey-Bass.
- Mattern, J. (2013). How to write a white paper. Retrieved from http://www.dirjournal.com/business-journal/how-to-write-a-white-paper/
- McNeill, J., Parker, R. A., Nadeau, J., Pelayo, L. W., & Cook, J. (2012). Developing nurse educator competency in the pedagogy of simulation. *Journal of Nursing Education*, *51*(12), 685-691.
- McSparron, J. I., Vanka, A., & Smith, C. C. (2019). Cognitive learning theory for clinical teaching. *The Clinical Teacher*, *16*(2), 96-100.
- Meechan, R., Jones, H., & Valler-Jones, T. (2011). Students' perspectives on their skills acquisition and confidence. *British Journal of Nursing*, 20(7), 445-450.
- Merillat, L., & Scheibmeir, M. (2016). Developing a quality improvement process to optimize faculty success. *Online Learning*, 20(3), 159-172.
- Merriam, S. B. (2009). *Qualitative research: A guide to design and implementation*. San Francisco, CA: Jossey-Bass.
- Merriam, S. B. & Tisdell, E. J. (2016). *Qualitative research: A guide to design and implementation*. San Francisco, CA: Jossey-Bass.

- Morales, M. P. E. (2016). Participatory action research (PAR) cum action research (AR) in teacher professional development: A literature review. *International Journal of Research in Education and Science*, *2*(1), 156-165.
- Murray, B. A. (2014). The use of high-fidelity simulation in psychiatric and mental health nursing clinical education. *International Journal of Health Sciences Education*, 2(1), 1-12.
- Murray, M., Sundin, D., & Cope, V. (2019). Benner's model and Duchscher's theory:

 Providing the framework for understanding new graduate nurses' transition to practice. *Nurse Education in Practice*, *34*, 199-203.
- National League of Nurses. (2019). From simulation to innovation and beyond. Retrieved from http://www.nln.org/conferences/ucf2019/overview
- Nehring, W. M., Wexler, T., Hughes, F., & Greenwell, A. (2013). Faculty development for the use of high-fidelity patient simulation: A systematic review. *International Journal of Health Sciences Education*, *1*(1), 1-34.
- Ng, G. M., & Ruppel, H. (2016). Nursing simulation fellowships: An innovative approach for developing simulation leaders. *Clinical Simulation in Nursing*, *12*(2), 62-68.
- Nordquist, J. & Sundbery, K. (2015). Institutional needs and faculty development for simulation. *Best practice and research clinical anaesthesiology*, 29(1), 13-20.
- Rahman, M. S. (2017). The advantages and disadvantages of using qualitative and quantitative approaches and methods in language "testing and assessment" research: A literature review. *Journal of Education and Learning*, 6(1), 102 -112.

- Ratka, A., Zorek, J. A., & Meyer, S. M. (2017). Overview of faculty development programs for interprofessional education. *American Journal of Pharmaceutical Education*, 81(5), 96.
- Reeves, P. M., Pun, W. H., & Chung, K. S. (2017). Influence of teacher collaboration on job satisfaction and student achievement. *Teaching and Teacher Education*, 67, 227-236.
- Riegel, C., & Mete, R. (2017). Educational technologies for k-12 learners: What digital natives and digital immigrants can teach one another. *Educational Planning*, 24(4), 49-58.
- Rizzuto, M. (2017). Design recommendations for self-paced online faculty development courses. *TechTrends*, *61*(1), 77-86.
- Roberts, E., Kaak, V., & Rolley, J. (2019). Simulation to replace clinical hours in nursing: A meta-narrative review. *Clinical Simulation in Nursing*, *37*, 5-13. https://doi.org/10.1016/j.ecns.2019.07.003
- Rock. K. Z. (2014). Transferring learning from faculty development to the classroom. Journal of Nursing Education, 53(12), 678-684.
- Ronfeldt, M., Farmer, S., McQueen, K., & Grissom, J. (2015). Teacher collaboration in instructional teams and student achievement. *American Educational Research Journal*, *52*(3), 475-514.
- Rotarius, T. & Rotarius, V. (2016). Preparing a health care white paper: Providing structure to a writing process. *The Health Care Manager*, *35*(2), 180-185.
- Rutherford-Hemming, T., Alfes, C. M., & Breymier, T. L. (2019). A systematic review of

- the use of standardized patients as a simulation modality in nursing education.

 Nursing Education Perspectives, 40(2), 84-90.
- O'Leary, J., Nash, R., & Lewis, P. (2015). High fidelity patient simulation as an educational tool in paediatric intensive care: A systematic review. *Nurse Education Today*, 35(10), e8-e12.
- Olenick, M., Flowers, M., Munecas, T., & Maltseva, T. (2019). Positive and negative factors that influence health care faculty intent to engage in interprofessional education (IPE). In *Healthcare*, 7(1), 29. Multidisciplinary Digital Publishing Institute.
- Paige, J. T., Arora, S., Fernandez, G., & Seymour, N. (2015). Debriefing 101: Training faculty to promote learning in simulation-based training. *The American Journal of Surgery*, 209(1), 126-131.
- Painter, S. R., & Clark, C. M. (2015). Leading change: Faculty development through structured collaboration. *International Journal of Doctoral Studies*, *10*, 187-198. Retrieved from http://ijds.org/Volume 10/JDVv10p187-198Painter0954.pdf
- Parrish, A. H., & Sadera, W. A. (2019). A review of faculty development models that build teacher educators' technology competencies. *Journal of Technology and Teacher Education*, 27(4), 437-464.
- Parry, M., & Fey, M. K. (2019). Simulation in advanced practice nursing. *Clinical Simulation in Nursing*, *26*, 1-2. https://doi.org/10.1016/j.ecns.2018.11.004
- Peterson, D. T., Watts, P. I., Epps, C. A., & White, M. L. (2017). Simulation faculty development: A tiered approach. *Simulation in Healthcare*, *12*(4), 254-259.

- Doi:10.1097/SIH.000000000000000
- Phillips, C., Bassell, K., & Fillmore, L. (2019). Transforming nursing education through clinical faculty development. *Teaching and Learning in Nursing*, *14*, 47-53.
- Prestridge, S. (2017). Conceptualizing self-generating online teacher professional development. *Technology, Pedagogy, and Education, 26*(1), 85-104. doi:10.1080/1475939X.2016.1167113
- Purdue Online Writing Lab (2015). White paper: Purpose and audience. Retrieved from https://owl.english.purdue.edu/owl/resource/546/1/
- Saldana, J. (2013). *The coding manual for qualitative researchers*. (2nd ed.). Thousand Oaks, CA: SAGE.
- Schaap, H. & de Bruijn, E. (2018). Elements affecting the development of professional learning communities in schools. *Learning Environments Research*, 21(1), p. 109-134.
- Schoepp, K. (2003). The tenets of good qualitative research. *Qualitative Research*, 603, L02.
- Scheckel, M. (2016). Designing courses and learning experiences. In D. M. Billings & J. A. Halstead (Eds.). *Teaching in nursing: A guide for faculty*. St. Louis, MO: Elsevier.
- Schultz, C. M., Krassa, T. J., & Jones, K. L. (2019). Pediatric practicums conducted in school settings: An integrative review. *International Journal of Nursing Education Scholarship*, 16(1), 224-227.
- Seaton, P., Levett-Jones, T., Cant, R., Cooper, S., Kelly, M. A., McKenna, L., ... &

- Bogossian, F. (2019). Exploring the extent to which simulation-based education addresses contemporary patient safety priorities: A scoping review. *Collegian*, *26*(1), 194-203.
- Shellenbarger, T. (2015). Twelve tips for a successful nursing conference experience.

 Retrieved from http://www.americannursetoday.com/12-tips-for-a-successful-nursing-conference-experience/
- Shin, S., Park, J., & Kim, J. (2015). Effectiveness of patient simulation in nursing education: Meta-analysis. *Nurse Education Today*, *35*(1), 176-182. doi:10.106/j.jnedt.2014.09.009
- Sicat, B. L., Kreutzer, K. O., Gary, J., Ivey, C. K., Marlowe, E. P., Pellegrini, J. M., Shuford, V. P., & Simons, D. F. (2014). A collaboration among health sciences schools to enhance faculty development in teaching. *American Journal of Pharmaceutical Education*, 78(5), 1-5.
- Siemens, G. (2005). Connectivism: A learning theory for the digital age. *International Journal of Instructional Technology and Distance Learning*, *2*(1). http://www.itdl.org/Journal/Jan 05/article01.htm
- Simko, L. C., Henry, R., McGinnis, K. A., & Kolesar, A. L. (2014). Simulation and mock code: A safe way for nursing students to learn. *Journal of Nursing Education and Practice*, 4(7), 95-103.
- Simon, M. K. (2011). Assumptions, limitations, and delimitations. In M. K. Simon (Ed.).

 *Dissertation and scholarly research: Recipes for success. Seattle, WA:

 Dissertation Success, LLC. Retrieved from

- $http://dissertation recipes.com/wpcontent/uploads/2011/04/Assumptions limitations \\ delimitations X.pdf$
- Smart, K. L., & Csapo, N. (2007). Learning by doing: Engaging students through learner-centered activities. *Business Communication Quarterly*, 70(4), 451-457.
- Stake, R. E. (1995). The art of case study research. Thousand Oaks, CA: Sage.
- Steiner, H. H. (2016). Learning communities' faculty scholars: An online, targeted faculty development course to promote scholarly teaching, *Learning Communities**Research and Practice, 4(1), 1-8.
- Steinert, Y., Mann, K., Anderson, B., Barnett, B. M., Centeno, A., Naismith, L., ...& Ward, H. (2016). A systematic review of faculty development initiatives designed to enhance teaching effectiveness: A 10-year update: BEME Guide No. 40.

 Medical Teacher, 38(8), 769-786.
- Steinert, Y. (2020). Faculty development: From rubies to oak. *Medical Teacher*, 42(4), 429-435. https://doi.org/10.1080/0142159X.2019.1688769
- Stufflebeam, D. L. (2016). *Manual for research, development, and technology program* and project evaluations (No. DOT/FRA/ORD-16/06). The United States. Federal Railroad Administration. Office of Research, Development, and Technology.
- Suplee, P. D., Gardner, M., & Jerome-D'Emilia, B. (2014). Nursing faculty preparedness for clinical teaching. *Journal of Nursing Education*, *53*(3), 38-41.
- Taibi, D. M., & Kardong-Edgren, S. (2014). Health care educator training in simulation:

 A survey and web site development. *Clinical Simulation in Nursing*, 10(1), 47-52.
- Talcott, K., O'Donnell, J. M., & Burns, H. K. (2013). Technology and the nurse educator:

- Are you elite? Nurse Educator, 38(3), 126-131.
- Tan, Y. S. M. & Caleon, I. S. (2016). Problem finding in professional learning communities: A learning study approach. *Scandinavian Journal of Educational Research*, 60(2), 127-146. https://doi-org.ezp.waldenulibrary.org/10.1080/00313831.2014.996596
- Taplay, K., Jack, S. M., Baxter, P., Eva, K., & Martin, L. (2014). "Negotiating, navigating, and networking": Three strategies used by nursing leaders to shape the adoption and incorporation of simulation into nursing curricula—A grounded theory study. *Improvement Science Research Network, 2014*.
- Trninic, D., Swanson, H., & Kapur, M. (2018). Productive dissent in learning communities. *Instructional Science*, *46*(4), 621-625. https://doi-org.ezp.waldenulibrary.org/10.1007/s11251-018-9466-0
- VanSchenkhop, M., Houseworth, M., McCord, M., & Lannin, J. (2018). Peer evaluations within experiential pedagogy: Fairness, objectivity, retaliation safeguarding, constructive feedback, and experiential learning as part of peer assessment. *The International Journal of Management Education, 16*, 92-104.
- Walker, N. (2018). Embrace action: Learn, connect and participate at the annual AORN conference. *Association of periOperative Registered Nurses Journal*, 107(2), 171-174.
- Wall, P., Andrus, P. M., & Morrison, P. (2014). Bridging the theory-practice gap through clinical simulations in a nursing undergraduate degree program in Australia.

 International Journal of Learning, Teaching and Educational Research, 8(1),

- Watkins, K. D. (2016). Faculty development to support interprofessional education in healthcare professions: A realist synthesis. *Journal of Interprofessional Care*, 30(6), 695-701. http://doi.doi.org/10.1080/13561820.2016.1209466
- Waxman, K. T., Nichols, A. A., Shum, C., & Forsey, L. (2019). Exploring faculty perceptions about simulation training: Influence on career, confidence, knowledge and skill acquisition, and competence. *International Journal of Nursing Education Scholarship*, 16(1). https://doi.org/10.1515/ijnes-2018-0067
- Williams, M., & Moser, T. (2019). The art of coding and thematic exploration in qualitative research. *International Management Review*, *15*(1), 45-55.
- Wright, A., Moss, P., Dennis, D. M., Harrold, M., Levy, S., Furness, A. L., & Reubenson, A. (2018). The influence of a full-time, immersive simulation-based clinical placement on physiotherapy student confidence during the transition to clinical practice. *Advances in Simulation*, *3*(1), 1-10.
- Wulf, K. L., Hurtubise, L., Brod, H., & Brinkley, P. F. (2018). The CARE Inventory: A self-reflective, behavior-based instrument to guide professional development and mentorship of academic faculty. *MedEdPORTAL: Journal of Teaching and Learning Resources*, 14.
- Yarber, L., Brownson, C. A., Jacob, R. R., Baker, E. A., Jones, E., Baumann, C., ... & Brownson R. C. (2015). Evaluating a train-the-trainer approach for improving capacity for evidence-based decision making in public health. *BMC Health Services Research*, *15*(1), 547-557. Doi: 10.1186/s12913-015-1224-2

- Yazan, B. (2015). Three approaches to case study methods in education: Yin, Merriam, and Stake. *The Qualitative Report*, 20(2), 134-152.
- Yin, R. K. (2013). Case study research: Design and methods (4th ed.). Thousand Oaks, CA: Sage
- Yin, R. K. (2017). Case study research and applications: Design and methods (6th ed.).

 Thousand Oaks, CA: SAGE Publications.
- Zapko, K. A., Ferranto, M. L. G., Blasiman, R., & Shelestak, D. (2018). Evaluating best educational practices, student satisfaction, and self-confidence in simulation: A descriptive study. *Nurse Education Today*, 60,28-34. https://doi.org/10.1016/j.nedt.2017.09.006

Faculty Development in Simulation for Professional Nurse Educators

Dr. Jill Johnson White Paper Walden University

October 2020

The Introduction

A position paper was developed to present the research study results. It is used to address complex issues; it supports an opinion or conveys a position on a subject (Purdue University, 2015). It will give substantial information on a topic of investigation and will effect change through an active and influential informational source. Its purpose is to help an organization to understand a question or problem, make decisions, provide a resolution to that problem, institute authority, or build awareness of an issue or problem (AIC Position Paper Guidelines, 2013).

Summarization of the Study

The goal of this project is to disclose the nursing educators' views and perceptions about their current faculty development program and simulation training. Also, to supply the faculty members and the senior nursing leadership with recommendations on measures to improve their current faculty development program. The problem that prompted this study is a shortage of nursing faculty who are adequately prepared in the utilization of simulation technology.

The research questions that will guide this topic of inquiry are as follows: RQ1: What are the experiences of nurse educators at a 4-year private, nonprofit university regarding the nurse educators' faculty development in simulation? RQ2: What are the perceptions of nurse educators at a 4-year private, nonprofit university regarding their improvement of nursing skills in simulation-based activities? The results of the study revealed three primary themes, 1) faculty-initiated professional development, 2) learning through simulation-based education, and 3) benefits of simulation for teaching and learning.

The Problem

The problem that inspired this study was a shortage of nursing faculty who are adequately prepared in the utilization of simulation technology.

The Research Questions

The research questions were based on examining faculty members' perceptions of the importance of faculty development regarding their growth and development as professional educators. RQ1 addressed the nurse educators' experiences regarding their faculty development program and the use of simulation technology as a teaching and learning tool. RQ2 investigated the faculty members' perceptions and views on the improvement of their nursing skills in simulation-based learning.

The Participants

The research study was conducted at the school of nursing at a local university. A purposeful homogenous sampling technique was implemented. The sampling method allowed the identification of participants that had similar experience and knowledge in simulation technology (Creswell, 2014). The school of nursing employed approximately 50 faculty members, but due to the limited number of educators that accepted the request, only seven were recruited to participate in the study.

The primary criteria used for selecting the participants for this research study: 1) faculty members actively teaching in either the clinical or classroom setting, 2) teaching in the BSN or MSN programs, 3) have experience in simulation technology, and 4) full-time or adjunct faculty members.

The Research Design

A qualitative exploratory case study was selected to explore the underlying local problem of inadequate faculty development concerning simulation training and other technologies in the clinical setting, about their experiences with the current faculty development program. The research method selected allowed for unique insights and profound understandings into the growth and development of faculty members in the discipline of nursing education (Merriam & Tisdell, 2016).

The Data Collection and Analysis

The use of informal semistructured one-on-one interviews with open-ended questions was used. Each interview transcript was coded and analyzed. Creswell (2014) and Saldana (2013) procedure was followed. The primary source of data came from participant interviews, and field notes, institutional training manuals, and the nursing curriculum related to simulation were reviewed. Several strategies were used to maintain the credibility of the research data, which included triangulation, member checking, and researcher's reflexivity.

The Results

Three primary themes were revealed: 1) faculty-initiated professional development; 2) learning through simulation-based education, and 3) benefits of simulation for teaching and learning.

Theme 1 addresses the following research question: "What are the experiences of nurse educators at a 4-year, private, nonprofit university regarding the nurse educator's faculty development in simulation?" The theme revealed a general trend of the overall views and perception of faculty members about the importance of faculty development and how

they felt about faculty-initiated professional development and simulation training. The analysis of the interview data showed that the participants were pleased with seeking their opportunities for faculty development. Also, they realized that their growth and development helped to improve their teaching excellence, thereby promoting an increase in student learning.

The participants revealed that opportunities for professional growth that were sought out provided them with improved perceptions of teaching, how they taught, and how they viewed education as a profession. They reported that it was beneficial to their research and improved their motivation and enthusiasm for nursing education and simulation training. But the educators acknowledged that there was a need for formalized simulation training.

Theme 2 addressed the following research question: "What are the experiences of nurse educators at a 4-year, private, nonprofit university regarding the nurse educator's faculty development in simulation?" The theme revealed a general trend of the overall views and the faculty members' perceptions concerning the use of simulation-based education. The analysis of the interview data showed that the participants used several simulation-based models and techniques in their teaching and learning.

Theme 3 focused on the following research question: "What are the perceptions of nurse educators at a 4-year private, nonprofit university regarding their improvement of nursing skills in simulation-based activities?" The third theme describes the perceived benefits of simulation-based activities to their teaching and learning practices. It was concluded that simulation was very beneficial to their confidence and competence as educators.

The participants revealed that simulation and simulation-based activities increased their confidence and competence as nursing instructors. One participant said that when she practices and teaches others in the simulation, it increases her confidence and nursing skills. She continues to say that simulation also increases an educator's feelings of preparedness, especially as the faculty member goes through those experiences. Another educator acknowledged that simulation training had helped her confidence because she finally knew what was expected of her. A third participant affirmed that simulation improved her knowledge in not only simulation but also the science behind it. She continued to reveal she was more comfortable with simulation, and that had enhanced her confidence and competence as a clinical instructor. Current research has found that two of the critical advantages of simulation-based training is the transformation of one's faith and ability regarding clinical learning (Wright et al., 2018).

Summary of Findings

Overall, the participants were pleased with their opportunities for professional growth and development. Also, they understood that their growth and development helped to improve their teaching excellence. They believed that the progress that they sought after

provided them with enhanced perceptions of their teaching, how they taught, and how they viewed education as a profession. Furthermore, the educators voiced that seeking out their opportunities for professional growth was most beneficial to them as it increased their motivation and independence to improve upon their learning.

One participant stated: "you need to seek out your own opportunities for professional development and growth, continuing education and training that is of interest and value to you..." A second participant specified: "...for most of my professional developmental training comes from my research and my own need and desire to learn more."

The participants disclosed that the school of nursing provided them with a variety of simulation technologies that helped in achieving their goals in simulation-based education. The participants also voiced their views on how simulation training and simulation-based activities contributed to their educational and clinical practices. Their responses were clear concerning the benefits that they received, which were increased confidence and competence as instructors. A participant commented, "...my confidence has increased because of simulation..." Finally, another compelling comment about the advantage of simulation was what one participant said, "...it also increases your feelings of preparedness..."

Regardless of the educators' satisfaction with seeking out their opportunities for professional development, they were concerned about the lack of formalized simulation training. Many of the faculty members relied on themselves and other educators who had some experience with simulation to get the training that they needed. A participant stated, "I do not feel like we have formalized simulation training." Also, another participant indicated, "...I would say there isn't any formalized training. It's hit or miss."

The justification for the proposed recommendations for this study site is to maintain superior professional development for faculty members. Also, another rationale for the proposals is to establish professional development opportunities that help teachers transfer their knowledge and learning to the classroom. Finally, the proposed recommendations for the faculty development program could improve the nursing faculty's ability to apply high-quality instructional practices, which would have a direct impact on their student learning outcomes.

Proposed Recommendations

The participants determined that faculty development regarding simulation was crucial to their growth and their roles as teachers. The educators shared their experiences in simulation and faculty development as being beneficial to their teaching and learning. Due to the deficiency or absence of formalized simulation training, I developed several recommendations based on the participants' responses, which were supported by the literature. The insights offered by the educators in this research study will provide the

senior leadership team with the necessary steps to create a collaborative process that will lead to the betterment and enhancement of the current faculty development program.

I have suggested seven recommendations that should augment and strengthen their current faculty development plan:

Simulation Pedagogy

Simulation pedagogy is an extremely engaging foundation that guides the teaching and learning process (Erlam, Smythe, & Wright-St Clair, 2017). Pedagogy focuses on a theoretical concept and the practice of teaching. (Erlam et al., 2017). The educators voiced that simulation training has helped them to improve upon their skills as nurses and their nursing practices. Also, they disclosed that simulation training had enabled them to become better didactical and clinical instructors. A participant stated, "...the training that I received helps me to be a much better instructor." This recommendation could be implemented during a scheduled simulation activity such as the proper placement of venipuncture that would provide educators with new knowledge and learning that may improve this nursing skill.

> Train the Trainer Program

The train the trainer program is an instructional approach where educators are trained to teach, mentor, or train other nursing faculty (Anderson & Vanderbilt, 2018). This approach provides nurse educators with vital support and knowledge that helps them to improve their academics and maintains their evidence-based clinical practices (Yarber et al., 2015).

A participant revealed that the train the trainer approach related to simulation had helped her, as it increased her feelings of confidence when she performed simulation activities during her simulation training. Other educators voiced that they felt more at ease when conducting a simulation activity due to the learning that they had received and the essential support that this approach had given them. The train the trainer program could be implemented during an instructor development workshop, as it provides trainees with new nursing skills and up-to-date simulation training.

> National Simulation Conference

National simulation conferences provide nursing educators with current educational practices and technologies that are crucial to nursing education (Shellenbarger, 2015). Also, they can give the educator networking opportunities, which allows them to learn from other educators. Participants disclosed that simulation conferences are beneficial as they provide them with up-to-date simulation technologies and new nursing techniques. The educators revealed that the conferences could be local or international; it all depends

on the budget. Implementation of these conferences can also provide teachers with current practices in simulation technology (Walker, 2018).

> Technology-enhanced Simulation Training

Nursing educators are practicing their skills in a technology-rich environment that is essential for their teaching and learning practices (Bleich et al., 2018). The use of simulation technology also strengthens the retention of instructor knowledge (Scheckel, 2016). The educators acknowledged that technology-enhanced simulation training is needed to provide them with new experiences that help to improve their academic and clinical learning for themselves and their students. The application of new technology related to simulation is utilized when designing structured learning activities. Technology-enhanced simulation training can be implemented when new simulation techniques are presented at a faculty development workshop.

Mentorship Program

A mentorship program is a relationship that takes place between the less experienced and more experienced faculty members in a similar area of expertise (Burgess, van Diggele, & Mellis, 2018). Mentorship programs should be implemented because they "enhance workforce performance and engagement, promote learning opportunities, and encourage multidisciplinary collaboration" (Burgess et al., 2018, p. 197). Educators voiced that mentoring is essential because it provides the less experienced or new faculty member with new knowledge and experiences from the seasonal faculty member. Also, a participant said that mentoring is always an asset to her. A necessary criterion for a mentorship program is to match the right mentor with the right mentee as this will help to achieve an effective and productive relationship.

> Inter-professional Collaborative Workshop

Inter-professional collaboration is a strategy that is used to introduce simulation technologies for faculty development. The importance of implementing an interprofessional collaborative workshop is to help educators "to learn about, from and with each other, to enable them to collaborate effectively" on educational goals that will promote simulation learning and to develop a collaborative nursing practice (Ratka, Zorek, & Merger, 2017, p. 1).

The faculty members acknowledged that inter-professional collaboration provided them with much-needed improvement with their faculty relationships and their relationships with other educators from different healthcare disciplines. The educators also revealed that inter-professional collaboration helped to improve their communication skills between faculty members and students and helped

- them to work cohesively as a team. It is an active and interactive learning process that occurs between different healthcare professionals.
- Faculty Learning Communities According to Trninic, Swanson, and Kapur (2018), faculty learning communities "aim to expand the collective knowledge of the group" (p. 622). They are also regarded as educator partnerships that provide and support learning (Kane, Shaw, Pang, Salley, & Snider, 2016). The implementation of faculty learning communities provides nursing educators with encouragement, support, and they create experiential learning opportunities and provide collaborative learning environments. The educators acknowledged that they used faculty learning communities at times because they were central to their simulation training, and they promoted a sense of cohesiveness to the nursing faculty.

Conclusion

The position paper's primary goal is to convey the results of the study findings and provide the nurse faculties and the school administration with recommendations on ways to improve their current faculty development program regarding simulation technology. The educators' responses regarding the faculty development program will inform the senior leadership team with the facts and evidence supported by current literature on why the faculty development plan needs improvement in simulation training. This white paper encompasses the suggested recommendations to help and guide the senior leadership team to reinforce and strengthen the faculty development program.

References

- AIC position paper guidelines (2013). Retrieved from https://www.conservation-us.org/docs/default-source/governance/position-paper-guidelines-(february-2013).pdf?sfvrsn=12
- Anderson, P. M., & Vanderbilt, A. A. (2018). Bridging the gap between physician and medical student education: Using the train the trainer model to improve cultural competence training in the clerkship years of medical school. *Advances in Medical Education and Practices*, *9*, 495-498.
- Bleich, M. R., Jackson, C., Werner, S. H., Hines, D., Stuart, N., & Nelson, A. (2018). Beyond high-fidelity simulation: Emerging technologies in leadership development. *Journal of Continuing Education in Nursing*, 49(3), 105-108.
- Burgess, A., van Diggele, C., & Mellis, C. (2018). Mentorship in the health professions: A review. *The Clinical Teacher*, *15*(3), 197-202.

- Creswell, J. W. (2014). Research design: Qualitative, quantitative, and mixed methods approach. (4th ed.). Los Angeles, CA: Sage Publications, Inc.
- Erlam, G. D., Smythe, L., & Wright-St Clair, V. (2017). Simulation is not a pedagogy. *Open Journal of Nursing*, 7,779-787.
- Kane, R., Shaw, M., Pang, S., Salley, W. & Snider, B. (2016). Faculty professional development and student satisfaction in online higher education. *Online Journal of Distance Learning Administration*, 14(2), 1-12.
- Merriam, S. B. & Tisdell, E. J. (2016). Qualitative research: A guide to design and implementation. San Francisco, CA: Jossey-Bass.
- Purdue Online Writing Lab (2015). White paper: Purpose and audience. Retrieved from https://owl.english.purdue.edu/owl/resource/546/1/
- Ratka, A., Zorek, J. A., & Meyer, S. M. (2017). Overview of faculty development programs for interprofessional education. *American Journal of Pharmaceutical Education*, 81(5), 96.
- Saldana, J. (2013). The coding manual for qualitative researchers. (2nd ed.). Thousand Oaks, CA: SAGE.
- Scheckel, M. (2016). Designing courses and learning experiences. In D. M. Billings & J. A. Halstead (Eds.). *Teaching in nursing: A guide for faculty*. St. Louis, MO: Elsevier.
- Shellenbarger, T. (2015). Twelve tips for a successful nursing conference experience. Retrieved from http://www.americannursetoday.com/12-tips-for-a-successful-nursing-conference-experience/
- Trninic, D., Swanson, H., & Kapur, M. (2018). Productive dissent in learning communities. *Instructional Science*, 46(4), 621-625.
- Walker, N. (2018). Embrace action: Learn, connect and participate at the annual AORN conference. *AORN Journal*, 107(2), 171-174.
- Wright, A., Moss, P., Dennis, D. M., Harrold, M., Levy, S., Furness, A. L., & Reubenson, A. (2018). The influence of a full-time, immersive simulation-based clinical placement on physiotherapy student confidence during the transition to clinical practice. Advances in Simulation, 3(1), 1-10.
- Yarber, L., Brownson, C. A., Jacob, R. R., Baker, E. A., Jones, E., Baumann, C., ...& Brownson R. C. (2015). Evaluating a train-the-trainer approach for improving

capacity for evidence-based decision making in public health. *BMC Health Services Research*, 15(1), 547-557.

Appendix B: Project Evaluation

Part A:

Directly after the presentation of white paper.

- 1 Strongly Agree; 2 Somewhat Agree; 3 Neither Agree/Disagree; 4 Somewhat Agree; 5 Strongly Disagree
 - 1. The white paper's recommendations were clearly communicated? 1 2 3 4 5
 - 2. Please rate your likelihood of implementing each recommendation. Please include why or why not each would work.
 - a. Mentoring program -12345
 - b. Inter-related workshop 1 2 3 4 5
 - c. Simulation pedagogy 1 2 3 4 5
 - d. Train the trainer program 1 2 3 4 5
 - e. National simulation conference 1 2 3 4 5
 - f. Technology-enhanced simulation training 1 2 3 4 5
 - g. Faculty learning communities -- 1 2 3 4 5

Part B:

Six months following the presentation of the white paper.

- 1. Which recommendations were implemented? Please describe what was accomplished, how it was facilitated, or why it was not implemented.
 - a. Mentoring program YES or NO Why or Why not?
 - b. Inter-related workshop YES or NO Why or Why not?
 - c. Simulation pedagogy YES or NO Why or Why not?
 - d. Train the trainer program YES or NO Why or Why not?
 - e. National simulation conference –YES or NO Why or Why not?
 - f. Technology-enhanced simulation training YES or NO Why or Why not?
 - g. Faculty learning communities YES or NO Why or Why not?
- 2. What were other strategies implemented, which helped you improve your faculty

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3. Moving forward, what do you hope to implement in the future?

Appendix C: Letter of Cooperation from a Research Partner

Community Research Partner Name: Virginia Commonwealth University

Contact Information: VCU School of Nursing, 1100 East Leigh Street, Box 980567, Richmond, VA 23298-0567, (804) 827-0629

Date: March 14, 2018

Dear Jill A. Johnson

Based on my review of your research proposal, I give permission for you to conduct the study entitled Faculty Development in Simulation for Professional Nurse Educators within the VCU School of Nursing. As part of this study, I authorize you to email to each participant a recruitment letter, which contains the overall purpose of the study. Data collection will be an individual interview via telephone or Skype and will be audiotaped. Each participant will receive a summary at the end of the study to evaluate the research conclusions. The study findings will be disseminated to all participants via email. Individuals' participation will be voluntary and at their discretion.

We understand that our organization's responsibilities include: The participants will be nursing educators who teach in the classroom or clinical settings. No rooms will be needed, as the interviews will be conducted over the telephone or skype. Resources will include viewing the faculty development training manual and the simulation training manual. The research partner will provide access to the above manuals. We reserve the right to withdraw from the study at any time if our circumstances change.

As a researcher, I will be responsible for complying with our site's research policies and requirements, which include:

- (1) Participants will be treated with respect. Autonomy will be acknowledged, and those with a diminished independence will be protected.
- (2) Beneficence. All participants will be protected from harm and secure their well-being.
- (3) Justice. All participants will be treated equally.
- (4) Participants will receive informed consent. Subjects will be given the opportunity to choose what shall or shall not happen to them.
- (5) An assessment of risks and benefits will be discussed.
- (6) Subjects will be selected. There will be fair procedures and outcomes in the range of study participants.
- (7) Determine the social and clinical value of the study, maintain scientific validity, and provides an independent review.

I understand that the student will not be naming our organization in the doctoral project report that is published in ProQuest.

I confirm that I am authorized to approve research in this setting and that this plan complies with the organization's policies.

I understand that the data collected will remain entirely confidential and may not be provided to anyone outside of the student's supervising faculty/staff without permission from the Walden University IRB.

Sincerely,

Authorization Official

Contact Information

Walden University policy on electronic signatures: An electronic signature is just as valid as a written signature as long as both parties have agreed to conduct the transaction electronically. Electronic signatures are regulated by the Uniform Electronic Transactions Act. Electronic signatures are only valid when the signer is either (a) the sender of the email, or (b) copied on the email containing the signed document. Legally an "electronic signature" can be the person's typed name, their email address, or any other identifying marker. Walden University staff verifies any electronic signatures that do not originate from a password-protected source (i.e., an email address officially on file with Walden).

Appendix D: Interview Guide

- 1. How does your institution of higher learning offer professional development and training? (RQ1)
- 2. What other ways can nurse educators achieve the learning that they require for their teaching and nursing practice? (RQ1)
- 3. How does your institution of higher learning provide mandatory, scheduled training sessions throughout the school year? (RQ1)
 - What was the title of the last professional development and training session that you attended?
- 4. Could you please discuss some of the professional development and training programs you attended in regards to simulation technology? (RQ1)
 - Can you tell me about the presenters' knowledge in regards to the information that was presented to the educators?
 - Did the professional development session include the learning styles of the educators?
- 5. Could you please describe the simulation methodologies that you have utilized in nursing education and training? (RQ1)
- 6. As a nurse educator, what are the target areas that you identify for simulation?
 (RQ1)
- 7. How has your participation in simulation training impacted your clinical practice? (RQ2)

- 8. Could you please describe how your educational institution prepares you for the new simulation technologies that are being utilized? (RQ2)
- 9. How do you evaluate the professional development and training that you received in regards to simulation technology? (RQ2)
- 10. How has professional development improved your competence and confidence in the utilization of simulation technology? (RQ2)