Simulation in Interprofessional Education: A Case Study with Baccalaureate Nursing

Faculty

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This dissertation titled
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Abstract

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Nursing programs across the country are facing the challenge of providing students with optimal clinical skill learning experiences. Faculty members are rising to this challenge in a variety of ways, and current research in nursing education advocates the addition of interprofessional education to the nursing curriculum. History and governing bodies explain how nursing education can achieve this goal but faculty have to implement required and suggested changes. Further research is needed to gain insight into perceptions of the baccalaureate nursing faculty of interprofessional education and how the simulation in interprofessional experience contributes to overall patient safety. Patient safety is a priority in nursing and by using simulation as a safe place for a nursing student to learn, and then patient safety is enhanced.

A qualitative case study was used to explore how the use of interprofessional education by baccalaureate nursing faculty can prepare nursing students to provide quality care to real patients. Baccalaureate nursing faculty from a large midwestern university in the United States of America participated in a case study that involved an interprofessional education simulation experience. Faculty were asked to participate in a set of interviews both before and after the completion of a simulated interprofessional
education experience. Additionally, the case study participants were asked to provide narrative reflective journal writings of their experiences with any simulation interprofessional education experience or any other interprofessional experience. Additional methods of observation, field notes, and focus group, were used by the researcher to gain an understanding of the faculty lived experiences. Findings from this study will aid in curricular changes within healthcare education regarding simulation in interprofessional education.
I would like to dedicate my dissertation work to my family who has provided me with the inspiration to continue on this doctoral journey. To my Grandma Hall, thank you for being a godly example of what a woman should be. To my parents who taught me to be my own person and work for what you want in life. To my husband, Joseph Buchman, for always being my biggest supporter- SHMILY! To my children: Jonah, Erika, Alyssa, Lucas and Drew, I love you more than you know and appreciate all of the “help” you offered over the past six years. To my siblings, thank you for always understanding when I couldn’t do everything I wanted to with you. To my nieces and nephews, continue to reach for the stars as you are only limited by the limitations you set in your own lives. To my extended family, God knew what he was doing when he placed each of you in my life. To my Girl Scouts, you are a great inspiration for me and I am thankful to be a small part of your lives. Yes, I am truly blessed!!
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Chapter 1: Introduction

Safety, quality, and patient-centered care are all terms that come to mind when thinking of any health care profession. The Institute of Medicine (2015) compiled its first report related to educating a health team in 1972. Interprofessional education became a focus for practice as a result of this report (IOM, 2015). “Interprofessional education occurs when students from two or more professions learn about, from and with each other to enable effective collaboration and improve health outcomes” (WHO, 2010, p. 7). However, health care and health care education are very slow to change and in 2016 the discussion continues about the best ways to begin the implementation of interprofessional education for members of the health care team.

Each profession represented on a health care team has a set of values. Nursing is an independent profession that strives to provide safe and effective care to each and every patient regardless of the patient’s background (Benner, Sutphen, Leonard, & Day, 2010; Institute of Medicine (IOM), 2001; Leininger & McFarland, 2006; The Joint Commission (TJC), 2015). Working in healthcare teams increases the quality of care and patient safety (IOM, 2015).

The Institute of Medicine (IOM) (2001) proposed “the following definition of quality care: the degree to which health services for individuals and populations increase the likelihood of desired health outcomes and are consistent with current professional knowledge” (p. 1). Using the IOM definition, leads to a definition of quality care as providing the best holistic care to every patient throughout each patient and/or family interaction to the best of the health care worker’s ability. Patient-centered care involves
assuring that the patient and/or the family is the reason for every procedure or interaction that occurs (Agency for Healthcare Research & Quality (AHRQ), 2013; Quality and Safety education for Nurses (QSEN), 2013). While each professional group on the health care team would define these terms in its own ways, common threads emerge that link these individual professions as members of a greater team (QSEN, 2013; TJC, 2015).

This study focused on the quality of the baccalaureate nursing faculty experience as members of the health care team and their perceptions of simulation in interprofessional education. Collaboration among different health care practitioners is important in quality care. Health care professionals need to be taught how to work with each other; therefore, interprofessional education is an essential component of education (IPEC, 2011; Reeves, Perrier, Goldman, Freeth, & Zwarenstein, 2013).

Stanley and Dougherty (2010) along with Gilliss’ reflection on the Carnegie study (2010) demonstrate that today’s nurses are working at a higher level of critical thinking than nurses in previous decades. Nurses are no longer limited to the bedside and under the direct supervision of physicians as they historically were. Nurses need to be independent thinkers and offer care within their scope of practice to patients while remaining a part of the health care team. This change in nursing care needs to start with the education provided to nursing students. Nursing students need to be engaged in their learning in order to develop higher levels of thinking (Benner et al., 2010). As nurses are working as independent thinkers, it is important to ensure that nurses are taught how to be members of a health care team. Members of the healthcare team have to be able to think
clearly and independently as they represent their profession within the context of the healthcare team (Benner et al., 2010; IPEC, 2011; QSEN, 2012).

Governing bodies that regulate schools and colleges of nursing require specific competencies and policies that need to occur throughout the lifespan of a nurses’ education (AHRQ, 2013). Changes to the competencies and requirements have added to the burden of nursing education by continuing to add to an already overly saturated curriculum (Benner et al., 2010; Giddens & Brady, 2007; Ironside, 2005). Benner and her team (2010) and her team of experts state that nurses are expected to possess more in depth information about the interpretations of a patient’s diagnosis, labs, drugs, and to plan interventions based on the additional information and care than at any previous time which leads to an over-saturation of the curriculum.

Nursing faculty struggle with how to help students transfer what the student has learned in the didactic portion of a course to the lab and the clinical practice. Fragmentation of learning is a frequent result (Benner et al., 2010). This fragmentation limits the student’s ability to move the newly learned skill into practice. The theory-practice gap is the label given to this fragmentation (Hatlevik, 2012; Saifan, AbuRuz, & Masa'deh, 2015; Upton, 1999). Theory and practice are taught as two different areas within one course of nursing thus causing the theory-practice gap to continue (Hatlevik, 2012; Upton, 1999). Nursing researchers across the nation have been looking for ways to close this gap. Simulation is one area that has been shown to enhance higher level thinking and problem solving and would allow the opportunity to teach theory and practice simultaneously in a controlled setting (Botma, 2014). This case was a beginning
case which allowed a beginning impression of nursing faculty understandings of an interprofessional simulation.

Leininger (1988, 2006) theorizes that care identified by the patient as authentic is a critical factor in the determination of quality nursing care. Care for the patients within their own personal identity must be transformed into the simulation experiences in order for the students to feel that the simulations are real life experiences (Diener & Hobbs, 2012). Safety needs to remain a top priority when offering care to patients in a simulated environment (AHRQ, 2015; QSEN, 2013; TJC, 2015). A need existed for a framework to guide nursing in this practice of simulation.

The Jeffries Framework for Simulation has now been widely accepted and is used in nursing academia (Groom, Henderson, & Sittner, 2014; Jeffries, 2005, 2012; Ravert & McAfooes, 2014). The Interprofessional Education Collaborative (IPEC) created a set of core interprofessional competencies to provide a set of guidelines to be used with interprofessional education (2011). Each of the four domains contains more detailed competencies. The IPEC competencies are defined by the following four domains:

- Values/Ethics for Interprofessional Practice
- Roles/Responsibilities
- Interprofessional Communication
- Teams and Teamwork (IPEC, 2011, p. 16).

Nursing faculty members generally teach content that is related to their specialty within nursing, e.g. pediatrics or adult medical-surgical. A given faculty member develops both the didactic and the lab component of a lesson on a specific subject. For
example, students are taught in the classroom the theoretical components of giving an injection to a patient, i.e.: who, what, when, where, why and how. The psychomotor skills of actually drawing up a medication and delivering the medication to the patient occur in the lab setting. In this setting, the injection is given to an object that simulates a patient (known as a simulator). This may be an orange, a hot dog, a mannequin arm or another type of device intended for learning purposes. An instructor observes and evaluates each student’s performance of this skill (known as a check off). If the student passes the check-off the student is permitted to provide a live patient an injection at a clinical facility with the supervision of the clinical instructor. Due to the unpredictability of the needs of patients in the clinical settings, students seldom have the opportunity to apply newly acquired skills immediately in the practice setting. One identified limitation to this type of teaching is that nurses do not work independently with the patients, which minimizes the nurse educator’s control in the clinical setting. Literature is beginning to emerge that recognizes the need for health care professionals to interact with each other during the time of their foundational education (Interprofessional Education Collaborative Expert Panel, 2011). Faculty members will not incorporate interprofessional education into the curriculum if they are not aware of its scope of use.

**Purpose of this Study**

The purpose of this case study was to gain a better understanding of the perceptions of the use of simulation in interprofessional education in a group of baccalaureate nursing faculty. Qualitative methodology through the research design of a case study was used to obtain insight into faculty perceptions of the use of simulation in
interprofessional education strategies that will assist nursing educators to better incorporate simulated interprofessional education experiences into a specific nursing curriculum. Through this methodology, the framework set forth by IPEC for health care educators was chosen to support the research questions. This knowledge is beneficial to nursing educators who are working with clinical partners in evaluating the influence of simulation in interprofessional education in its role to reduce the theory-practice gap between the classroom/lab and the clinical setting.

**Statement of the Problem**

Nursing education reform is needed (American Association of Colleges of Nursing (AACN), 2008; Benner et al., 2010; IOM, 2015; QSEN, 2013). Involving students in the teaching and learning process via the use of different modalities is being explored in the literature (Benner et al., 2010; Christiansen & Bell, 2010; Clifton & Mann; 2011; Hammer, Fox, & Hampton, 2014). Clifton and Mann (2011) have identified that the use of video has enhanced critical thinking in student nurses. Christiansen and Bell (2010) discovered that peer learning groups allowed students who taught others to review the knowledge, which also increased self-esteem. According to Hammer, Fox and Hampton (2014) using simulation with nursing students allows for faculty to have a more controlled environment for learning to occur. Simulation is the process of using “imitation or representation of one act or system by another” (Society for Simulation in Healthcare, 2015, p. 1).

The National Council of State Boards of Nursing (NCSBN, 2014) released a study that reported that educational outcomes for nursing students who were involved in
high-fidelity simulation for up to 50% of their clinical experiences were the same as those for students who had only patient-based clinical experiences. The board of nursing in each state will review the recent NCSBN report and determine if changes to the nursing educational program requirements in support of the current findings are needed. Following decisions by the state boards of nursing, nursing programs across the nation will need to integrate simulation into the curricula. Interprofessional education is one way to meet this need (IPEC, 2011; Simulation Innovation Resource Center (SIRC), 2015). There are many challenges and existing barriers that need to be overcome before interprofessional education can be used successfully (Olenick et al., 2011).

The research on faculty perceptions of interprofessional education is limited (Bennett et al., 2011; Lapkin et al., 2013; Loversidge & Demb, 2014). A distinct gap exists between available information about students and their perceptions of interprofessional education and that of the faculty. Previous interprofessional education studies have focused on the students and their perception of the experience (Fernandes et al., 2015; Wilbur & Kelly, 2015). Clark and her team (Clark, Congdon, Macmillan, Gonzales, & Guerra, 2015), report that interprofessional education can have great impact on the curriculum, which is the responsibility of the faculty. This study will assist with filling the gap by providing a venue for the voices of the baccalaureate nursing faculty.

The nursing educator has historically been the focus of the classroom. All eyes are upon the professor as that person explains concepts, facts, and figures related to the practice of nursing. Benner, Sutphen, Leonard, and Day (2010) eluded to the fact that nursing students lean towards being passive and sit back and listen while taking notes.
instead of being active and participating in a way that would promote student learning and critical thinking. The Carnegie study (Benner et al., 2010) reported that nursing curriculum has been focusing too heavily on content, thus, leaving the nursing student with a feeling of frustration and an inability to progress with their learning. As a result, nursing educators are faced with the challenge of finding ways to interact with students in ways that focus less on the accumulation of information. This is a new challenge to many nursing educators (NCSBN, 2014).

A simulation experience provides students the opportunity to practice the giving of an injection and the associated care on a mannequin in an environment that simulates the clinical practice (Benner et al., 2010; Billings & Halstead, 2013). The student is then able to discuss with the simulated patient through the use of a faculty member serving as a voice behind the mannequin what medication is being administered and why the patient needs the medication (Jeffries, 2012). Simulation is one way of involving the student in hands-on learning experiences thus allowing them to live what they have learned which is one step closer to closing the theory-practice gap (Jeffries, 2012). Research is limited in the area of adding in other health care professionals into a team-based simulation interprofessional experience (International Nursing Association for Clinical Simulation and Learning (INACSL), 2013; NCSBN, 2014).

In 2012, Colley reported that while change needs to occur within nursing education in general, educators believe the change involving students would result in faculty thinking that they would not have enough time to teach everything they need to
teach. Students would have the sense that they were not being taught. Human nature is not receptive to change and nursing education is no different.

The andragological approach of nursing education that has formed the historical path in the nursing curriculum is further addressed in Chapter Two. The insight into nursing education’s past will create a better appreciation of the progression of nursing education leading up to the present.

**Significance of the Study to Nursing Education and Nursing Practice**

The driving force for this research topic is the need for nursing faculty and nursing programs across the nation to strengthen the preparation of baccalaureate nursing students in the evolution from student nurse to registered nurse. This needs to happen through curricular changes. Nursing faculty members have the ability to drive the curriculum at their universities.

The framework set forth through the IPEC competency domains guided this case study. The IPEC framework may be an important component in addressing how simulation in interprofessional education can provide the content to illustrate how the use of simulation may help to lessen the theory-practice gap in nursing education.

“Interprofessional education is students from two or more professions learn about, from and with each other to enable effective collaboration and improve health outcomes” (WHO, 2010, p. 10). This definition coupled with the principles of interprofessional education as outlined by IPEC fall into the four distinctive domains of: values/ethics for interprofessional practice; roles and responsibilities, interprofessional communication and teams and teamwork (IPEC, 2011). The four domains are to serve as a guide for faculty
to work together to provide a common learning experience for students across multiple professions. A call has gone out from leaders in healthcare to embrace educational opportunities for students in the healthcare field (AACN, 2008; IOM, 2010).

**Research Questions**

A qualitative approach was used to determine how baccalaureate faculty define and apply interprofessional education into their teaching. This approach allowed the researcher to gain the baccalaureate nursing faculty’s understanding of their perspectives. Additionally, a qualitative approach allows for the research questions to be fully answered and provide a depth and breadth of understanding of the participants’ experiences. The baccalaureate nursing faculty was able to express their knowledge without fear of bias or retribution. A case study research design allowed for the baccalaureate nursing faculty to be themselves without interruption from the researcher.

This research examined the lived experiences of a set of baccalaureate nursing faculty during their simulated interprofessional educational teaching experiences to better garner their understanding of how simulation in interprofessional education can inform the curricula.

The five main research questions examined in this study were:

1. What are the lived experiences of nursing faculty?
2. How do nursing faculty describe simulation in interprofessional education?
3. What are the perceptions of baccalaureate nursing faculty concerning the value of simulation in interprofessional education?
4. How does participating in a simulated interprofessional education experience influence the teaching practices of baccalaureate nursing faculty in a midwestern university?

5. What do nursing faculty understand as their role in informing curriculum changes to include simulation in interprofessional education?

A case study approach as defined by Yin (2009) is an in-depth look at a person or group of persons. Additionally, the events need to be realistic and meaningful which made the choice of a case study a fitting strategy for this study. Through the research questions and the researchers understanding of the process of a case study, this case study was formed. Further discussions of the research methodologies are included in Chapter Three.

Figure 1: Diagrammatic Representation of Research Questions.

Source: Generated from this research.
Theoretical Framework

Interprofessional education does not have a distinct theory specific to its namesake. However, the IPEC Framework was considered as the related framework that guided simulation in interprofessional education. This IPEC Framework provides an understanding that the populations forming the interprofessional healthcare teams are at the center of the care that they provide. It is hoped that through interprofessional healthcare teams nursing faculty members will develop a new culture for healthcare education. The IPEC Framework will provide the theoretical underpinning for this research study. The historical perspective on nursing education and how the profession of nursing moves forward from its’ past while being aware and present in the current and the future is compelling.

Location

This case study took place at a large midwestern university. This School of Nursing was established in 1968. The School offers a variety of degrees across four campuses with the campus used for this case study serving as the main hub for the other three regional sites. The first class of traditional baccalaureate nursing students graduated in 2013.

The following section will define terms that are needed to gain a full understanding of this study.
Definitions of Terms

**Accreditation:** “an indication of confidence in the ability of the educational institution to offer a program of quality, deserving of public approbation” (Commission on Collegiate Nursing Education (CCNE), 2014, p. 4).

**Baccalaureate nursing:** nurses who “provide patient-centered care that identifies, respects, and addresses patients differences, values, preferences, and expected needs” (BSN Essentials, 2008, p. 8) within a four-year undergraduate degree.

**Faculty:** “a registered nurse who meets the faculty requirement set forth in the Ohio revised code for a registered nursing education program” (Ohio Revised Code, 4723-3-01, 2015).

“**Interprofessional education** occurs when students from two or more professions learn about, from and with each other to enable effective collaboration and improve health outcomes” (WHO, 2010, p. 7).

**Nurse education program:** "a nurse education program approved by the board of nursing” (Ohio Revised Code, 4723.063, 2015) education of individuals in preparation to sit for the registered nurse licensing exam.

**Patient:** “the recipient of nursing care or dialysis care, which may include an individual, a group, or a community” (Ohio Revised Code, 4723-3-01, 2015).

**Practice of nursing as a registered nurse:** “providing to individuals and groups nursing care requiring specialized knowledge, judgment, and skill derived from the principles of biological, physical, behavioral, social, and nursing sciences” (Ohio Revised Code, 4723.01, 2015).
Perception: “is not a science of the world, nor even an act, a deliberate taking up of a position. It is the basis from which every act issues and is presupposed by them” (Streubert & Carpenter, 2011, p. 74). Perception is the natural process of beliefs for purposes of this study.

Positivist: “naïve realism, assuming an objective external reality upon which inquiry can converge” (Guba & Lincoln, 1994, p. 111).

Pre-licensure: “nursing education include, but are not limited to, diploma, associate degree, baccalaureate degree, master’s degree, and doctor of nursing programs leading to initial licensure to practice nursing as a registered nurse” (Ohio Revised Code, 4723.06, 2015).

“Registered Nurse: an individual who holds a current, valid license issued under this chapter that authorizes the practice of nursing as a registered nurse” (Ohio Revised Code, 4723.01, 2015).

Rounding: “a teaching strategy that uses the patient’s bedside for direct, purposeful experiences” (Billings & Halstead, 2013, p. 326).

Simulation: the “imitation or representation of one act or system by another” (Society for Simulation in Healthcare, 2015. p. 1).

Student nurses: Characteristics according to Benner and team (2010): imaginative, understanding, rapport, coping in the context of others and they “need rich opportunities to continue to learn, develop their practice, and articulate it both as individual nurses and members of a health care team” (2010, p. 30).
Summary

This chapter delivered a transitory overview of the research involving the baccalaureate nursing faculty from one midwestern university. The purpose of this case study was to gain a better understanding of the baccalaureate nursing faculty’s perceptions of the use of simulation in interprofessional education using the IPEC Framework. This study took place in the baccalaureate nursing faculty’s environment and allowed for them to remain in their natural setting. This case study looked at the lived experiences of the baccalaureate nursing faculty around an interprofessional education simulation experience and allowed for thick rich data about those experiences to be collected and shared with nursing and the interprofessional education fields.
Chapter 2: Review of the Literature

Historical Overview

The purpose of this case study was to gain a better understanding of the baccalaureate nursing faculty members’ perceptions of the use of simulation in interprofessional education. This examination of the literature begins with an outline of nursing education from the historical perspective. Doing so will provide an understanding of how nurses are educated. The review will then move to a discussion of simulation in interprofessional education, which is a fairly new method of instruction, and learning in the nursing profession. This study was aimed at the faculty at one large midwestern University and their perceptions of the use of interprofessional education through a simulation experience.

This examination of the literature was directed using the following search engines: Google Scholar, Cumulative Index of Nursing and Allied Health Literature (CINAL) and ProQuest. The following search terms were used: Nursing, education, faculty, simulation, qualitative, case study, BSN, interprofessional education, interprofessional simulation. The design of this literature review involved selecting studies that defined nursing as a profession and simulation in interdisciplinary education as it exists today.

Historical Perspective

Introduction.

According to Leininger (1988), historical research is very important because, as she explains, that without a past, there was no meaning for a present or a future. Nurses
work in an assortment of health care settings. The education that precedes nurses taking licensure exams through the National Council of State Boards of Nursing (NCSBN) is varied among states and institutions (QSEN, 2013). The NCSBN has developed an exam (known as the National Council Licensing Exam or NCLEX) that “ensures that newly graduated nurses from education programs can practice as safe effective practitioners in the field of nursing” (NCSBN, 2013, p. 1). Benner and her team (2010) explains that nurses go to different schools and colleges to obtain their nursing education and that not all nursing student are required to take the same courses. Although, the preparation for the NCLEX can be varied, all entering into the field of nursing across the United States of America must take the NCLEX exam and successfully pass the exam. Although the formula of what constitutes a passing score is not common knowledge, a blue print of what can be found on the exam is freely given to everyone on the NCSBN website (NCSBN, 2013). Nurses are not expected to be experts but to have the basics and be prepared regardless of where they completed their education (NCSBN, 2013).

Nurses have historically worked at the bedside of patients whether they are in the hospitals, in clinics, or in patients’ homes (Benner et al., 2010, Benner, 2013). Although nursing is a service profession; the current trend is that nurses are no longer limited to caring for patients strictly by doing hands-on care (Kennedy & Hussey, 2015). According to Potter and Perry (2009) nurses are working in supportive roles such as nursing education and informatics. The present state of nursing education is designed to comply with many state regulations and national accrediting bodies (Benner et al., 2010; Potter & Perry, 2009).
The scope of nursing practice is subject to continuous updating and has been since the days of Florence Nightingale, the Lady with the Lamp (Collyer, 2015; Pasley, 2010). Florence Nightingale believed in the importance of sanitation and infection control during the Crimean War in the 1850s (Collyer, 2015; McDonald, 2013; Potter & Perry, 2009; Taylor et al., 2011). She further thought that the character of the nurse was to be on the battlefield and to facilitate the recovery of injured soldiers (Potter & Perry, 2009; Taylor et al., 2011). Nightingale is credited with saving many lives during this era by decreasing the infection rates and helping wounded soldiers remain free from deadly infection (Nightingale Society, 2015; Potter & Perry, 2009). A nurse epidemiologist did not exist before Nightingale (Potter & Perry, 2009). Nightingale used her intelligence and skills to build statistical models that displayed connections between poor living quarters and the increase in disease (Potter & Perry, 2009, Taylor, 2011).

Nightingale took what she had learned during the days of the Crimean War and organized the very first school of nursing (Potter & Perry, 2009; Taylor, 2011). This school was located in St. Thomas Hospital in London (Potter & Perry, 2009). Nightingale transferred what she had learned about the control of infection through control of the environment to nursing students (National Women’s History Museum (NWHM), 2015). Nightingale was the first known nurse to transfer knowledge and skills to others; and concepts that she taught remain an important part of public health and are being taught today (Pasley, 2015).

The Nightingale Schools advocated that the practice of infection control occurred both internal and external of the hospital and was to be in the hands of the nurses who
knew the patients better that the physicians (Potter & Perry, 2009; Roux & Halstead, 2009). According to Roux and Halstead (2009), Nightingale held the belief that nursing education should not be associated with medical education nor should it be limited to hands-on skills or tasks that have no theory to support their implementation.

Roux and Halstead (2009) explain that Nightingale believed nursing students needed backgrounds in anatomy and physiology to gain a better understanding of how surgery works. Additionally, nursing students were to be educated in the field of chemistry, nutrition, and professionalism all of which are still components of current nursing curriculum (Roux & Halstead, 2009). Nightingale was an advocate for students and student learning (Taylor, 2011). Her ideas prompted the current clinical instructor model for students to be under the direct learning experiences with a trained nurse (Roux & Halstead, 2009).

The quick arrival of the Civil War in the 1860s necessitated the need for further nurses in the United States (Roux & Halstead, 2009). One nurse by the name of Clara Barton followed in the footsteps of Florence Nightingale and went onto the battlefield and tended to soldiers where they lay. Barton’s efforts led to the creation of the American Red Cross (Roux & Halstead, 2009). The nursing profession learned through Clara Barton that by not moving patients but rather treating them where they lay was a safe and often an effective way of treating patients. This information was shared and passed on to the learners in the Nightingale schools (Potter & Perry, 2009).

Roux and Halstead (2009,) also address the impact of the Industrial Revolution at the end of the 1800s with more women needing to be in the workforce; this led to a more
basic level of nursing and nursing education. This level of nursing came to be known as practical nursing. The first nursing course of this type was taught outside of the university and outside of the hospital setting. It was taught in the Young Women’s Christian Association (YWCA) located in Brooklyn, New York (Roux & Halstead, 2009). The education was limited to the need-to-know hands-on-skills and the theory behind the practice was no longer taught (Roux & Halstead, 2009). Learners documented their skill by performing routine demonstrations of basic skills in the provisions of basic nursing (Roux & Halstead, 2009). This type of practical nursing is still in existence today, but is shrinking as the care in hospitals is much more complex requiring greater preparation. Given the lack of jobs for practical nurses the number of programs is decreasing and the move is to make the entry into nursing, the baccalaureate degree (IOM, 2010; Larson, 2008).

**Twentieth century nursing.**

The turn of the twentieth century brought many changes to nursing and nursing education. In 1901, Fenwick addressed the need for nurses to be educated in colleges a place that they could become prepared to address concerns from patients at all levels (Roux & Halstead, 2009). Additionally, the Army Nurse Corps was founded in 1901 and very soon after in 1908 the Navy Corps emerged. The Corps based some of the education provided on information from the eras of the Crimean War and the Civil War (Roux & Halstead, 2009). Also during this time frame, Columbia University Teachers College hired its first nursing professor, Mary Adelaide Nutting (Potter & Perry 2009).
During the 1920s a continued area of growth occurred for nursing education as specialty areas began to emerge (Potter & Perry, 2009). Roux and Halstead (2009) explain that during the first part of the twentieth century nursing schools provided services to area hospitals in exchange for a few lecture courses, a place to stay and a small monthly allowance. Apprenticeship type learning occurred in the hospital settings and continued into the dorms as the discussions of the day occurred (Roux & Halstead, 2009).

According to Bastable (2006, & 2008), the National League of Nursing published standards that decreased student-working hours and required learning to be more structured and to include more hours. Due to this publication, the Teachers College at Columbia University provided nursing students with two years of hospital training and a full year of public health training (Roux & Halstead, 2009).

The year 1923 brought educational standards via the Goldmark Report (Batten, 2011). This recommendation included standards being developed for nursing education and that schools of nursing need to develop education standards rather than serving in hospitals for patient care (Batten, 2011; Egenes, 2009). There was further discussion that the number of patients that schools of nursing were servicing was unbalanced (Batten, 2011). The learning would need to be completely changed with the change in the location of the teaching (Batten, 2011; Egenes, 2009).

The Burgess Report followed the Goldmark Report in 1928. Egenes (2009) writes that while the report had meaningful ideas regarding funding from hospitals to support nursing education, the recommendations were not followed. Furthermore, this report
requested that schools of nursing look at criteria for admitting nursing students (Egenes, 2009). According to Egenes (2009), another evaluation of nursing education occurred in 1948 when the Carnegie Foundation funded Ester Brown to write a report. Brown supported the work of both the Goldmark Report and the Burgess Report (Egenes, 2009; Ellis & Hartley, 2004). Additionally, Brown added a need for recruitment of faculty with baccalaureate or graduate degrees (Egenes, 2009). Nursing education and learning would be enhanced by the faculty having degrees in nursing (Egenes, 2009). During 1949, the Ginzberg Report was released, which identified a nursing shortage (Ellis & Hartley, 2004). The nursing shortage had an impact on how nurses learn with schools wanting to put as much material in as short a period of time as possible to fill the demand for registered nurses (Ellis & Hartley, 2004).

Work in the 1950s demonstrated that nursing schools were not meeting the standards that had been identified in earlier reports (West & Hawkins, 1950). A reform of nursing was advocated (Ellis & Hartley, 2004). This reform was seen as essential due to the changes in the medical technology and the increased need for nurses to better understand the disease processes (West & Hawkins, 1950, Roux & Halstead, 2009). The only way for this change to occur was to remove nurses from the hospital education system and place them directly into the learning classroom environment (Roux & Halstead, 2009; West & Hawkins, 2004). Additional changes in the 1950s to affect nursing education included the opening of a master’s degree in mental health at Rutgers University in New Jersey (Roux & Halstead, 2009). This was significant to nursing
education because prior to this time if nurses wanted to get an advanced degree they had to obtain the degree outside of the field of nursing (Schekel, 2009).

According to Egenes (2009), the year 1959 brought the associate degree nursing programs. The associate degree nursing program is still in existence (Benner et al., 2010). The U.S. Public Health Services (1963) argued that the nursing profession should not all convert to entry- baccalaureate (Schekel, 2009).

In 1965, the American Nurse Association (ANA) declared that the baccalaureate degree should be the entry- education for registered nurses (ANA, 1965). The declaration called for an understanding that the nurse of today will not be the same nurse as that of tomorrow and those being prepared to enter the profession needed to have the broader based education (Nelson, 2002). The ANA Position Statement (1965) noted that all nurses should be educationally trained in colleges if they are going to practice nursing and that the minimal education for nurses should be a baccalaureate degree. The ANA is the premiere practice-based organization in nursing, and it continues to create standards for what the practice arena needs from the education arena (ANA, 2015). These changes occur through policy and procedure changes (Nelson, 2002). In 1969, the ANA, promoted that the nurse should be prepared in theory and in specialty roles (Nelson, 2002).

Nelson (2002) reported that in 1978 the ANA House of Delegates supported the 1965 requirements for minimal entry into the field of nursing to be the baccalaureate degree. Furthermore, Nelson (2002) reflects that in 1982, the ANA House of Delegates again approved the 1965 Position statement. This practice has not yet changed in 2016,
although there has been some progress (ANA, 2015). As the 1990s approached, the National League of Nursing released a position statement that there should be an easy conversion from one type of nursing education program to that of the next level (Schekel, 2009).

The year 2001 brought revisions to the Code of Ethics to reflect current ethical issues in nursing (Schekel, 2009). Spigel (2002) reports that the Nurse Reinvestment Act of 2002, was responsible for funding to assist with the nursing shortage and to create scholarships for those who agree to work in low income areas as well as loan forgiveness for nursing faculty program. Portions of this act are still in place today to assist with the nursing shortages (AACN, 2014; Spigel, 2002).

The American Association of Colleges of Nursing (AACN) released a fact sheet in 2014 that indicted a shortage of baccalaureate prepared nurses is affecting patient care. A call to move nursing education to baccalaureate entry was again supported (ANA, 1965; AACN, 2014). Partnerships began to emerge in healthcare in large cities between large hospital facilities and educational institutions (AACN, 2014). It is this call that brings us to the present in nursing education.

**Current State of Knowledge**

Nursing is a profession that is practiced and not merely completed (Benner et al., 2010). According to Potter and Perry (2009), to act professionally a nurse must administer care to patients in a safe and effective manner. Nurses are not born but are trained and educated to care for those in need (Benner et al., 2010). Each college or university has guidelines that perspective nurses must adhere to in order to become
successful nursing students and ultimately successful nurses in the field (AACN, 2008; OBN, 2011). Nursing programs use a set of normal situations and expectations that are governed through the professional code of ethics, the accrediting bodies, and the school’s policies to assure that nursing students are given the knowledge that will assist with critical thinking and that will lead to the ability to deliver safe and effective care (AACN, 2008; NCSBN, 2013; OBN, 2011; QSEN, 2013).

**Standards of teaching practice.**

Nurses need to be knowledgeable and competent in their field (Benner et al., 2010). Nurses can be proficient in specialty areas but all nurses need to have the same basic foundational skills (Potter & Perry, 2009; Ohio Revised Code (ORC), 2015). Critical thinking is one thing that sets the baccalaureate student nurse (BSN) apart from student nurses in other types of educational programs. Proficiency in situations that require speedy critical thinking is a high priority for this level of nurse (AACN, 2008). The American Association of Colleges of Nursing (2008) defines critical thinking as “all or part of the process of questioning, analysis, synthesis, interpretation, inference, inductive and deductive reasoning, intuition, application, and creativity” (p. 37). Critical thinking is an essential skill for all nurses (AACN, 2008; Benner et al., 2010). Nurses are expected to have a variety of roles throughout the day and critical thinking ability allows them to move from one role to another without any loss of function (OBN, 2011). Not only do nurses provide care but they are responsible for maintaining the units where they work as well as contributing to the agencies that employ them. Nursing education uses all of these standards in the education of the student nurses (ANA, 2015).
Ohio Board of Nursing.

The Ohio Board of Nursing (OBN) is governed by the Ohio Nurse Practice Act (Ohio Nurse Association (ONA), 2010). There are a written set of rules and regulations that all nurses must adhere to obtain and maintain licensure as a nurse in the state of Ohio (OBN, 2010). The Ohio Nurse Practice Act sets the parameters of practice for nurses in the state (ONA, 2010). The OBN is charged with enforcing the rules and regulations set forth by the Ohio Nurse Practice Act (OBN, 2011). Each state has its individual board of nursing which implements and supervises nursing practice according to the specific rules and mandates of that state (ONA, 2011). The main goal of the OBN is to protect the public by assuring that registered nurses are providing safe and effective care (OBN, 2011). The rules and regulations spell out the requirements for the nurse educators and the requirements for nursing programs that educate student nurses (OBN, 2011). Periodically, the OBN makes site visits to nursing programs to validate that what the nursing program says is occurring is truly occurring (OBN, 2011). In Ohio programs are reviewed every five years at a minimum and preparation for such review requires a tremendous amount of time (OBN, 2011).

National League of Nursing.

A nursing shortage is occurring nationwide and nursing programs are under pressure to produce nurses that are going to help fill the gap (AACN, 2014; Ellis & Hartley, 2004; Spigel, 2002). The National League of Nursing (NLN, 2002) in its position statement on the preparation of nursing educators suggested that nursing educators be supported and developed. Nursing faculty can come from a variety of
backgrounds into education (NLN, 2002). Regardless of the nursing educator’s background, the NLN asserts the following:

That the nurse educator role requires specialized preparation and every individual engaged in the academic enterprise must be prepared to implement that role successfully. In addition, each academic unit in nursing must have a cadre of experts in nursing education who provide the leadership needed to advance nursing education, conduct pedagogical research, and contribute to the ongoing development of the science of nursing education (NLN, 2002, p. 1).

Nurses are not entering the field of nursing education at the level that is desired or needed (AACN, 2014, NLN, 2002). Current statistical data based on the ratio of ten students to one full time nursing faculty suggests that nursing education still has much room for growth as we have less than 50% of the educators we need (NLN, 2002). According to the NLN (2012), both the nursing and the nursing educator shortage continue. Buerhaus (2008) reports that in order for the nursing shortage to be resolved, there would need to be a 40% annual increase in practicing nurses to replace the nurses who are retiring. This adds in additional pressure for nursing educators to meet the requirements of the nursing students and to adhere to the standards called upon by the profession.

Nurse educators need to know how to teach as well as how to measure and appraise student nurses. Curriculum development becomes a priority for the nurse educator. According to the NLN (2002):
It is critical that all nurse educators know about teaching, learning and evaluation; and nurse educators who practice in academic settings also must have knowledge and skill in curriculum development, assessment of program outcomes, and being an effective member of an academic community, among other things. Additionally, each academic unit in nursing must have a cadre of experts/architects/designers/leaders who can envision new realities for nursing education, generate new models of education, and create new pedagogies and new futures for nursing education (p. 3).

The NLN is permeated with four core values that flow over into the nursing education that is provided to the BSN students. Caring, integrity, diversity and excellence are core values supported by the NLN as well as the educational system educating the participants in BSN program where this research occurred (NLN, 2012). Caring is a fundamental part of being a nurse (Benner et al., 2010; Potter & Perry, 2009, NLN, 2015). Integrity is when a nurse is responsible for doing the right thing (Potter & Perry, 2009; NLN, 2015). Educators tend to teach nursing students how to care for someone who has a certain disease process but it is just as important to look at the individual as a diverse person (NLN, 2002). The final core value relates to excellence (NLN, 2002). Educators need to “promote excellence in nursing education to build a strong and diverse nursing workforce to advance the health of our nation and the global community” (NLN, 2015, p. 1).
Lack of nursing faculty.

According to the Robert Wood Johnson Foundation (RWJF) (2007) nursing programs are turning away students due to the lack of nursing faculty. A factor adding to the shortage of faculty is the low pay for nursing educators; there is not a significant pay differential between nurses who work in the clinical setting and nurses who are responsible for training student nurses to care for patients (RWJF, 2007). Perhaps the most significant issue correlated to the shortage of nursing educators is the statement that by the year 2020, the United States will lose 72% of the current faculty to retirement (AACN, 2014; RWJF, 2007).

Quality and Safety Education for Nurses.

Quality and Safety Education for Nurses (QSEN) is a project that was funded by the Robert Wood Johnson Foundation to assist with the education of future nurses (QSEN, 2012). The focus of QSEN is addressing six of the most challenging areas for student nurses. QSEN (2012) defined the following six areas as competencies:

- Patient-centered Care
- Teamwork and Collaboration
- Evidence-based Practice
- Quality Improvement
- Safety
- Informatics (QSEN, 2012, p. 1)

Nursing educators are well versed in the language of QSEN (Hern, Key, Goss, & Owens, 2015; Mansour, 2015). QSEN looks at the knowledge, skills and attitudes (KSA)
to assist nurses in providing safe and quality care to patients (QSEN, 2012). Nursing educators look to the QSEN website to gain insights into different aspects of education they can provide to their nursing students (Hern et al., 2015; NLN, 2015). Each of the six categories is broken down into the three areas of knowledge, skills, and attitudes (QSEN, 2012).

**American Association of Colleges of Nursing.**

The AACN provides specific competencies for BSN and higher levels of nursing education (2008). The BSN competencies have nine specific standards that nursing programs and nursing educators must meet (AACN, 2008). The following paragraphs discuss the nine baccalaureate essentials that nursing educators use to design a program that would be accredited by the accrediting member of the AACN.

The AACN position on baccalaureate education is that BSN “is the minimum level required for entry into professional nursing practice in today’s complex healthcare environment” (AACN, 2008, p. 8). Therefore, nursing education programs across the nation need to take heed and assure that their programs produce nurse generalists who are ready to work in the field (Martin, Godfrey, & Walker, 2015; OBN, 2011). The first essential states that all baccalaureate level nursing programs must offer a liberal education to their students (AACN, 2008). The second essential focuses on the basics of the organization and the leadership in the organization. It further looks into the quality of care provided to each patient as well as the safety of each individual patient (AACN, 2008). The third essential describes the role of the BSN prepared nurse as evidence-based practice through scholarship (AACN, 2008). The fourth essential details the nurse’s role
in the area of technology (AACN, 2008). By the year 2014, federal initiatives are requiring all health care institutions to use electronic health records (NLN, 2008). The fourth essential ties the quality from the previous three essentials into the technology aspect (AACN, 2008).

Essential five relates to regulatory agencies and systems in place that govern nursing education (AACN, 2008). The sixth essential details collaboration and interprofessional communication among health care professionals (AACN, 2008). Essential seven is focused on the population (AACN, 2008). Professionalism is tied into the eighth essential (AACN, 2008). The set of values that a nurse has is determined by many factors, one of which is the nursing education the BSN student receives. “Professionalism and the inherent values of altruism, autonomy, human dignity, integrity, and social justice are fundamental to the discipline of nursing” (AACN, 2008, p. 5). The final essential, number nine is focused on the entirety of the baccalaureate education (AACN, 2008).

The *Essentials of Baccalaureate Education for Professional Nursing Practice* (2008) provides valuable information about each of the nine essentials to prepare nursing students to be able to meet the curriculum requirements which, in turn, allows them to be successful graduates of their respective nursing programs (Martin et al., 2015). The BSN Essentials are the foundational framework to many curricula in nursing (BSN Essentials, 2008). The IOM (2010) has produced reports that offer information and standards as to what and how healthcare workers should be prepared. The main goal of the IOM Report from 2010 is to assure that there is a safer healthcare delivery system.
**Future of Nursing Clinical Practice**

The National Council of State Boards of Nursing (NCSBN) released a position statement in 2010 that specified nurses at the baccalaureate level of practice to possess the minimum degree to enter nursing. The position statement also raised a call for advanced practice nurse to care for patients at clinical facilities and for nurse educators to take on the role of nursing faculty (2010). The NCSBN Position Statement (2010) was based on the expectations that research supports the fact that nurses with higher education are facilitating higher patient outcomes.

Nurses are being encouraged to use innovative teaching methodologies in the classroom in the 21st century (Billings & Halstead, 2013; NCSBN, 2010). Doing so will require nursing faculty to be educated in new and evolving teaching modalities that exist especially in the realm of technology (AACN, 2008; Livesay et al., 2015; QSEN, 2013). The majority of nursing faculty did not grow up using computers and technology and may be slow to want to learn about how to use these new devices in classrooms and clinical (Billings & Halstead, 2013). Faculty workloads become a focus as more work and expectations are added to the educators. Students are requiring more time from the faculty members thus increasing the invisible factors of the nursing workload (Smeltzer et al., 2014).

Nurses are being called to take leadership roles (AACN, 2008; Billings & Halstead, 2013). Boynton explains that “nurses must develop an emotional maturity that will enable them to hold difficult conversations, respect a wide variety of diversity, manage conflict, and collaborate effectively” (2016, p. 2-3). Nurse are no longer going to
be expected to stand behind the physician but rather to stand beside the physician as the role of a nurse is no less important but rather different (Billings & Halstead, 2013). Nurses are the main source of communication between the patient and other healthcare professionals. The nurse’s strength lies in the ability to discover the patient’s perspective about the state of health (Benner et al., 2010). Evidence based practice is a growing research opportunity for nurses (Billings & Halstead, 2013; QSEN, 2013). Evidence-based practice is a way of looking at a clinical practice that has been studied and changed to meet the patients’ needs based on best practices available (Billings & Halstead, 2013; Hood, 2014; QSEN, 2013).

**Interprofessional Education**

The World Health Organization (WHO) defines “interprofessional education occurs when students from two or more professions learn about, from and with each other to enable effective collaboration and improve health outcomes” (WHO, 2010, p. 7). This definition of interprofessional education is not what is currently happening in many educational systems (Angelini, 2011; Benner et al., 2010). Programs tend to work in silos to reach curricular goals and accreditation standards with minimal cross-discipline discussions (Angelini, 2011; Benner et al., 2010). Working in silos does not foster teamwork. Benner and her team (2010) reports that nursing and “other health care professions educate their students in silos, isolated from one another and hence largely ignorant of the expertise of those with whom they will need to work closely and seamlessly” (p. 22).
IPEC (2011) sent out a call to all healthcare and educational entities to find a way to educate and work together. This has been a slow moving process as a product of the educational silos found in healthcare across the United States (Angelini, 2011; Benner et al., 2010). The literature revealed that interprofessional education has been valued in countries such as the Australia, Belgium, Canada, Germany, Japan and the United Kingdom (Anderson, Thorpe, Heney, & Petersen, 2009; IPEC, 2011; Lapkin, Levett-Jones, & Gilligan, 2011; Muller-Juge et al., 2014). Education systems in the United States can play a significant part on closing the opening amongst education and the practice setting with interprofessional education (IPEC, 2011). Fostering teamwork in the education setting will then carry over into the practice setting.

Communication errors among professionals have caused medical errors, delays in treatments and deaths (TJC, 2014). There is a critical need for health care professionals to work together as a team (IPEC, 2011). There is increased literature on student perceptions regarding interprofessional education. One study by Wilbur and Kelly (2015) asked pharmacy and nursing students about their perception of interprofessional education. They identified that students reported a willingness to work together in the future.

Clark (2015) and her team completed a study with students from the health care fields of pharmacy, nursing, social work and respiratory therapy. The results indicated an increase in the team aspect of providing care (Clark et al., 2015). Another interprofessional education study with healthcare professional students from midwifery, occupational therapy, physician assistants, physiotherapy and nursing demonstrated
students experiencing an increase in pride and faith or trust in others (Fernandes et al., 2015). The interprofessional studies found related to student perceptions are reflective of what IPEC states:

Interprofessional education is generally well-received by participants who develop communication skills, further their abilities to critically reflect, and learn to appreciate the challenges and benefits of working in teams. Effective interprofessional education fosters respect among the health professions, eliminates harmful stereotypes, and evokes a patient-centered ethic in practice (IPEC, 2011, p. 20).

There were very limited studies, which addressed faculty perceptions, specifically those of baccalaureate faculty. Two studies were found that contributed to understanding faculty perceptions. Bennett (2011) and his team from Australia studied an interprofessional group of faculty from six different specialties. Through a process of interviews and workshops Bennett (2011) and his team were able to identify faculty barriers related to interprofessional education. Four themes emerged as barriers including leadership, curriculum, and costs and funding (Bennett et al., 2011). IPEC (2011) forewarned of these barriers in their initial call for interprofessional education.

Another study, concerning faculty perceptions, was completed by Loversidge and Demb (2014). Groups of nursing and physician faculty worked in dyads in the educational setting to prepare for teamwork. Themes emerged and included curriculum, clinical environments and student roles and student understanding of roles (Loversidge & Demb, 2014). IPEC (2011) identifies learning about the work of others as a key factor.
when working with interprofessional education. Faculty are able to view how students are able or not able to work in a team environment.

**Simulation in Interprofessional Education**

Simulation in the interprofessional educational experience was the focus of this case study. Simulation is used as an opportunity to allow a faculty member to create a situation for a student that closely mimics reality (Scheckel, 2008). Simulation in interprofessional education is innovative in nature and there are not interprofessional simulations readily available thus faculty members who want to use this innovative strategy will need to create or redesign simulations to meet their course needs (Nimmagadda & Murphy, 2014). The advancement of technology has helped to advance nursing education in the area of simulation (Benner et al., 2010; Jeffries, 2012). Simulation allows the user to practice providing safe and effective care in a safe environment (Hood, 2014; QSEN, 2013). Faculty can involve students at a greater level in a simulation experience as compared to a class lecture (Benner et al., 2010; Jeffries, 2012; Roux & Halstead, 2009). The safety of being able to practice in higher level scenarios with a simulator provides a safe learning environment for students, patients and faculty (Jeffries, 2012). An added benefit is that all students can be assessed in an identical simulation environment.

Faculty can program simul ators or more commonly called mannequins to do a variety of skills such as talk and blink (Bradshaw & Lowenstein, 2014, Nimmagadda & Murphy, 2014). The mere presence of a heartbeat that pulses throughout the body provides a more realistic environment for students to learn (Jeffries, 2013; Roux &
An advantage to using a simulator is that faculty can provide experiences that students may not ever get the opportunity to experience in the clinical setting (Benner et al., 2010; Bradshaw & Lowenstein, 2014; Jeffries, 2013; Roux & Halstead, 2009). According to Jeffries (2005) nursing faculty members are important parts of the simulation process. Faculty need to be present during a simulated experience but are not necessarily in the room with the students (Jeffries, 2012). Faculty members are able to be in a separate room and watch as the simulation experience occurs via video tape (Bradshaw & Lowenstein, 2014; Jeffries, 2012). These videotapes are essential during the debriefing process. The debriefing process occurs immediately after the simulation experience and is thought to be the utmost significant part of the simulation experience (Bradshaw & Lowenstein, 2014; Jeffries, 2012; Mariani, Cantrell, & Meakim, 2014).

The NLN (2012) and International Nursing Association for Clinical Simulation and Learning (INACSL, 2013) both support and provide resources specific to faculty for simulation experiences with nursing students. The NLN (2012) developed a Simulation Innovation Resource Center (SIRC) that provides resources to faculty to use as they incorporate simulation into their nursing courses. INACSL (2013) provided a set of standards of best practices for simulation in nursing education. Despite all of the resources for faculty conducting simulation, limitations still exist. These limitations include financial resources to purchase the needed equipment, faculty time and the drive to conduct simulations (Benner et al., 2010; Billings & Halstead, 2013; Bradshaw & Lowenstein, 2014; Jeffries, 2012).
Gaps in the Literature

The literature review revealed gaps related to faculty perceptions in a baccalaureate nursing program regarding simulation in interprofessional education. There is very little to be found on nursing faculty and their perceptions of simulation in interprofessional education. Additionally, available interprofessional simulations are not in existence and those who want to use interprofessional simulations have to be innovative and create or rework simulations intended for one profession (Tullmann et al., 2013). Research is required to understand the experiences of the baccalaureate nursing faculty to reflect how they may better utilize simulation in interprofessional education to help reform the nursing curriculum. Faculty perceptions are the natural thoughts and processes that occur during a given timeframe or experience (Streubert & Carpenter, 2011).

The literature revealed that there are barriers to moving nursing towards simulation in interprofessional education. The barriers identified earlier, are part of the reason the literature is limited in the field. According to Streubert and Carpenter, an acknowledgment and clearer understanding of the faculty perceptions will provide much more than completing an observation alone will (2011). The belief systems that become commonly accepted are based on perceptions of what is real to a person (Streubert & Carpenter, 2011). Human interactions cause us to form thoughts that lead us to an understanding of a perception. Benner (2010), and her team explain that students reflect on perceptions and emotions that come up when they have time to reflect. If this reflection occurs with students then it can be perceived that this same reflection on perceptions can occur with baccalaureate nursing faculty. Researching perceptions of
nursing faculty will allow for a clearer understanding of what is occurring and not just what is seen by the naked eye (Benner et al., 2010).

Summary

Nursing education has evolved over the years (Benner et al., 2010; Billings & Halstead, 2013, QSEN, 2013). There are current calls by leading nursing educators and agencies to move nursing forward to a collaborative learning environment through interprofessional education as identified in this literature review. Although nurses are expected to work in teams in practice, nursing education programs run in silos as they educate the future nurses. Current initiatives and position papers are calling for nurses to join the healthcare team starting at the educational level.
Chapter 3: Methodology

Overview

The purpose of this bounded case study was to gain a better understanding of the baccalaureate nursing faculty perceptions of the use of simulation in interprofessional education. The baccalaureate nursing faculty members are those being studied and they are a bounded group. All participants were bounded by teaching nursing students at the baccalaureate level at a large Midwestern university. This case study is holistic in nature as it is seeking to understand the baccalaureate nursing faculty members experience with simulation in interprofessional education. The IPEC Framework was a lens through which the case study was framed and analyzed. The goal is to be able to share with others the role and value that the baccalaureate nursing faculty placed on interprofessional education through the use of a simulation interprofessional education experience.

Denzin and Lincoln assert, “qualitative research is a field of inquiry in its own right” (2000, p. 2) while Creswell refers to research that begins with a worldview and inquiries about the meaning of a specific interaction or issue for the person being studied (2012). For the purpose of this study, qualitative research is defined as research that is the result of an inquiry into the lived experiences of a group of people being studied (Creswell, 2012; Denzin & Lincoln, 2000). The intent is to uncover the lived experiences of the participants as told to the researcher then the lived experiences of this group of baccalaureate nursing faculty members can be applied to other groups of faculty members in the future.
Qualitative research holds the term quality. Quality as defined by Merriam-Webster dictionary (2013) is “a peculiar or essential character or nature” (p. 1a). This quality of a person or the quality of life is what identifies each person as an individual (Denzin & Lincoln, 2000; IOM, 2001). This definition of quality fits this study and follows Denzin and Lincoln (2000) when they write “the word qualitative implies an emphasis on the qualities of entities and on the processes and meanings that are not experimentally examined or measured (if measured at all) in terms of quantity, amount, intensity, or frequency” (p. 8). Therefore, qualitative research is a process wherein the quality of inquiry is the basis of the research method. The qualitative researcher does not necessarily have an interest in determining numbers of participants, the amount of people affected by the research, the intensity to the broad public of readers or the frequency in which the situation or case plays out in different parts of the world. The qualitative researcher gives little thought to the masses but rather the quality of work that was completed based on the individual or groups of individuals being studied.

Historically, a positivist approach was thought to be the paradigm that served as the basis of qualitative research (Denzin & Lincoln, 2000). According to Denzin and Lincoln (2000), the positivist believes that there is a truth or a reality that exists and qualitative researchers serve as the utensil that is used to be capable to study, capture and comprehend what is accepted on in the world. This lends itself to a desire to validate. As with many things in life, there is another side to the spectrum. The post-positivists argue that the reality of another person cannot truly be obtained but rather merely approximated
(Denzin & Lincoln, 2000). Regardless of the chosen paradigm underlying the qualitative research, the participant is the focus of the research.

According to Denzin and Lincoln (2005) the use of qualitative research as a research method allows for the researcher to have a preview into the world of the participants. This preview is what allows the researcher to absorb what the participant is portraying through the qualitative research process. Additionally, “qualitative researchers study things in their natural settings, attempting to make sense of, or interpret, phenomena in terms of the meanings people bring to them” (Denzin & Lincoln, 2005, p. 3). This allows for more purity within the research process. Qualitative researchers are privy to an “emic view” (Streubert & Carpenter, 2011, p. 22) of what is going on with their participants. This view from within a group of people is unique and allows the qualitative researcher to see what others cannot see. This is not to be taken lightly as it is a true privilege for a qualitative researcher to be able to learn such intimate details of another person’s narrative. The researcher is the main source of information that was shared with the world; therefore, this is an honor to be accepted into the environment.

Qualitative research is a means by which the researcher is able to serve as the voice for the person being studied. Denzon and Lincoln (2002) note that qualitative research is used interdisciplinary. Terms are often used ubiquitously within qualitative research across different fields, disciplines, and professions. Qualitative research is used in education as well as the field of nursing. Nurse researchers have used qualitative research to gain valuable information regarding groups of patients. Historically nursing’s use of qualitative research will be addressed later in this paper.
Streubert and Carpenter (2011), explain that qualitative researchers search for holistic truths and that each participant has more than one truth. The holistic truth is the fundamental truth outlined by the participant. This is due to the fact that people actively participate differently in social actions. A nurse may go into a patient’s room on night shift and at the time believe that they are actively participating just by being there. Upon reflection a few days later, they may realize a different truth that while they were in the patient’s room; they merely looked in to see if the patient was breathing and did not fully engage with the patient. One truth does not eliminate the other even within the same person. Looking further into Streubert and Carpenter’s work (2011), participants base their occurrences or perceptions on previous experiences. Using the same example of a night shift nurse, a nurse always may have completed breathing checks and engaged in conversation with the patients the same way for many years. Due to the presence of another person in the room with a target patient the nurse may reflect on the existence of outside influences on how the nurse reacted that day. The qualitative researcher would examine the situation holistically on that day to determine all the truths of the participants to paint a true picture of the event as seen by the participants.

There are six characteristics identified by Streubert and Carpenter (2011) that are emphasized by qualitative researchers. First, is a belief of multiple realities. This belief was illustrated through the earlier example of a night shift nurse. The second characteristic is a commitment to finding the correct approach that supports what phenomenon the researcher is studying. Multiple phenomena were discussed throughout this paper. The third characteristic for a qualitative researcher is an obligation to reporting
the participant’s views. The participant’s truths must be told as seen without an interpretation from the researcher. The next commitment, number four is to limit disruptions in the natural setting where the research is occurring. Qualitative researchers will want to investigate and become a part of the environment that they study. This task must be well thought out to consider safety concerns as well as for disruptions that could occur by placing one’s self into another person’s environment. The fifth commitment involves an acknowledgement of the researcher within the environment. The researcher becomes a part of the environment just by being there so the commitment needs to be to not over power the situation in any way. And the final commitment involves the researcher writing thick rich data into a report or paper to share. The participants need to be represented as they were without any interpretation on behalf of the researcher. Multiple realities develop as the participants each see things in their own way. The priority is on each participant and their reality at the time they are telling about it. Researchers must keep as much of themselves out of the final product as they can.

The skill of being able to obtain detailed information about smaller groups of people within the world we live in produces a wealth of information (Patton, 2002). For example, entire cases or populations of people can be brought to life for others to learn about when they are made aware of the existence of another culture. If one were to examine the holistic experience as described by many participants in a simulation experience and disseminated to multitudes based on a population of peoples’ experiences as opposed to just one person’s experience, the effect could be greatly magnified.
Qualitative researchers empower their participants. The research that is completed by qualitative inquiry allows others to have insight into situations that they may have never known existed. Merriam (2009) writes that participants are empowered after understanding that their lives and experiences have been showcased in a way to explain to the world that the participants are and how they live their lives. This empowerment of knowing that could have helped to make a difference in someone else’s lives is the same empowerment that qualitative researchers experience when others comment on their work. This is supported by Merriam (2009) when describing the role of the qualitative researcher as having an interest in gaining an understanding of the participant and how they interpret their experience.

Specific attributes are by an individual engaged in qualitative research. A qualitative researcher needs to be able to devote the time needed to finish the research process but also to create a format to display the truths of others without adding a positive or a negative connotation on the truth. They need to be able to just state the truth as it is in a presentable manner that is appealing to the readers and that does justice to the participant. With that said, Mason (2002) warns the qualitative researcher to be cautious that although there are many exciting and important components to qualitative research one must be prepared for the challenges.

The qualitative researcher must be open to allow the qualitative research to flow. While a researcher may have had a specific question when they started obtaining data, the conversation could go in a totally different direction. Although quantitative research may be very similar to following a recipe with a step-by-step format, (Mason, 2002)
qualitative research takes on the approach that although the chef is making something to eat, the recipient, in this case the qualitative researcher, truly has no way of knowing what the outcome will be.

A unique quality to qualitative research is the opportunity to inquire into the social experiences of human life. According to Denzin and Lincoln (1994) and Streubert and Carpenter (2011) it is through the qualitative research experience that the researcher is able to focus on social concerns and address life’s questions related to those social experiences. How are these social experiences created? Where did they originate? How do they relate to human life? Do they have potential to relate to other people’s lives? These are all the types of questions a qualitative researcher must be prepared to ask.

Qualitative researchers need to proceed with caution when collecting research. Unlike their quantitative peers who are looking for numbers and very black and white details, the qualitative researcher is dealing with people’s lives and inquiring into what may be very personal details. This is a privilege not granted to all researchers. Qualitative research requires a very delicate approach of inquiry so that the natural context of the participant does not get invaded or disturbed. Although Streubert and Carpenter (2011) tell us that all “researchers affect the study participants in some way” (p. 22) the researcher must proceed carefully with research. The qualitative researcher must be skilled in knowing how to obtain the participant’s truths.

**Historical Perspective**

Although Florence Nightingale is often referred to as the first nursing researcher; nursing has not been in the lead of qualitative research. Historically, nurses were trained
by other disciplines on how to become nurses and what a nurse should be and do. Furthermore, the research approaches frequently used in nursing are too often based on foundational theories adopted from other fields in academia.

Nursing programs have been established since the days of Nightingale in the 1850s. During the 1950s a few nursing researchers begin to emerge. Marjorie Simpson is labeled as a pioneer in nursing research (Moule & Goodman, 2009). The majority of early nursing research was quantitative in nature. Lincoln and Guba (1982) stated that qualitative research is an approach that is used to guide individual perspectives and thoughts on experiences. This understanding helped to shed light on nursing and nursing researchers.

Cowman (1993) writes about Leininger and the American experience with nursing research. A list of four factors related to nursing research was developed. The following contains the four areas:

The nurse researchers adopted the prevailing quantitative approach as the primary base for their research because they wanted to be accepted and respected by other academic scientist, the researchers who established the first doctorate programs in nursing implanted the quantitative paradigms as the primary research model within these programs, the foremost nursing research publications would accept only quantitative research reports for publications and national funding for research projects was awarded only to quantitative research projects thus, the quantitative approach became the nursing research model of choice (Cowman, 1993, p. 789).
According to Streubert and Carpenter (2011) even in the year 1995, there were not many nurses writing or publishing qualitative research. Nurses were not calling themselves qualitative researchers. Over the past few decades fluctuations have transpired in nursing that allowed a new generation of nurse researchers to not only publish qualitative research but also to gain credibility for doing so. Streubert and Carpenter (2011) write, “journals and conferences are much richer because of the work of the early scholars in bringing to the mainstream a philosophy of science that demonstrates an investment in understanding the human condition” (p. 2).

Although there have not been many qualitative researchers in nursing history, qualitative researchers play a significant role in the improvement of nursing knowledge. Nurses need to understand the ways of knowing as outlined above. As nursing is both an art and a science, a science in the anatomy and skill needed to understand how the body works and the art identified in the caring aspect. The importance or relevance of the research is essential in the nurse obtaining and developing the research to the greatest potential. This leads to how nurses currently view qualitative research.

Streubert and Carpenter (2011) write that through the work of Carper in 1978, the ways of knowing explained still provides nursing with an excellent way of developing knowledge. Furthermore, it was written that there are four main ways of knowing that nurses need to understand when it comes to research.

Qualitative research is a way of looking at human values, culture and relationships; quantity is hard to measure when it comes to these personal aspects of human life (Streubert & Carpenter, 2011). The quality of the situation or the person being
studied is a top priority. Nursing is a field that places the patients at the center of all activity. Using numbers only within a situation pushes researchers into missing thick rich data that could have a tremendous influence on nursing practice. For example, if nurses were to evaluate only quantitative data collected through in-depth survey on patients who present with breast cancer in a certain geographical area, they could provide data about how many individuals who live in a certain location tested positive for breast cancer. The lost information that could determine what factors these individuals had in common would be better collected through interviews.

The quality of care that nurses provide identifies nurses as a profession. Bowling writes that the quality of care delivered to patients regarding health status determines the level at which the standards of care are met (2002). The limits that are set determine the level of acuity of care provided to a patient based on common goals and needs. Therefore, research by nurses that are based on the standards of care are very important to the profession of nursing and the patients and families served.

A common problem with nurse researchers who complete qualitative work is that the research tends to occur in small silos (Streubert & Carpenter, 2011). Furthermore, these silos are causing nurses to work on developing the same patterns of knowing in different areas without even being aware that others have already or are currently working on the same issues in health care. This leads to nurses reinventing the wheel multiple times when there may be a resolution in place at some other location. Nurses need to do a much better job of sharing what they learn about a population of people by sharing the information is identified through qualitative research (Denzin & Lincoln;
2000, Streubert & Carpenter, 2011). Nursing is both a profession of science and an art of healing. Nurses need to feel empowered by the way they provide patient-centered care the same way as the baccalaureate nursing faculty need to feel empowered by their lived experiences with interprofessional education.

According to Bowling (2002), healthcare has been improved as a result of completed qualitative research. Nurses use research to evaluate health outcomes for patients and to advocate for and assist patients who then seek appropriate treatments. The ultimate research goal according to Bowling (2002) is to have nurses add to the overall body of knowledge of science regarding health care. Increasing the body of knowledge for the nursing community as a whole was a basis for the development of the following five research questions.

**Research Questions**

The research questions examined in this study are:

1. What are the lived experiences of nursing faculty?
2. How do nursing faculty describe simulation in interprofessional education?
3. What are the perceptions of baccalaureate nursing faculty concerning the value of simulation in interprofessional education?
4. How does participating in a simulated interprofessional education experience influence the teaching practices of baccalaureate nursing faculty in a midwestern university?
5. What do nursing faculty understand as their role in informing curriculum changes to include simulation in interprofessional education?
The Researcher

The researcher is a full time faculty member at the School of Nursing at a large midwestern university in the United States. The researcher started her nursing career directly out of high school as a State Tested Nursing Assistant (STNA). While working as an STNA in a long term care facility and learning the basics of caring for patients she continued her education and received the Licensed Practical Nursing degree from Buckeye Hills Career Center in Rio Grande, Ohio. This licensure allowed for a more advanced skill in providing safe and effective patient care. During this time, this researcher remained in long term care working with the geriatric population specifically those with Alzheimer’s and other forms of dementia.

The next step in the nursing ladder was to obtain both an associate and a bachelors’ degree from the University of Rio Grande in Rio Grande, Ohio. It was during this time that a medical/surgical experience in an acute care facility allowed for development of critical thinking. Furthermore, it was upon completion of the bachelor’s degree that this researcher began a career in academia as a clinical instructor.

A love developed for academia and the researcher obtained a Masters in Science degree with an emphasis on education from the University of Phoenix online. The master’s degree led to a position as a full time faculty member. Additionally, the researcher worked as a nursing administrator at a local health care facility, which continues on a per diem basis. Immersion in the faculty role led to a desire to learn more about the research role and its relation to the faculty role. This led to the enrollment into a
PhD program for Instructional Technologies. Nursing and the basis of instructional technologies have married well and will be useful in the future.

**Bias and Assumptions**

As the researcher, and a member of the baccalaureate nursing faculty at this midwestern university, the role of researcher had to be separated from the role of instructor. To minimize any potential bias, the researcher did not act as an instructor in the case study. Inter-subjectivity is a potential bias as this researcher is a faculty member within the same School of Nursing as the case study and focus group participants. The commonality between the participants and the researcher are in existence due to the nature of the profession. The role of this researcher was observational only during the time of the interprofessional simulation.

**Reflexivity**

Reflexivity is important for a professional to be ethical and use discretion (D’Cruz, Gillingham & Melendez, 2007). This researcher, although a member of the nursing faculty at the large midwestern university that serves as a location for this study, did not serve as a faculty member in the role of the interprofessional simulation in order to minimize the risk of bias to this research. This researcher has served in the faculty role during simulations in the past but not during a simulation with interprofessional education with this group of nursing faculty members. As this is considered backyard research, this researcher had to be cautious to report only on the findings and not allow a passion for simulation or interprofessional education influence the participants as they provide their narratives. The connoisseurship brought to this research by this researcher is
to be considered with the experience in simulation but should be considered minimal in experience with simulations in interprofessional education as this is a fairly new adventure in nursing. Additionally, the dean of the respective college has charged faculty to look for ways to use interprofessional education as a way to educate students.

The researcher is a nurse by profession. Qualitative research is well suited to understanding professional topics. Health care professionals are often interested in the interactions of patients, practitioners, and educators (Streubert & Carpenter, 2011; Thorne, Kirkham, & MacDonald-Emes, 1997). This case uses qualitative methodology to study nurse educators. Nurses are advocates for those we care for and teach. Additionally, nurses want to empower those that are served by the profession. Through the use of qualitative research, participants are empowered to share their lives and the experiences they have with others.

Research Participants

This research was made possible by the participation of three full time nursing faculty members. These faculty members participated in a series of interviews, simulations and reflective journals. For the purpose of telling their narrative, they were referred to as Nurse-1, Nurse-2, and Nurse-3. The narratives of the research participants throughout this chapter are representative of the interviews, reflective journals and the simulation in interprofessional education experience. In addition, there were seven total participants in a follow up focus group; none of the case study participants were involved in the focus group.
Nurse-1 was a 52-year-old Caucasian female. She is a full time nursing faculty member at the large midwestern university used for the study. Nurse-1 stated that education has been a part of the nursing role for all of her professional career. She turned to nursing education as a field of practice as a way to give back to the profession that she has always loved. Nurse-1 has been a registered nurse since 2006. This was the first nursing education faculty role held by this participant.

Nurse-2 was a 43-year-old Caucasian female. She is a full time nursing faculty member at the large midwestern university used for the study. Nurse-2 explained that her path to nursing education occurred after many years in an executive role in nursing. Upon obtaining a master’s degree in nursing, an opportunity occurred for her to move to an educational role and that has been a decision that has helped to shape her into the educator that she is today. Nurse-2 worked originally as a licensed practical nurse and has been a registered nurse since 1996. This participant has taught both on the main campus of the university as well as on one of the regional campuses.

Nurse-3 was a 56-year-old Caucasian female. She is a full time nursing faculty member at the large midwestern university used in the study. This participant has been a registered nurse since 1991. Nurse-3 had prior teaching experience at another university and came into nursing education after many years as a nurse in an emergency room environment. Additionally, she teaches Basic Life Support (BLS) and Advanced Cardiac Life Support (ACLS) through the American Heart Association training center.
Research Design

A case study was the essence of the study. In order to fulfill the purpose of this research and to answer the research questions, the case study approach was the best fit. Creswell (2012) refers to qualitative research as research that begins with a worldview and looks at the issue at hand inquiring into the meaning of the person being studied. The goal of this research is to understand the lived experiences of baccalaureate faculty at one large midwestern university and how they understand simulation in interprofessional education through the use of a simulation experience. This researcher was seeking the depth and breadth of the baccalaureate nursing faculty experiences to determine the meanings and the attributes of their experience as the faculty member of a simulation in interprofessional education.

Denzin and Lincoln (2000) write that no paradigm is distinct to itself nor does it belong to any one profession. This knowledge allows the researcher to choose how and why a paradigm may be chosen for a research project. Qualitative research consents for the researcher to have the freedom of deciding which method of practice fits best with the research question being studied. Furthermore, the researcher can choose any method or practice over any other type (Denzin & Lincoln, 2000). Qualitative researchers vary widely in thought processes which are influenced by the researcher’s profession and attitudes (Sandelowski, 2000).

The understanding of qualitative research was valuable in determining the correct methodology to use in the research project. One cannot choose qualitative research solely because of one’s comfort with this style of research but rather that the style of qualitative
research fits more completely with the research question(s). A qualitative researcher has a plethora of methods available for data collection such as observational field notes, focus groups, historical documents, journals and interviews.

The case study is an in-depth look at a person or group of persons. Case studies can be used both in quantitative as well as qualitative research (“Qualitative Research,” 2008). Stake (1995) writes that a case study involves looking at a case and the details of each case that makes it a case. The circumstances that make a case study are the roots by which the groups of people involved in the case study are linked. “A case study provides intensive descriptions and analyses of a single unit or bounded system, such as an individual, program, event, group, intervention, or community” (Merriam, 1998, p. 19). Yin (2009) states that historically, nursing is one of the professions that have used a case study approach in research.

Yin (2009) relates that a case study needs to be realistic and meaningful. Yin further breaks down the “real life events as such as individual life cycles, small group behavior, organizational and managerial process, neighborhood change, schools performance, international relations, and the maturation of industries” (2009, p. 4). Researchers use case studies to illustrate the process occurring within the case.

There are different purposes for case studies. The case study in this research is exploratory in nature with the intent of identifying some characteristics for future research. The baccalaureate nursing faculty is a unique group as they have experiences that no other group has on a regular basis. A phenomenon that is already occurring with the baccalaureate nursing faculty was explored. The unique angle of how baccalaureate
nursing faculty members interact and function in a simulation in interprofessional education was explored. This exploratory case study is a sample of baccalaureate nursing faculty at one large midwestern university and could be applied to other groups of baccalaureate nursing faculty at other universities. Five research questions were explored using the case study approach.

Education researchers have been credited for using case studies for many years (Patton, 2002; Yin, 2009). Creswell writes that case studies are a great format for researchers to collect data through direct contact with groups of people as they are being interviewed (2012). Interviews are key resources with qualitative research as this is where the researcher is able to assemble thick rich data from the participants that will assist in telling the person’s story. Phenomenology, among other methods lends itself to interviews by allowing the researcher to understand a particular phenomenon.

Additionally, case studies allow for a review of available documents connected to a group of people. Journals written by the baccalaureate nursing faculty were reviewed at the completion of the case study. This thick rich descriptive information helped to discern what the baccalaureate nursing faculty members were experiencing within the case study environment. In addition to reviewing documents, a case study is enhanced by the use of archived data, physical artifacts or audiovisual materials (Creswell, 2012).

**Research Setting**

This case study took place at a large midwestern university. The simulation in interprofessional educational experience was considered extracurricular as it was not part of a required course or workload for faculty within the nursing department. The relevant
college had been charged by the dean to implement more interprofessional educational experiences. The college is preparing to undergo renovations within the next three years that will include a research space for interprofessional education. The college has recently developed a task force for interprofessional education.

Simulation in Interprofessional Education Experience

The researcher with Nurse-3 developed the script for the simulation that was used in this simulation in interprofessional education experience. Developing Interprofessional simulations is a necessity as this is an innovative way of teaching and learning as a result there are not readily made interprofessional simulations available (Nimmagadda & Murphey, 2014). Nurse-3 serves in a role within the School of Nursing that provides time in her workload to assist with the development of simulations. The researcher has years of experience writing simulations for nursing students and has some experience in facilitating extracurricular simulations in interprofessional education. The focus of the script was placed on the IPEC framework as opposed to any specific professional skill set. Meaning that in a nursing simulation, faculty could be assessing for a student following the five rights of passing medications if they were only assessing skills. As with an interprofessional simulation, the skill set of each profession is different and the four domains of the IPEC Framework were used not only to develop the simulation but also as a framework for all of the case study participants to follow as a guideline.
Table 1: Interprofessional Simulation Involvement

<table>
<thead>
<tr>
<th>Simulation</th>
<th>Debrief</th>
<th>SimMan 3G patient</th>
<th>Standardized Patient</th>
<th>Nurse-1 participated</th>
<th>Nurse-2 participated</th>
<th>Nurse-3 participated</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>2</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
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<tr>
<td>3</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
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</tr>
<tr>
<td>4</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
</tbody>
</table>

The objectives of the simulation in interprofessional simulation experience are supported by the IPEC framework. The following objectives were given to the faculty as part of the simulation interprofessional education experience:

1. To actively communicate as an effective member of an interprofessional team (Communication).

2. To demonstrate emerging collaborative skills while developing a patient-centered care plan (Collaboration).

3. To describe the unique perspective, value, contributions, and responsibilities that healthcare professionals bring to the geriatric interprofessional team (Roles and Responsibilities).

4. To demonstrate the ability to collaborate with the patient and family as well as develop an understanding of the potential barriers to communication with geriatric patients including health literacy, cultural barriers, cognitive, psychosocial, and physical impairments (Collaborative Patient-Family Centered Approach).

The simulation in interprofessional education experience used in this research utilized the School of Nursing’s simulation mannequin as well as a standardized patient who was an actor. The set of simulations in interprofessional education experiences were
offered at a time when neither the mannequins nor the lab was being used for regularly scheduled nursing courses. The use of interactive mannequins and standardized patients or actors was important as this would be the expectation of nursing faculty providing simulation experiences within the School of Nursing.

Teams require student participation from each participating discipline. Student participants were recruited through an extracurricular course offered at the college involving students from multiple professions. Using an elective as a means of recruiting participants has been a common way to recruit for extracurricular interprofessional activities in the past. This specific simulation in interprofessional education experience had the potential to link groups of students from nursing to physical therapy, music therapy, pharmacy, emergency medical technician and physicians (Appendix G, H & I). There was an attempt to maintain the same number of participants and faculty from each discipline, but this did not occur as the role of the pharmacist and the physician changed as the group changed. This may not always be the case depending on those that agree to participate from each discipline. The simulation ran for a total of four times. All three nursing faculty participants participated in all four of the simulations.

While Nurse-3 was vested in the scenario of the simulation from the beginning due to assisting with writing it, Nurse-1 and Nurse-2 were informed of the details prior to the first simulation in interprofessional education experience. The script was sent to them for review and then the researcher met with each of them independently to review the roles of each person.
Nurse-1 served as a greeter to the students and provided them with the student version of the script. In addition, she met with the actors and made sure that they understood their roles. During the simulation, this participant stood out of sight and observed the simulations as they unfolded. After the simulations ran through, Nurse-1 assisted with the debriefing process.

Nurse-2 served as the main debrief facilitator for all four simulations. Although the script remained the same for each simulation experience, the students were different; therefore, the simulation ran differently each time. During the simulations, Nurse-2 stood out of sight and observed the simulations as they unfolded. This participant assured that the student participants were seated in a circular format as she led the debrief for each simulation session.

Nurse-3 in addition to helping with the creation of the simulation in interprofessional education served as an actor in the simulation. She served as the daughter to the patient. The patient was represented by the use of a SimMan 3G during the first two simulations with another faculty member serving as the voice behind the SimMan 3G. A standardized patient represented the daughter of the patient during two of the simulations.

Each simulation was prepped with a pre-brief conducted mostly by Nurse-1 as she went over the expectations and objectives of the simulation in interprofessional education experience with each of the groups. The actual simulation ran for a total of 15 minutes per simulation. Each simulation experience was completed by a different group of students and was followed by a debriefing process that was facilitated by Nurse-1 and
Nurse-2. Each debrief took 30 minutes. Upon completion of the final simulation in interprofessional education, the actors and the case study participants set down and held an informal debrief.

Table 2: Interprofessional Simulation Timeline

<table>
<thead>
<tr>
<th>Preparation</th>
<th>Simulation development</th>
</tr>
</thead>
<tbody>
<tr>
<td>Day of Interprofessional Simulation</td>
<td>PT notes development</td>
</tr>
<tr>
<td>Nursing Faculty</td>
<td>Set up</td>
</tr>
<tr>
<td>Role distribution</td>
<td>Faculty and Actors meet and greet</td>
</tr>
<tr>
<td>Pre-brief</td>
<td>Consent forms for participating completed</td>
</tr>
<tr>
<td>Role distribution</td>
<td></td>
</tr>
<tr>
<td>Students (Occurred 4 times as students changed)</td>
<td></td>
</tr>
<tr>
<td>Consent forms for Simulation completed</td>
<td></td>
</tr>
<tr>
<td>Students pre-briefed</td>
<td></td>
</tr>
<tr>
<td>Students divided into groups of 4</td>
<td></td>
</tr>
<tr>
<td>Role distribution</td>
<td></td>
</tr>
<tr>
<td>Student Debrief</td>
<td>Faculty led debrief with each group of interprofessional</td>
</tr>
<tr>
<td></td>
<td>simulation (4 total)</td>
</tr>
<tr>
<td>Event Debrief</td>
<td>Nursing faculty and researcher reviewed all 4 simulation</td>
</tr>
<tr>
<td></td>
<td>experiences</td>
</tr>
</tbody>
</table>

Participants

The participants as well as the site were purposefully selected for this case study as they are all baccalaureate nursing faculty members who have the ability to inform curricular changes at their university. According to Krueger and Casey, the participants need to be selected based on the researcher’s purpose (2000). The participants in this study were baccalaureate nursing faculty at a large midwestern university in the United States. The School of Nursing baccalaureate nursing program is housed at the main campus with three regional campuses falling under one School of Nursing. There are
approximately 40 full time nursing faculty members across all four campuses. This simulation in interprofessional education experience took place on the main campus. The simulation lab was most accessible for the students from the other healthcare professions. Therefore, the nursing faculty asked to participate was limited to those teaching on the main campus.

The fourteen main campus baccalaureate nursing faculty were all asked to participate via email. There was no obligation for any faculty member to participate. All willing participants who meet the demographic criteria (Appendix D) and were willing to devote the time needed to take part in the case study were accepted into this study up to the point of saturation. Saturation is when the participants start repeating the same things independent of each other (Streubert & Carpenter, 2011). Saturation cannot be predetermined by a set number of participants. There were a total of three case study participants. Consequently, because this study’s purpose was to garner the understandings of baccalaureate nursing faculty, only nursing faculty who voluntarily participated in the study were used.

All three participants willingly gave of their time to the research. Hours were spent in the interview process by each baccalaureate nurse faculty member. In addition, the participants informed the researcher if they were going to partake in any other form of interprofessional education experiences, and they provided reflective journals of these experiences as well. All three case study participants participated in the four simulations in interprofessional education experiences.
Due to the nature of the simulation in interprofessional education experience, faculty from other disciplines could have been involved in the simulation in interprofessional education experience. Due to the limited size of the lab location and the number of participants and baccalaureate nursing faculty members, no other faculty members were asked to participate. Additionally, students from all disciplines represented was involved in the simulation in interprofessional education experience, however, for the purposes of this study, they were not studied.

**Data Collection Process**

An email (Appendix B) went to all baccalaureate nursing faculty teaching baccalaureate-nursing students at one large midwestern university requesting that they participate in this study. Individual meetings were set up with each respondent to assure full understanding of the study and to assure eligibility. All participants were asked to review a consent form prior to participating in this study. A copy of this consent form can be found in Appendix C. All participants met the criteria of the study already identified. The review of the consent form was the initial point of contact with the baccalaureate nursing faculty and the researcher regarding this study. Creswell identified that providing a full understanding of the study to the participant assists with the development of rapport (Creswell, 2013).

**Interviews.**

Open-ended interviews were used with each participant to increase the accuracy of data collection (Streubert & Carpenter, 2011). Research questions were designed with a semi-structured format to allow the researcher to enter with a set of guides for research
questions but then allow for the responses of the participants to guide the interview process. The naturalistic approach of allowing the baccalaureate nursing faculty members to speak naturally about what was going on in their lives was applied.

Interviews were conducted on a one-on-one basis between the researcher and the participant. According to Rubin and Rubin (2005) thick rich data needs to be developed from the main interview questions, probes and follow up interviews. They further write that while qualitative interviewing is an extension of ordinary conversations they build on naturalistic philosophy and the “interviews are partners in the research enterprise rather than subjects to be tested or examined” (2005, p. 12). Each interviewee is treated with the individuality that permits a conversation whether it be structured, semi structured or unstructured to flow. Being a good steward of the interviewee’s time is very important in developing rapport. Each interview was scheduled for a one hour timeframe.

Kvale and Brinkman (2009) write about the importance of morality within interviews. The researcher has a responsibility to serve only as the instrument and deliver the participants truths in a moral and ethical way without adding to or taking away from what the participant is saying. Interviews are the backbone to qualitative research, and they add the breadth and depth to the student nurse experience by including words that address feelings and emotions. Additionally, priority must be given to understanding the population of people that was interviewed (Rubin & Rubin, 2011). Rubin and Rubin in their previous work defined the glass ceiling as a barrier to gaining information from participants. Some participants especially women and minorities may feel concern related to participating in interviews (Rubin & Rubin, 2005).
Table 3: Interview and Focus Group Protocol

<table>
<thead>
<tr>
<th>Researcher</th>
<th>Steps</th>
</tr>
</thead>
<tbody>
<tr>
<td>Set up interviews.</td>
<td>Find quiet private location.</td>
</tr>
<tr>
<td>Be prepared. Have audio recording device ready. Have notebook available for notes.</td>
<td>Relax. Do not let the stress of the day show. Have the room set up and ready when participant arrives. Do not make them wait.</td>
</tr>
<tr>
<td>Use open-ended questions.</td>
<td>This is to allow for full answers in the participants words.</td>
</tr>
<tr>
<td>Use productive feedback.</td>
<td>Maintain composure. Use feedback such as thank you, or I see.</td>
</tr>
<tr>
<td>Be prepared to repeat the question in another way if need be.</td>
<td>Repeat question or ask in another way such as, could you tell me more about that?</td>
</tr>
<tr>
<td>Thank the participant.</td>
<td>Be sure to thank the participant for their time. And Schedule any additional meetings while you are together.</td>
</tr>
</tbody>
</table>

Documents.

The nursing faculty were asked to write about their lived experiences in a reflective journal throughout the time period of this study. Patton (2002) warns of ethical issue that could arise with using participant written material. Heeding the warning, participants were told at the time of consent that their reflections were to be used as part of painting the full picture of their lived experience in this simulation in interprofessional education experience. Upon receipt of these reflective journals, a copy was placed on the
jump drive and secured in the filing cabinet. The original document was stored on a computer with a secure password. Each participant had a varying number of reflective journals. Nurse-1 provided a total of six reflective journals. Nurse-2 provided five reflective journals. And Nurse-3 provided a total of four reflective journals.

The researcher observed the simulation in interprofessional education experiences. Due to the nature of simulation small groups of four to six students rotated through a simulation experience. All three of the baccalaureate nursing faculty members were present for each of the four simulation interprofessional education experiences. The simulation in interprofessional education experiences provided a crucial time to observe the lived experience of the three case study participants as they fulfilled their roles in the simulation in interprofessional education experience. The simulation in interprofessional education served as the prime opportunity to aid the researcher in observation and gathering lived experiences to answer the research questions. The researcher was not directly involved in the simulation but was an observer of each session. The number of student participants determined the number of sessions needed. Observation of the simulation in interprofessional education experiences added to the overall representation of the lived experience of the nursing faculty. Participant observation is as important as any other inquiry in qualitative research (Creswell, 2013, Patton, 2002, Streubert & Carpenter, 2011).

Observation is an additional form of data collection that may occur during a case study. The direct observation that occurs from being immersed within a population or group allows for insights that may not have previously occurred. Immersion in the
population of baccalaureate nursing faculty and students will provide direct observation data as the case unfolds. According to Krueger and Casey, field notes taken by the researcher at the time of interview or focus group can be used to supplement the transcripts (2000). The researcher used observations and field notes obtained from the interviews as well as the interprofessional simulation experience in the findings.

**Focus group.**

Seven participants were invited to participate in a focus group. The seven participants were chosen as a result of all who answered the email and met the demographic requirements (Appendix D). The group size is important to allow each participant to engage in the process (Streubert & Carpenter, 2013).

The focus group served as a representation of the participant group. Both the focus of the five research questions and the group of seven baccalaureate nursing faculty were studied (Streubert & Carpenter, 2013). “Focus group research is scientific research because it is a process of disciplined inquiry that is systematic and variable”(Krueger & Casey, 2000, p. 198). Furthermore, Krueger and Casey stress that a focus group is intended to provide insight and understanding into those being studied (2000). The researcher served as a facilitator for the focus group. The purpose of the focus group was to seek the understanding of the baccalaureate nursing faculty members regarding their understandings of simulation in interprofessional education.

The researcher explained the purpose of the focus group to the participants and then served as the facilitator to keep the dialogue on the specified focus. Key words were documented by the researcher throughout the focus group process. The focus group lasted
for one hour. These observation/field notes were available for later review. Additionally, an iPhone served as the audio recording device. The researcher completed all of the transcription thus allowing voice recognition to become part of the transcription (Streubert & Carpenter, 2013). The researcher was better prepared to complete the analysis steps as a result of transcribing the research interviews and focus groups because it increased the familiarity of the participant’s voices (Krueger & Casey, 2000).

Transcription was a lengthy process. Once the transcription occurred, the audio from the iPhone was transferred to storage on a jump drive and a computer. The original audio on the iPhone was then deleted. Transcriptions and the audio recording were stored on a jump drive in a locked filing cabinet attached to a desk as well as on the researcher computer with a secured password.

The researcher created and retained an electronic database to organize the data. The electronic database was a folder set up to house the documentation. Yin (2009) supports using a database to keep the research organized. The researcher provided an identification code to each participant. The codes were assigned as Nurse-1, Nurse-2 and Nurse-3. Consent was obtained from each participant; however, the assigned code was not made available on the consent form as outlined in the IBR (Appendix A). The researcher and the dissertation chair were the only ones to know the code that linked the participant to the experiences recorded. The code was locked and no one else was able to view the code linking the research participant to the coded information. All observational field notes developed during the research process were locked in a filing cabinet. The only person to hold a key to this filing cabinet was the researcher. The key was available
to the dissertation chair. The researcher transcribed all interviews. The transcriptions were stored electronically in a secure password protected area and backed up on a jump drive that is locked in the filing cabinet with the field notes. Creswell (2013) notes the importance of backing up all recorded data.

**Coding**

“Data analysis consists of examining categorizing tabulating or otherwise recombining the evidence to address the initial propositions of a study” (Yin, 1984, p. 99). Data analysis occurred in the process of coding. **Coding occurred** after the transcription process had been completed. Only the participant’s comments were coded. Coding as defined by Charmaz (2006) requires the researcher to find the importance in each line or segment of information. Saldana (2012) defines “a code most often a word or short phrase that symbolically assigns a summative, salient, essence-capturing, and/or evocative attribute for a portion of language-based or visual data” (p. 3). Keeping both of these definitions in mind, coding in this study only occurred by the researcher and the researcher was open to emerging themes and did not force any information (Charmaz, 2006).

A pre-coding process of identifying words and rich text that stood out as notable was identified first by the researcher. Although other types of coding are available, the research questions guided the researcher to use first cycle or line-by-line coding (Charmaz, 2006; Saldana, 2012). Due to there being multiple participants, an approach of coding all of one participant’s data before moving on to the next (Saldana, 2012) was applied. The researcher was able to code on paper. Once the first cycle line-by-line
coding has occurred, the researcher then moved on to the second cycle of coding that is more specific and focused (Saldana, 2012). Charmaz (2006) identifies focused coding as using the most notable information from the line-by-line coding and taking that information to code in a more focused format. Saldana (2012), agrees that second cycle coding is more specific and challenging.

The researcher used generic coding as the goal for planning out the specific coding process. Generic coding allows for the researcher to develop the style of coding during the process and not have a predetermined style (Saldana, 2012). A process of piloting the coding process occurred once the data collection process had occurred (Saldana, 2012). Codes were used to identify the themes. Themes then develop from the codes.

**Triangulation**

Triangulation was used to strengthen the understandings obtained from the baccalaureate nursing faculty. Triangulation was used to verify and add credibility to data that was taken from multiple venues. For the purpose of this research, triangulation was reached by using data sources from interviews, the focus group, observation field notes from the simulation interprofessional education experience and reflective journal documents. The researcher had to listen carefully, ask clear and concise questions and allow for flexibility in the responses from the participants to allow for full inquiry to occur.

All participants in this research were women. Interviews were held in a private location with a do not disturb sign on the door. Efforts were made to make the
interviewees feel relaxed and comfortable. This is supported by Rubin and Rubin when they write that some minorities and women may feel concern related to participating in interviews (2005). Each Nurse participant was interviewed two or three times with follow up questions provided for the reflective journals. See appendix K for sample reflective journal requests.

Key words were written on paper during the interview process. Once the hour long interview had concluded, the researcher reflected on the key words and made additional notes. Interviews were recorded using an iPhone. The interviews were saved with a password and immediately uploaded into a computer that was locked with a passcode at all times. All interviews were recorded with a code number for the participant’s name. Once the researcher completed transcriptions, a copy of the transcription document was placed on a jump drive and secured in a locked filing cabinet. Additionally, a copy was saved to a computer with password protection. The original audios on the iPhone were deleted upon completion of the transcriptions.

The second process in triangulation was the use of focus groups. Rubin and Rubin (2011) write that the researcher should bring together a group of individuals that will answer questions based on their areas of knowledge. According to Krueger and Casey people who participate in focus groups feel empowered because someone is listening to them. They report that participants have thanked researchers for the opportunity to be heard. People like to be heard and want others to appreciate what they are saying without the fear of being judged or accountable for every word they say. The environment that exists within a focus group allows for the participants to feel a part of something and not
singled out by the one-on-one conversation that would occur in an interview. Paying attention to the details expressed by each member allows for more open and honest conversations to occur. Participants can get creative in their answers and their analogies of what they want to be heard and they leave feeling very empowered by the conversation (Krueger & Casey, 2009).

The conversation that occurs in the focus group will provide thick rich data for the researcher to analyze. “Through focus groups we have gotten tiny glimpses of worlds that we otherwise do not experience” (Krueger & Casey, 2009, p. xv). These glimpses are what qualitative researchers are seeking. The size of the group can have an impact on the productivity of the group.

The final part of triangulation used involves the use of documents. Documents used in this research will include the use of self-reflective journals after the simulation in interprofessional education experiences have occurred and any other time the participant participates in interprofessional educational experiences and the curricular map for this School of Nursing. Patton writes about documents and the written materials by providing a list of acceptable forms of documents that include: “Written materials and other documents from organizational, clinical, or program records; memoranda and correspondence; official publications and reports; personal dearies, letters, artistic works, photographs, and memorabilia; and written responses to open-ended surveys” (Patton, 2002, p. 4). Prior (2003) adds that electronic documents can be used as well.
Each baccalaureate nursing faculty held onto their own reflective journals and submitted them to the researcher as they saw fit. This researcher used triangulation to assure quality of data was obtained as opposed to the amount of data gathered.

**Limitations and Delimitations**

There are identifiable limitations to this case study. There were approximately fourteen baccalaureate nursing faculty members available. Faculty members were asked to voluntarily participate in this research. A second limitation is that the nursing educators are majority Caucasian females that teach in the nursing program at the chosen university. The third limitation is that the researcher is a faculty member within the institution. All efforts to preserve confidentiality of information as provided to this researcher were taken.

There is an identifiable delimitation to this study. The choice of using only nursing educators from a large midwestern university limits generalization. The results of this study may have implications for nursing educators across the curriculum in larger institutions that teach baccalaureate nursing students. However, because of the diversity of institutions and programs, generalization may not be possible.

**Summary**

This exploratory case study focused on baccalaureate nursing faculty at a large midwestern university in Ohio. The purpose was to gain a better understanding of the baccalaureate nursing faculty perceptions of the use of simulation in interprofessional education experiences. The participants were provided with an informed consent that detailed the study. Participants lived experiences were collected through the use of
interviews, observational field notes and reflective journal documents as sources with a
member check completed through the use of a focus group. The results were then
analyzed and coded for themes. It is hoped that the outcomes of this case study were that
of an understanding of the baccalaureate nursing faculty lived experiences be understood.
Chapter 4: Research Findings

The purpose of this case study was to gain a better understanding of the perceptions of the use of simulation in interprofessional education in a group of baccalaureate nursing faculty. This nursing faculty participated in a series of interviews, interprofessional simulations, and reflective journals about their lived experiences. In addition, a focus group was conducted that allowed seven participants in addition to the researcher to explore interprofessional education further. The three case study participants were not included in the focus group. The interview transcriptions and the reflective journals were reviewed together by the researcher. The observational and field notes were used together as a way to support what was seen and heard in addition to the words that were spoken or written by the participants.

This chapter presents the themes that emerged from the lived experiences of baccalaureate nursing faculty represented in this case study. Additionally, this researcher used observations and field notes collected throughout the simulation in interprofessional education experience. A detailed timeline of progression for this case study can be found in Appendix J. The researcher sought to answer the following questions throughout the interview process:

1. What are the lived experiences of nursing faculty?
2. How do nursing faculty describe simulation in interprofessional education?
3. What are the perceptions of baccalaureate nursing faculty concerning the value of simulation in interprofessional education?
4. How does participating in a simulated interprofessional education experience influence the teaching practices of baccalaureate nursing faculty in a midwestern university?

5. What do nursing faculty understand as their role in informing curriculum changes to include simulation in interprofessional education?

Table 4: Participants of Case Study

<table>
<thead>
<tr>
<th>Participant</th>
<th>Gender M/F</th>
<th>Age in years</th>
<th>Full/Part time</th>
<th>Race</th>
<th>Teaching experience</th>
<th>Registered Nurse Experience</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nurse-1</td>
<td>F</td>
<td>52</td>
<td>Full</td>
<td>Caucasian</td>
<td>1 ½ years</td>
<td>2006</td>
</tr>
<tr>
<td>Nurse-2</td>
<td>F</td>
<td>43</td>
<td>Full</td>
<td>Caucasian</td>
<td>2 years</td>
<td>1996</td>
</tr>
<tr>
<td>Nurse-3</td>
<td>F</td>
<td>56</td>
<td>Full</td>
<td>Caucasian</td>
<td>9 years</td>
<td>1991</td>
</tr>
</tbody>
</table>

Participant Understandings

Upon initial interviews each participant communicated her understanding of interprofessional education and simulation. However, each participant had a different definition of interprofessional education. All interviewed participants stated familiarity with the term interprofessional education through their role as nurses in the field. Nurse-1 stated to have no experience with interprofessional education initially defined interprofessional education as “a class where multiple disciplines are sitting and hearing the same information and learn from each other’s different perspectives” by the end of this case study Nurse-1’s definition of interprofessional education had expanded to include experiences held by students that involved a multitude of opportunities.

Nurse-2 indicated that she had little to no previous interprofessional education experience initially and defined interprofessional education as,
people from varied backgrounds coming together to enhance experiences for the students because they are not going to be working in silos anymore. I just picture it as different professionals coming together to enhance the experience for all of the students

By the end of this research Nurse-2’s definition was,

bringing together future professionals from varied backgrounds to give their experiences on how truly we must collaborate to get our work done. Exposure and realizing that we got the variety of professionals and experts that we can pull under the care of the patients, if the students and future professionals know they are out there.

This participant stated that this research was eye opening to see how little the different groups of students knew about each other.

Unlike Nurse-1 and Nurse-2, Nurse-3 described some previous experience with interprofessional education and provided this initial definition,

in the context as an educator, getting my students experiences that will let their first year in practice be a little less anxious and stressful so that they can clarify the roles of the people they was working with so that they can feel part of a team and tie all of that to better patient outcomes.

By the end of this research, Nurse-3 informed the research that the research had helped her to expand her thought processes and how interprofessional education can and should look. She provided a new definition for interprofessional education:
it means people, students, faculty, administrative people or whoever, team members outside of nursing but I still think at this point involved in healthcare in some way, getting together to perform either simulate or a class together, where they perform the duties of what the team would do in a healthcare setting.

Although, each participant had slightly different definitions initially of interprofessional education, their overall ending definitions only differed slightly. Furthermore, each participant had only a slight difference in how they defined simulation. All interviewed participants noted familiarity and varying types of experience with simulation as a tool for educating nurses as each clinical course in the nursing curricula has a minimum of two simulations. Definitions varied from a simple form of “simulation is creating an experience that is like the real experience” defined by Nurse-1 to Nurse-2 stating,

creating some type of scene through either live people or mannequins type people to re-enact an experience in a controlled environment where people can learn and grow and then the big portion would be that they can enhance critical thinking

The final definition of simulation from Nurse-3 was,

a clinical exercise in a safe environment where there is no over judgment. Students are allowed to perform without immediate feedback that diverts them from their goal. Typically, we use mannequins but standardized patients can be sued as well if we can get them. Simulation is role-playing.

Nurse-1 explained that the “cool thing that I have found with simulation is that it exposes to the educator where the knowledge deficit is.” Nurse-2 explained, “I have
enjoyed the small snippets of simulation that I have been involved in and I think the
students get a good experience. It is a safe zone to make mistakes in.” Nurse-3 expressed,
I am using our Vital Sims mannequins to help students practice listening to a
pulse, finding a pulse. I have had a couple (students) tell me the pulse is slowing
down when they are listening and in fact the pulse had not slowed down. The
pulse strength and amplitude had been reduced. And I think that is a very superior
example of distinguishing what is happening with a patient. So, I think my
teaching has been enriched.

The dialogue that occurred during these interviews focused on the level of
interprofessional educational experience of each participant. Although each participant
defined interprofessional education in their own way they at times did not consider some
of the experiences they have had to be interprofessional education. Throughout this
research process, the participants each evolved their definitions as outlined above and
each participant evolved their thought process throughout this research.

Although none of the participants identified any experience with interprofessional
education in their educational program in to the nursing fields, each participant noted the
desire for their students to experience interprofessional educational opportunities.
Participants reported that in the field of nursing, interprofessional teamwork and
collaboration are priorities in the workforce from day one on the job.

While interprofessional education is not currently a requirement in each program
at the university, interview participants suggested the current state of interprofessional
education at this large midwestern university is under review and that as a result Nurse-3
has participated as a panelist in an interprofessional symposium held at the University while both Nurse-1 and Nurse-2 attended the interprofessional Symposium. Participants all commented on the fact that the university is looking to expand its approach with interprofessional education. Communication and collaboration among health care professionals was needed to allow interprofessional education to move forward as a university driven experience.

All interviewed participants noted limited experience in how interprofessional education via the use of simulation, or any format, would be able to become a part of the nursing curricula although each participant identified value in the concept. Stated reasons included already busy schedules for nursing faculty, accreditation standards and lack of overall time within the role of a faculty member to take on something new without letting go of something already in existence.

The focus group occurred at the end of this research process and involved a total of seven participants and the researcher. The participants in the focus group were not the participants in the case study. The case study was used as a member check by the researcher due to the only having three case study participants.
Table 5: Focus Group Demographic

<table>
<thead>
<tr>
<th>Focus Group (FG) Participant</th>
<th>Gender</th>
<th>Full/Part time</th>
<th>Race</th>
<th>Teaching experience</th>
</tr>
</thead>
<tbody>
<tr>
<td>FG Nurse-1</td>
<td>F</td>
<td>Full</td>
<td>Caucasian</td>
<td>1 year</td>
</tr>
<tr>
<td>FG Nurse-2</td>
<td>F</td>
<td>Full</td>
<td>Caucasian</td>
<td>3 years</td>
</tr>
<tr>
<td>FG Nurse-3</td>
<td>F</td>
<td>Full</td>
<td>Caucasian</td>
<td>2 years</td>
</tr>
<tr>
<td>FG Nurse-4</td>
<td>F</td>
<td>Full</td>
<td>Caucasian</td>
<td>4 years</td>
</tr>
<tr>
<td>FG Nurse-5</td>
<td>F</td>
<td>Full</td>
<td>Caucasian</td>
<td>8 years</td>
</tr>
<tr>
<td>FG Nurse-6</td>
<td>F</td>
<td>Full</td>
<td>Caucasian</td>
<td>3 years</td>
</tr>
<tr>
<td>FG Nurse-7</td>
<td>F</td>
<td>Full</td>
<td>Caucasian</td>
<td>1 year</td>
</tr>
</tbody>
</table>

However, they provided similar definitions of interprofessional education and simulation that are outlined in the following table:
Table 6: Focus Group Definitions

<table>
<thead>
<tr>
<th>Participant</th>
<th>Interprofessional Education</th>
<th>Simulation</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>IPE is education that is conducted among various disciplines at the same time in hopes of increasing and allowing for each of the disciplines to see what their role is.</td>
<td>Simulation is highly valuable as a way to learn of other professions. It is real world. It prepares the students for what they are going to experience.</td>
</tr>
<tr>
<td>B</td>
<td>Stated to agree with definition of focus group participant A.</td>
<td>I think Simulation is extremely beneficial for IPE simulation. I think it is eye opening for students to see the role of others and to see how everyone works together as a team.</td>
</tr>
<tr>
<td>C</td>
<td>Knowing the roles of each other and working together collaboratively.</td>
<td>Nodded head to agree with participant F.</td>
</tr>
<tr>
<td>D</td>
<td>Being a team player, working as a team player and being open as a team.</td>
<td>They (students) need to practice and they need to experience, that is what happens in Simulation.</td>
</tr>
<tr>
<td>E</td>
<td>Increases the view and the broad spectrum of what we can teach our students getting things from different people’s perspectives.</td>
<td>At a good facility, they are going to be working as a team. Simulation is a great place for them to gain this experience before they are working.</td>
</tr>
<tr>
<td>F</td>
<td>I am able to incorporate different disciplines in the clinical setting because we have different disciplines to work with.</td>
<td>We gear our goal towards our nursing skills and the competencies of our nursing students but we play the role of the other members of the team so that they understand their role better.</td>
</tr>
<tr>
<td>G</td>
<td>Nodded head in yes form.</td>
<td>Nodded head to agree with all other statements. And added that if we write scenarios we need to have someone available to assist in writing evidenced based scenarios for simulation.</td>
</tr>
</tbody>
</table>

All of the participants from the case study and the focus group serve as full time faculty members at a large midwestern university. While some faculty may teach freshmen students in a pre-nursing course, all of the faculty involved in this study taught
students in the three years of the nursing program during the sophomore, junior and senior years. The focus group participants were candid in their responses and the focus group was successful in reaffirming the responses obtained from the interview participants. The results of the focus group were used to support the voices of the three case study participants.

**Themes**

Principal themes that emerged from the participant interviews, simulation experiences and reflective journals are presented below.

![Diagrammatic Representation of Themes](image)

*Figure 2: Diagrammatic Representation of Themes.*

*Source: Generated from participant interviews, simulation experiences and reflective journals.*
Theme One: The Profession of Nursing Education

Nursing education as a profession emerged from the participants’ reflections during the interview process as well as their reflective journals and interprofessional simulation experience. The participants’ views regarding nursing education and the extreme time commitment needed to meet the core competencies of nursing allow for an already complex work day for nursing faculty. Throughout the interview process, noted competencies, accreditation standards and curricular guidelines all make up the role of the nursing educator. Interview participants indicated that due to these requirements there might not be enough time left in the current state of nursing education to fully embrace interprofessional education. While there has been a shift to include interprofessional in the IOM report and the emergent of standards to guide interprofessional practice via simulation through IPEC, nursing faculty still report difficulty with the current role of the nurse educator to be able to fully embrace interprofessional education.

Interview participants reported that within their current faculty roles they have full days of developing content for their students so on the days of their respective classes they are fully prepared. Nurse-3 explained as she was intently looking at the researcher that she typically is involved with “scheduling people, ordering things and just making sure all of the simulations run well.” She continued;

I am always thinking about this job because A) that’s how I roll in any job I do B) I love it C) I really want the best for the students and I still consider myself a rookie so I am constantly trying to learn what is out there and make my course better. And make their learning as rich as possible.
Nurse-2 reported that a typical workday will vary “depending on the load of the day. I spend a ton of time at my desk really preparing and then really feel, like an on stage moment when you are in front of the classroom” and other days “could be very different.” Due to the participants varying levels of teaching experience and the subject matter that they teach, the amount of time needed to prepare for each class is slightly different. Participants stated beliefs that they are members of a team within nursing and that they collaborate on a regular basis with other members of the nursing faculty. Nurse-1 explained, “I believe we’re a team and we collaborate and since I’m a novice, I look to people who are experts who guide me and that’s how I interact.” All participants reported that they seemed to work in a nursing silo suggesting that they are constantly working within the realms of nursing.

In addition, all participants reported being actively involved in one or more nursing committee meetings on a regular basis. Such committees include policy, curriculum, evaluation, and remediation. Nurse-2 specified “we have kind of formal structures where it might be planned meetings where you have groups that are meeting.” In addition, as a new faculty member, Nurse-2 reported having mentor meetings, “I have formal meeting scheduled with my mentor that we are going to meet every two weeks and kind of teach me some of the roles about academia and those things.”

Although the meetings may occur on a biweekly or a monthly style basis, the work needed is completed throughout the weeks in which one participant reported having much interaction with other faculty member within nursing in order to complete committee work. Nurse-2 reported “there are also a lot of interactions where can you go
grab lunch, or the pop ins. I pop in your door like three times a day so I can pick your brain about this. So, interactions are either formal or informal based on your needs at the moment.” Additional required meetings were mentioned by one of the participants as faculty are required to meet with other faculty that are teaching the same group of students on a weekly or biweekly basis.

Nurse-3 detailed in addition to her teaching expectations,

> I try to stay current with reading. I attend local conferences. I do not have certification as a Sim person yet but am thinking about that. The thing that I really like about it is um… it keeps me in all three levels. I love to just dabble in each of the three s (teaching, scholarship and research) here at our School of Nursing.

Nurse-1 specifically identified that although there had not been much opportunity at this point for interprofessional educational opportunities, this could be because she is still learning her role as a nursing faculty member. The role evolves each semester as the demands of the curricula outline the courses that are to be taught in each semester. All participants suggested that they have to prepare thoroughly for their assigned nursing courses, as they all considered themselves to be relatively new faculty members.

All participants related communication as an important factor in their current roles as nursing faculty members. Communication with students is an ongoing basis as all three participants reported holding office hours and meeting students outside of those hours as well. Additionally, all three of the research participants voiced that communication with other faculty members and their mentors was occurring on a daily basis.
Faculty are assigned a teaching assignment within their departments. Nurse-3 detailed that the current structure for teaching and meeting criteria does not allow for flexibility in the number of hours spent with the students we have thus limited the ability to have any further students from other professions. Nurse-2 added that the role of being a nursing faculty member is still being learned. As pointed out by Nurse-2, mentors are assigned to assist faculty with the transition to the role of being a faculty member and also to help guide them on their path.

Interprofessional education in the realm of academia is new to the faculty role within the nursing department at this university. Nurse-1 stated that interprofessional education was something that she frequently did as a practicing nurse almost on a daily basis but that she had only heard the term as a faculty member and not had any experience with interprofessional education prior to the start of this research. Other participants had little experience with interprofessional education in the faculty role. While all participants reported their teaching workload to be within nursing classes teaching only nursing students. This creates a need for nursing faculty to complete interprofessional education in an extracurricular format. Participants reported this as a challenge but that they were still willing to participate themselves in extracurricular interprofessional education.

Nurse-3 does participate regularly in interprofessional education by being actively involved in a joint group of medicine and nursing students and serves as a faculty advisor to this group. Within the confines of that group, the participant is able to bring nursing
students and medical students together for a variety of interprofessional experiences including simulations.

In addition, this faculty member works with the College of Medicine on a joint project of nursing students teaching IV skills to medical students. Nurse-3 states, as part of my service for my contract as an instructor I do from 2-4 free BLS classes per year, which is something I want to do. I do this either for faculty or students, whoever needs a BLS card. And ACLS is getting tougher to find because that is being transitioned to online but I typically work with … at the College of Medicine to work with year three students because they are all required to have it and that occurs every summer.

Additionally, Nurse-3 specified,

I have done IV labs together where I have taken cohorts of nursing students to teach medical students how to draw blood and start IVs, marvelous experience. Everybody was happy with that- we got terrific feedback and we are doing it again soon.

Nurse-2 was able to bring in an expert panel of different professionals for her nursing students. The response to this form of interprofessional education was highly valued not only from the nursing students, but according to the interview participant, the panelist that included fire, police, physician, case managements and emergency nursing was a phenomenal experience for the panelist as well as the nursing faculty who attended.

Nurse-2 is currently seeking an advanced degree outside of nursing. This has allowed her to experience interprofessional education through a different lens. This
degree is not focused on healthcare per say but the flexibility in the content allows for health care to become a focus. Although this participant self-reported that she does not see herself as intuitive, she can jump in and support other people who have intuitive ideas and ways of learning. This was supported by further discussion on the degree the participant is seeking to support her nursing education role.

All faculty members reported simulation as an important role for a nurse educator. These nursing faculty are continuously thinking about ways to incorporate their course objectives into simulation experiences for their students. Participants reported working together to collaborate and plan for simulation experiences that will involve the students and keep them active at the same time that the simulations cross walks with the course objectives. Nurse-3 outlined, “I am constantly trying to learn what is out there and make my course better. And make their learning as rich as possible.” Although the role varies slightly for each research faculty participant, they all identified that they like to lead by example. They spoke of being upfront and providing their students with as much information as they can. Maintaining open communication and being available were all important.

**Summary of Theme One: The Profession of Nursing Education**

Reflecting on the lived experiences of the faculty members as nursing educators; their role emerged as factors in the role hold or will hold in interprofessional education. Nurse-1 explained that when I thought of “ways to give back to the profession, I thought education would be one way to do that.” Participants describe their current role as nursing faculty as being held to many standards and accrediting bodies. All participants
expressed that they would like to see their role as nursing educator expanded to include interprofessional education. The current importance is placed on producing nurses that are ready to go into the work force as individual nurses and this group of faculty would like to see that expanded to include an interprofessional team.

**Theme Two: Real Life Interprofessional Experiences**

Real life interprofessional experiences emerged as a theme for the interview participants. Although, all of the research participants started this process with little to no experience with interprofessional experience as an educator, all had multiple interprofessional experiences as a nurse to share and grow from. All participants identified pivotal moments in their nursing careers where providing interprofessional practice to patients assisted to shape them into the educators they are today.

Nurse-1 detailed her pivotal experience as,

> When I worked inpatient rehab, the interdisciplinary team including the MD rounded twice a week on patients. Although I had read written notes and spoken to other disciplines in my career, it wasn’t until I saw the collaboration and the positive impact it had on the patient that I really began to see I didn’t have the full scope of how important all the disciplines were to planning care for the patient. Doing it together in a room was extremely effective.

Nurse-3 shared her pivotal moment as,

> when I took Basic Trauma Life Support, taught entirely by paramedics. I had no idea what medics really did…going through the course helped me value their contribution – their vast skill base and ability to think critically about an endless
array of patient presentations. They taught me so much in those 2 days and my interaction with them in the ED changed after that class. I felt “partnered” with EMS after that (instead of fragmented or in a silo).

Nurse-2 shared that,

I spent many years as an ED RN and truly saw the benefits of an interprofessional team. It takes a village and truly this was one of my favorite aspects of being an ED nurse. One team, all together to provide the best care to patients.

Teamwork and collaboration were indicated by all participants as being a key factor in providing safe and effective care to their patients. Participants expressed how the experiences that they have had as career nurses’ prior to education have helped them to emerge into better educators. All participants shared that through their interprofessional practice they had grown as individuals as well as nurses and that they are better prepared to care for patients and to prepare students for their future careers.

Faculty participants were linked to practice, although only one of the three participants reported currently being actively employed as a nurse. All have within the past two years been employed at area facilities as nurses. Nurse-3 expressed:

I am linked to practice and practice requires interprofessional teams for the good of everybody. For the good of keeping jobs even because those agencies are businesses, even if they are not for profit someone is getting and those are businesses and when patient satisfaction is tied to the business that means the team takes the blame it is not just one person.
Participants report that their experiences as nurses as a part of the interprofessional practice team in their respective facilities have prepared them to provide example of patient situations to their students that will often translate through simulations.

However, in order for interprofessional Simulations to work, the participants agreed debriefing needs to be a valuable piece of the experience. A debrief experience needs to allow each participant to feel safe and able to bring up any areas that they thought went well or not so well without any negative connotation from the faculty member or their peers. Nurse-2 related simulation debriefing to an experience in the work force of dealing with the death of a young person by stating,

I had a young person that we lost; we just lost and moved on to the next case.

And you know, there are still things that I still think about today and wonder if it could have been different at that time during a traumatic experience if we could have debriefed.

Nurse-2 further added that a debrief is where your best thinking happens. And it has to be where you set up a situation where people can freely talk, you have to be willing as the leader of a debrief to allow people to say what they want and try to argue their point. I think it is such a vital step in the process of, ‘is there something to learn from today,’ but then there is something that has been a traumatic situation that you need to get off of your back, that you can talk about it. And then you do feel good to move on. So if it is a simulation, I think it’s vital, because it again, allows people to process. That is when they get their best learning, but in real life, I think it’s vital as well.
Nurse-3 explained debriefing as,

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  debriefing means being able to be resilient, being able to process something that
  has happened and a lot of things have happened to me. You know, we all need
  debriefing. I have had good debriefing even from the get go at my first code in
  1991, in the ER. I remember two nurses that had been there for a long time
  working through the process with me and just asking me what I thought and the
  doctors were really good at that too.
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Although back in 1991, Nurse-3 did not know the term debriefing meant, it was the
process that helped this participant to grow and flourish as a nurse.

Nurse-3 provided an interprofessional practice experience of explaining that
nurses work on a medical/surgical unit throughout facilities on a daily basis with physical
therapist. Nurse-1 mentioned an example of “how awesome it was to have pharmacy at
the bedside when teaching patients about medications.” Pharmacists are now out on the
floors at the hospitals and the nurse and the pharmacist work directly together where in
years past the pharmacist stayed in the pharmacy and the nurse dealt with the patients.
There is now a team approach to talking with the patients and the physicians regarding
medications at some facilities.

Faculty members are currently using simulation in all of the nursing clinical
courses. Participants reported using mannequins to guide nursing students with practicing
of skills such as listening to a pulse and providing respiratory care. These are strictly
nursing tasks. All research participants expressed the desire to add in interprofessional
simulations to boost their student’s experiences.
Simulation between nursing and medicine has already started to emerge with small groups of faculty and students in an extracurricular format. Nurse-3 spoke of experience with Advanced Cardiac Life Support (ACLS). Healthcare professionals from different disciplines work together to know how to potentially save a person’s life using evidence-based practice via ACLS. Most facilities train their nurses to be a part of this team. Nurse-3 has not only been a part of this team but has been an educator of ACLS as a part of her role in interprofessional practice and now continues with this role as a nursing educator. This participant partners with the College of Medicine at this university to offer the medical students the skills necessary to be actively involved in ACLS.

Nurse-1 specified the following, “the medical student articulated the validity of rounding with nursing and vice versa. They stated that this was a great way to support each other by building on each other’s knowledge and expertise.” Rounding is when all members participating from different professions make round together and talk about each patient they have in common. This is how the interprofessional team can learn from each other’s perspectives.

Upon participating in a series of four interprofessional simulations the participants all suggested that their professional development has been impacted by the interprofessional educational simulation experience. Participants reported seeing their students understand the roles of other professions in a way that they had previously not been able to express.
Subtheme: Communication.

Communication emerged as a subtheme and a huge part of the real life experiences for all three participants. Communication is something that the research participants reported as being relaxed with their students. Nurse-2 specifically described, “there is an interesting gap that we are going to have to fill because people do not do a whole lot of talking to each other.” Furthermore, they added that as faculty members we cannot take for granted that students know how to communicate with each other or patients. Nurse-1 stated in her reflective journal,

The problem with relying on texting or automated communication is that it allows for miscommunication between disciplines and introduces the opportunity for errors putting our patients at risk. Further with complex situations, the dialogue is imperative between the healthcare team. Interprofessional education will open up opportunities to practice before they enter the professional setting.

They have been exposed to texting and laptop communication for so long that it is no longer evident how to verbally and professionally communicate with each other.

Communication is an important part of working as a team. Nurse-1 detailed,

I think this allows me to see different perspectives that I might not see if I didn’t interact with them (other members of the interprofessional team). The things that are important from their point of view, things like why communication is important.
It was important to view specific pieces of patient information through the team members lens or perspective and the only way to do that was to keep open communication among the team members.

Participants recalled communication during the interprofessional simulation, as the family member was at time confrontational and the communication was enhanced as a result of the conflict the family member was creating. This was a good exercise in professionalism and making sure that in the middle of conflict, all members of the interprofessional team remained professional and upheld professional communication. The participants reported that simulation allowed for a real life experience for the students in a safe environment where they could make mistakes without life-threatening results. Patient safety is a priority not only for nursing but as a result of the simulation it was clear to the participants that patient safety was a common thread among the different professions represented. Nurse-1 explained as she learned forward toward the researcher, “the most profound piece for me, the obvious one is communication and the impact that it can have on the patient’s safety.”

When it comes to using simulation for interprofessional education, participants report that it is unclear at this time whose job it is to focus in on making sure that these simulation experiences are created and by whom. Nurse-1 looked thoughtful and said, “sometimes I wonder if everybody thinks it’s someone else’s job and so could we practice at it ahead of time and what that communication looks, that would be helpful.” Therefore, participants detailed, that clear communication between all involved faculty that are planning to use interprofessional education via a simulation would need to
communicate ahead of time what expectations they have and what the simulation will look like.

**Summary of Theme Two: Real Life Interprofessional Experiences**

Participants expressed how their previous experience as nurses as well as current experience as educators has influenced how they communicate within the role of the team. Nurse-1 explained that interprofessional education had not been a huge part in education but leaned forward as she expressed that interprofessional education absolutely had been “in my professional career. I understand why this makes sense.” Open dialogue and communication among members of the team is critical for these participants. All interviewed participants provided valuable experiences in their practice of nurses that have built the foundation of what they use as educators to form that interprofessional team for their students. Nurse-1 expressed “I feel like education has been a part of my role all throughout my nursing career.” The link to practice each participant has is what will fuel the development of real life interprofessional simulation experiences.

Participants reflected on the importance of debriefing as the main form of learning with an interprofessional simulation. Whether the experience initiated from real life practice as nurses or from the role of the nurse educator, the understanding of the role they played within the health care team impacted all research participants.

**Theme Three: Aspiration for Interprofessional Education Simulations**

Fostering ideas from others in the field of nurse and interprofessional education appeal to the participants as Nurse-1 explained in her reflective journal “I guess it’s (interprofessional education) new to me and I see that and I should start fostering
interdisciplinary relationships before we get into the professional workplace, and that would be a benefit.” While all three participants can see themselves as being doers in the future role of interprofessional simulations, they want students to want to be involved in interprofessional Simulation as a way to help develop them as professionals.

Nurse-3 said,

We can’t do our jobs without the other professions. We can’t do it well. We can’t have best outcomes on our own. I want to model our appreciation for those other professions to my students. I want to tell them about what I have observed throughout the years.

Regardless of our profession, participants believe that at the end of the day all of healthcare workers have the same outcome of caring for our patients.

Interprofessional education and simulation will help to “enhance people in healthcare divisions to experience that before they enter the healthcare setting because hopefully they would feel more comfortable on approaching a patient issue which they may not without an interprofessional educational experience” according to Nurse-1.

Advice from Nurse-3 as she spoke with excitement in regards to interprofessional simulation is for students to “be prepared to have your mind changed. Be prepared to face your own biases in light of the experience that you have and embrace that.”

A quote from Nurse-1 from her reflective journal was as follows:

“interprofessional education is really exciting. Like all new things, mainstreaming this educational approach will take time, collaboration, innovation, patience and momentum.
Interprofessional education was beneficial to the healthcare community as a whole.”

Additionally, Nurse-1 noted,

As healthcare continues on its exponential path of innovation there was more and more opportunities to fall short of having insight into a particular professions. As dynamic as healthcare is, I am certain there was an additional profession created in the future and it was critical to understand what they bring to the healthcare field.

As a result of this case study research, Nurse-1 decided to attend an open lecture held by the music department. This lecture was on music therapy and ended up being an interactive session on how music therapy can benefit other professions. “What I experienced was a surprisingly wonderful lecture on music therapy and interprofessional collaboration.” Nurse-1 reported that the “nationally renowned music therapist was able to provide an example of how music therapy can assist patients who have a variety of health disparities including an aphasic patient following stroke.” This participant spoke intently as she expressed that this interprofessional education experience, was uplifting: reminding me that the traditional treatment approaches have their imitations and the opportunities to enrich treatment options for patient is still an area for growth in healthcare. I think that all health care professionals would find the impact of music therapy valid based on the information presented.

How can interprofessional education be brought across the curriculum? As Nurse-1 outlined in her reflective journal it as,
What strikes me is how to bring this kind of curriculum across the spectrum of health care professionals so that patients can benefit from the collective knowledge of multiple disciplines learning the same information at the same time and how each discipline can learn from each other to expand treatment therapies available to patients.

Nurse-2 reflected on the interprofessional symposium held at the college and mentioned the idea of a curriculum crosswalk at the college level by stating “I love the idea of a curriculum cross walk across disciplines to see where similar information is covered. This would be an important step for interprofessional education.” Nurse-3 suggested,

I just think a course and maybe just an early course. I mean, the interviewer knows me and the interviewer knows I am a worker bee that I tend not to be an ideals person in this mileau. The good news is that if somebody (points to me) comes up with a curriculum or develops a course an IPE course for nursing to plant in the nursing curriculum I can see being a part of it by being a doer, an implementer an editor maybe.

Furthermore, participants spoke of the need for more interprofessional simulation experiences in the curriculum focused at the academic level. Nurse-2 noted that simulation was probably the best format to get interprofessional education into the curriculum. All participants noted that although, they were not clear on how they would help facilitate interprofessional education and simulation that they all planned to. Nurse-1 suggested taking the two required simulations that are already in all of the clinical
nursing courses and start there by making those interprofessional simulations. Nurse-3 suggested to help students understand what reality is by incorporating interprofessional simulations into the curriculum. Nurse-1 identified in her reflective journal,

Although I am truly a novice with interprofessional education, this experience has demonstrated to me that there needs to be interprofessional focus at the academic. It was my goal to support/facilitate interprofessional learning opportunities in my role as a nurse educator.

Participation in the interprofessional simulation experience has increased awareness in the participants in regards to the value of interprofessional simulation and prompted an eagerness to see more. Nurse-3 expressed with a smile “I am more enthusiastic after experiencing this simulation about the value of others in healthcare” supports an increase in awareness. The participant went further to say “It is likely that in the future I will plan both lectures and simulations to include a wider array of healthcare professionals.”

Nurse-1 said with a smile, “I am really excited about interprofessional simulation. I think the direction and focus this approach to learning is getting is valid. I anticipate seeing more of this collaborative learning in the future.” Furthermore, following the interprofessional simulation experience, research Nurse-1 reported seeing students “being proud” of what they had accomplished. This self-pride is an important aspect of being confident in the skills needed to move forward in the chosen profession. Nurse-3 expressed,
I would like to think that I have done it (interprofessional education) all along, talked about the collaborative team but I am sure that I haven’t…You know I had a professional pride that was more exclusive than I have now. Now I do tend to even in my speech value the team more than just value the profession.

According to the research participants, knowing how the other professions interact with the same patient would be beneficial to all students involved in a simulation. All participants’ also thought that interprofessional Simulation would be a confidence builder for the students who participated as they move forward into their respective fields. In addition to a confidence builder for students, participant all reported that the interprofessional simulation experience expanded their belief in the usefulness of interprofessional simulations.

Interprofessional Simulation is one way of showing students what the real world is like as a nurse. Nurse-2 wrote in her reflective journal,

In the real world, especially in our world, it is not a nurse working alone and it would give them (students) the opportunity to feel what it is like to have other professions around and how they interact because a nurse does not take care of a patient by themselves. This will allow them to experience what it is like in the real world.

Nurse-3 reported that anecdotally people like it when they get together. Additionally, this participant identified, “someone needs to take charge and move this initiative forward.”
Summary of Theme Three: Aspiration for Interprofessional Education Simulations

The research participants all expressed a desire to see interprofessional simulations become a greater part of their students learning and their teaching. Although there was no definite format on how that would occur, there was a consistent desire for interprofessional simulations to become core mainstream in the curriculum and all participants expressed a wanting to participate in that process. Nurse-1 specified, “if there is an opportunity for schools getting together to talk about interprofessional simulation that would be something I would certainly be willing to participate in.” Nurse-3 suggested,

I think it should not be an elective. I think we have to expose these students to it. Our student, their students, music therapy, pharmacy and it doesn’t even have to be at …to help them understand what reality is.

Theme Four: Receptiveness of Interprofessional Education

The participants identified respecting each other’s opinions and expertise as a key factor in the acceptance of interprofessional education. Nurse-2 specifically mentioned that the students had only had material presented through her lens in the classroom and that by bringing in professionals from other professions this would benefit all students by getting to be engaged by other professions and seeing things through their lens or view as well. She stated in reference to the interprofessional panel “brought for more of an active learning experience. Up until this point, the students had only heard me talk all day long.” This was supported by Nurse-2’s statement “it was eye opening to see how little they knew each other” when referencing students and faculty from
different professions. Nurse-2 explained that a survey she had provided to her students following the interprofessional panel yielded the following student feedback that they wanted to take more professional responsibility and delegation and how everyone must work together for a successful outcome.”

Participants noted, while nursing seems to be taught in a silo one needs to be careful because you could end up teaching students only about their profession. It is important to focus on all professions and how they work together. Nurse-2 said “you end up getting blinders on and you only see life through your lens,” this limits the progress of interprofessional education and simulation. Nurse-3 expressed, “I am in a little bit of a silo, and I think we all are here in nursing since we are all so busy.” Furthermore, if we don’t prepare students to think outside the box they will not be prepared to work in teams upon graduation.

The college is the academic home to professions which would allow for multiple interprofessional educational opportunities including simulations. Nurse-1 suggested that an example could be to pull nutrition in for a patient who had a stroke, “the one who couldn’t talk but he could sing.” The patient would also need nursing care, speech therapy and even physical therapy. The professions working as an interprofessional team taking care of this stroke patient would serve as an example for an interprofessional simulation.

**Subtheme: Value.**

The value of interprofessional education emerged as a subtheme under receptiveness. Nurse-2 identified, “our students are entering a world of autonomy and
interdependence and having an opportunity to collaborate with other professionals was
value added for them.” Nurse-3 noted,

    I want everyone to value it the way I do and I want everyone to market it the way
    I imagine it being marketed. I want them to tie it to patient outcomes. I want the
    students to want it because it will develop them. I want all of the students to want
    it at that level.

As a result of the interprofessional simulation experience the participants
described acceptance and benefits of interprofessional educational simulation. All
participants expressed that their own professional development has been positively
impacted as a result of the interprofessional simulation experience. Seeing the different
professions represented by students from those professions helped the participants to
broaden their perception of what value interprofessional education simulation has for all
students. Furthermore, the participants all expressed that they had believed they were
confident that they held the skills required for interprofessional collaboration and
communication as a healthcare team until this experience when all reported professional
growth.

    In reference to another profession represented in the simulation, Nurse-3 said,
“even in a simulated setting, I can see the incredible value that this healthcare profession
adds to the collaborative team.” Professional development continued with Nurse-2 as she
outlined,

    I really feel like I benefited by witnessing the student from different professions
work together. I didn’t realize the gap in our curriculum (University) until you see
their eyes opening to all the differing professions and how it truly takes all of us to impact patient care.

Nurse-1 also indicated a professional growth after participating in the four interprofessional educational simulations. This participant explained,

This experience has enlightened me professionally to the glaring hole our interprofessional students have in education to learn how to communicate and collaborate as a team. It is clear there is not enough opportunity to develop insight into each discipline with a traditional education approach.

Participants reported a value with interprofessional simulation, as it was an opportunity for faculty as well as students to get an insight into what the roles of the other professionals hold. This dynamic allowed the faculty and the students to see that no one profession was more important in the simulation than any other profession. Regardless of the program the simulation student participants came from, they were having the same type of life experiences in general terms of where they are in their respective life journeys. Nurse-3 noted,

To pick up the current dynamic at the college of medicine and to understand that their students and mine are about the same developmentally and so having the same type of life experiences in general in terms of where they are in their life journey that was helpful.

The faculty members were able to see their students empowered by the fact that they were able to put their role in action. Nurse-3 explained,
I enjoyed seeing my nursing students empowered to know that they had a skill that medicine didn’t have because I think they perceived that medicine knew it all and it was really neat to see them empowered not cocky but empowered and working with those medical students.

Additionally, the research participants reported that they saw a little less fear in their students, which was a result of self-confidence in their skills and their ability to talk to others from different professions as well as confidence in what to expect in working together.

In response to the interprofessional simulation experience, Nurse-2 identified a gap in her students’ knowledge and decided that many times a student’s level of understanding may have been taken for granted. Nurse-2 identified “many times I take for granted the level of what students understand and where the gap (knowledge) exists. Because of this experience (simulation), I am pulling a multi-professional panel together around the topic of emergency preparedness.” Nurse-2 explained, “I wouldn’t have probably done the panel that way I did had I not participated in this research.” Nurse-1 identified that “prior to this interprofessional simulation experience, that I was unaware of the need for interprofessional education with my students.”

Upon reflection of the interprofessional simulation participants identified the understanding of the experience and the regard of how their students benefited as a result. Participants reported observing the students express interest in the roles of the other participants as well as the student responsiveness to being able to hand off report to another person from another profession. This interest from the students was enough to
further fuel the research participant’s interest to want to learn more about interprofessional simulation. Participants have reported wanting to learn more about the IPEC standards that guide interprofessional simulation as well as any core competencies brought forth from accrediting bodies. Nurse-3 specifically declared, “I am looking, I am sort of skewering the literature to see what is out there.” Followed by a statement of finding literature that supports that interprofessional education was “only valued when there was meaningful interactions with each other.”

Respect, appreciation, recognition, regard, and acceptance are all terms that all professions involved in interprofessional simulation needs to value according to the research participants in order for interprofessional simulations to become a part of the college curriculum. Participants want to lead by example with their students and to treat people with kindness and respect. Nurse-3 said with confidence, “I value the team more than just value the profession” of nursing. Nurse-3 described admirably “recognizing the talent in other people and the gifts they have that was just precious and a gift to me.” Nurse-2 noted “I definitely saw students more confident... when they did simulations.” Nurse-1 expressed, “we are all giving input for the best way to care for our patients and respecting each other’s opinions and expertise.” Nurse-3 explained, “if we all do interprofessional simulation right, then all of our student will go into the clinical setting a little more confident” than before. Nurse-3 expressed that it would be nice to start development of those relationships while the students are still students and went on to comment, “I just value and respect them (other professions) so much. I need them in my life and I just need the nursing students to see that.”
All three participants stated desires to be more involved in interprofessional simulation on a regular basis. Nurse-3 detailed, “wanting to learn more so I am searching for standards, and core competencies related to interprofessional education and simulation.” Furthermore, Nurse-3 said, “the slate is full of possibilities” and gave an example of how interprofessional simulations could be added. Nurse-3 mentioned mental health as a potential area for an interprofessional simulation as the mind is a battlefield and as health care workers we need to find a way to help keep the mind occupied as for some patients the mind is still a battlefield. Nurse-2 and Nurse-3 want to accept the responsibility of developing an interprofessional simulation related to emergency preparedness. This is based on previous negative experiences from members of an interprofessional team not working together to benefit the patients or each other.

**Summary of Theme Four: Receptiveness of Interprofessional Education**

Respect and value of the roles of other professions was apparent when listening to the research participants. All of the research participants expanded on their definitions of interprofessional education and simulation throughout this process. All three participants voiced that they would like to incorporate additional interprofessional simulations into their roles as faculty members.

**Theme Five: Barriers to Interprofessional Education**

Although all of the research participants seemed positive and noted the value associated with interprofessional education there were some barriers that emerged as a theme. All participants identified time as a potential barrier. Interprofessional simulations
take much time to prepare and more time to deliver. The time is complicated by the different schedules of faculty and students within different professions.

Participants also mentioned the current educational curriculums as a potential barrier to interprofessional education and simulation. Unless interprofessional simulations were made a part of the current respective curriculums, the participants although they stated value in interprofessional education and simulation, questioned whether or not students would have room in their curricula to participate. Also, changing of the curricula at any level has many steps. Participants wondered if this curricular review and revision process would take too long.

Some participants thought that group size could also be a potential barrier. Participants identified that a group of four students would be a manageable number for interprofessional simulation but that in order for that size groups to occur, that would take multiple hours and faculty or students may not have that available in their schedules especially if this would be conducted on an extracurricular basis. Finding faculty willing to participate with large numbers of students was an issue. Participants reported having approximately one hundred students per level of sophomore, junior and senior and that is only for nursing so when you couple that with as many students from another profession, do you have faculty interested in participating? Nurse-2 explained that some faculty may be used to smaller groups and may not be comfortable speaking in front of such large groups by suggesting,

The first thing (barrier) could be finding the appropriate people to come in and people that are willing, that’s a step of finding the right nitch of a group of people
that are comfortable standing in front of a group of 100 people to tell them their story…that is probably the biggest barrier for me is the class size is big so not everyone is comfortable in front of a 100 people.

Students and faculty could serve as a barrier to interprofessional education. Interview participants could potentially see a student question the value of interprofessional education via simulation. Nurse-3 expressed, “I will never believe simulation is as good as the real thing because you don’t get the nuance patient experience you just cannot. Each one is authentic and that can’t come through even with a standardized patient they are still being scripted.” The students need to be at the same learning level in order for an interprofessional simulation to be valued. Nurse-3 asked how we assure that “each group of students is academically on a level playing field.” Nurse-1 questioned,

I could potentially see either a medical or nursing student say why am I here? My focus should be on drugs or medicine or whatever so I could see based off of traditional schooling that people could say this isn’t important.

The Interprofessional Symposium that the university held was attended by all of the participants, which reported discussion on the barriers of interprofessional education. Nurse-1 cited regulatory or accrediting bodies as a potential barrier by stating “some of the barriers are each profession’s regulatory or accrediting bodies. I believe it will take a huge collaborative undertaking to manage/eliminate such barriers for future interprofessional education opportunities.” Nurse-3 questioned, “knowing how long it takes to get through curriculum, and at the university level” will this change occur? I also
think of faculty preparedness.” Will the faculty be prepared for a full curricular change to include interprofessional simulation? She goes on to state “we need to have a tool to measure what we are doing and to guide what we are doing to prove its worth.”

Some faculty could question if simulation, whether it is a nursing or an interprofessional simulation could ever be the same as a real patient experience as proposed by one of the research participants. Nurse-3 noted that when dealing with patients, it is an authentic experience every time and you don’t have a way to know what will occur next, that can be somewhat limited with a simulated patient.

**Summary of Theme Five: Barriers to Interprofessional Education**

While the majority of the participant’s thoughts and reflections were of the positive aspects of interprofessional simulation, there were some barriers that were brought up and deserve merit. The participant all indicated that in spite of the identified barriers outlined in theme five that the positives outweighed any barriers and that they would like to move forward with interprofessional simulations at their university.

**Researcher Observations and Field Notes**

Throughout this case study, this researcher maintained a reflective journal that detailed observations and field notes of the simulations in interprofessional education experiences. The observational field notes were conducted at the interview and the focus group and were mainly small words written down on the pages that detailed actions of the participants sat the times of their responses. One example was when Nurse-1 was discussing that interprofessional education was exciting. She physically set up in her chair and leaned forward as she was explaining why she found interprofessional
education to be exciting. Another example of field note obtained during this case study process was during simulation number three when Nurse-3 who was serving as an actor and the daughter to the standardized patient (who was also an actor) was interacting with her mother and began to laugh at something that was said by the mother. This laughter received the attention of the music therapy students. The actors then were able to relate their laughter to a memory they had both shared about a loved one and the simulation continued without the students knowing if that was supposed to have occurred or not.

**Chapter Summary**

This chapter illustrated findings from interview participants regarding their lived experiences as a nurse educator with the focus of interprofessional simulation. Five themes emerged that demonstrated the understandings of the nursing faculty, as they understand simulation in interprofessional education. Throughout chapter five, an in-depth discussion occurs as a result of these themes.
Chapter 5: Discussion, Conclusion and Recommendations

Introduction

A clear purpose of this case study was to gain a better understanding of the perceptions of the use of simulation in interprofessional education in a group of baccalaureate nursing faculty and that is delineated in this chapter. The research questions that were the foundational layers of this case study are reflected on. This chapter further expands and analyzes the results of Chapter 4 with a spotlight placed on the importance of the themes that emerged.

Moving forward with interprofessional simulation, it allows students to get steps closer to the real life that the participants are working towards. The eagerness to continue with interprofessional simulation was demonstrated throughout each interview completed with the three participants. Additionally, it opens the eyes of the participant of the interprofessional simulation to more than just one faculty member’s experiences.

This researcher worked with a group of three baccalaureate nursing faculty members over a period of six months as they explored simulation in interprofessional education as well as other forms of interprofessional educational experiences along the way. This research focused on the baccalaureate faculty members’ understandings and was designed to contribute to other nursing faculty members and nursing programs that are considering adding simulation in interprofessional educational experiences to their curricula. Intent was to provide a format for the baccalaureate nursing faculty members to engage in meaningful conversations that allowed for their voices to be heard. Participating actively in this process allowed for the baccalaureate nursing faculty to feel
like they were important. The baccalaureate nursing faculty members were able to state professional growth throughout this process by living through the simulation in interprofessional educational experience through their previous simulation experience within their respective nursing careers. Importantly, they have realized that faculty involvement needs to occur from conception to fruition of the Interprofessional simulation as Interprofessional simulations are innovative and not readily available for use (Nimmagadda & Murphy, 2014).

The aim of this research was to return these lived experiences of the three case study participants into the fields of nursing education and interprofessional education as a way for nursing faculty and nursing programs to reflect on the experiences of these case study participants. This researcher’s hope is that these baccalaureate nursing faculty members understandings will be heard by nursing faculty and programs and that they will take action within their own universities. In addition, this case study should serve as a light for healthcare professions outside of nursing and could assist other healthcare professionals to lead to a similar type of move toward simulation in interprofessional education. Reflecting back on the definition of “interprofessional education occurs when students from two or more professions learn about, from and with each other to enable effective collaboration and improve health outcomes” (WHO, 2010, p. 7), nursing cannot make this change alone.

All three of the baccalaureate nursing faculty provided rich conversations with robust and meaningful understandings regarding simulation in interprofessional education. The following research questions guided this study in order to gain a better
understanding of the understandings of the baccalaureate nursing faculty members on the use of simulation in interprofessional education:

1. What are the lived experiences of nursing faculty?

2. How do nursing faculty describe simulation in interprofessional education?

3. What are the perceptions of baccalaureate nursing faculty concerning the value of simulation in interprofessional education?

4. How does participating in a simulated interprofessional education experience influence the teaching practices of baccalaureate nursing faculty in a midwestern university?

5. What do nursing faculty understand as their role in informing curriculum changes to include simulation in interprofessional education?

The next few paragraphs will address the implications of the data collected. Additionally, future recommendations for using simulation in interprofessional education will be discussed. Furthermore, specific conclusions will be detailed that may serve as beneficial to other baccalaureate nursing faculty members, nursing programs and teams of interprofessional health care professionals.

**Relevance of Participation**

The interviews, reflective journals and other documents as well as observations provided the best format to answer the research questions. During the interview process the participants were encouraged to answer several questions and were asked to think deeply as they discussed their experiences. The three baccalaureate nursing faculty
members had all been involved in simulations in their current role as a nursing faculty member but had not experienced a simulation in interprofessional education. As a result of their experience in simulation, they are considered to be subject matter experts in nursing and in simulation by this researcher. The participants are considered to be novices in the area of simulation in interprofessional education.

**Links of Themes to Research Questions**

**Theme one: The profession of nursing education.**

The baccalaureate nursing faculty members described their lived experiences of being nursing faculty members. This theme links to the first research question; What are the lived experiences of the nursing faculty? The baccalaureate nursing faculty members felt this experience of serving as a faculty member in the profession they love was an important part of their story. The IPEC framework that guided this research outlined roles and responsibilities as one of the four domains. The baccalaureate nursing faculty had a need to understand their role as it exists as a nursing faculty member and then be able to understand how that role can merge into simulation in interprofessional education. Each of the participants had a different level of teaching experience as described in chapter four.

Participants indicated that the requirements of their current faculty roles would be a crucial factor in how they would be able to implement further simulation in interprofessional education. The participants described a faculty member’s day as full with constantly thinking of and preparing for their students. The preparation as described by the participants took on different forms including reading and preparing for classes
that the faculty would provide lectures in, as well as attending required weekly meetings. Nurse-3 described this best when she explained,

    I am always thinking about this job because A) that’s how I roll in any job I do B) I love it C) I really want the best for my students and I still consider myself a rookie so I am constantly trying to learn what is out there and make my course better. And make their learning as rich as possible.

    The faculty member’s role changes on a daily basis as the needs for the day change. This is typical for nursing faculty at other universities as well (Benner et al., 2010, Colley, 2012).

    Time was described by the participants as being a part of the role of a faculty member. Although, each faculty member teaches around twelve credit hours per semester as a teaching faculty member, the hours to prepare for those twelve credits is much greater. Smeltzer and all (2014) discuss the nursing faculty workload as containing invisible components.

    Committee work was understood from the participants as an important part of the role of being a faculty member. Each baccalaureate nursing faculty participant serves on a School of Nursing committee, with some reporting service on more than one committee. These committees meet regularly throughout the semesters and form the foundational underpinning of the nursing program. This type of invisible workload adds to the faculty member’s daily teaching load (Smeltzer et al., 2014). Committees are a valuable piece of the participant’s role of a faculty member.
Mentoring was also considered a part of the participants’ faculty role as they all mentioned being newer faculty. New full time faculty members are assigned a mentor in this School of Nursing whenever possible. Although this mentoring is provided to be helpful and assist in guiding the nursing faculty members, there is a time commitment that adds to the overall workload. The mentor and the mentee work together to have regular meetings aimed to assist the new faculty member to transition into their faculty member role. This increases the invisible workload for the faculty member (Sweltzer et al., 2014). Nurse-1 and Nurse-3 are both assigned to a group mentoring session on a regular basis. According to Krueger and Casey, due to the faculty role, there is not always time for individual mentoring to occur (2010). Nurse-2 started a year later at the School of Nursing, and has an individual mentor that she meets with on a regular basis.

Faculty members reported keeping current on evidence based practice within the field of nursing as an important part of the faculty role. Nurse-3 reported attending conferences as a way to keep up to date. Nurse-1 and Nurse-2 have also reported attending local conferences to learn further about the role of a nursing faculty educator. Nurse-1 explained that she still is still learning her faculty role as a new faculty member and Nurse-2 added that for her, the role of being a nursing faculty member is still being learned. According to Billings and Halstead, the need for a nursing educator to remain professionally current while preparing students is an additional hurdle for nursing educators (2013).

Communication is a key factor in being a faculty member as painted by the participants. Open communication with students is ongoing and being available to the
students essentially at any hour now with email and text messaging options. All of the participants hold open office hours on a weekly basis to allow for students to stop in outside of class time. Communication is not limited for the faculty member to only student interactions. Communication with other nursing faculty colleagues occurs on a daily basis. There are formal and informal communications that occur daily. Some of the faculty are assigned to co-teach a class with another colleague which clear communication on who is preparing what portion of the lectures, while others have a more informal form of communicating with their nursing colleagues such as asking for advice regarding how to teach a certain subject. Regardless of the style or method of communication, effective communication is key (Boynton, 2016).

At the time of this research, the entire baccalaureate nursing faculty member participants reported teaching only within the department of nursing as part of their assigned workload. Nurse-3 reported that along with her role as a nursing faculty member, she did have some experience with interprofessional education on an extracurricular platform. These extracurricular experiences involve working with faculty and students from the College of Medicine and providing a teaching experience on the skills of inserting IVs and teaching students from different professions the skills for BLS and ACLS.

Nurse-2 is currently seeking a certification though the College of Education. She combined part of an assignment for class with participating in this case study. Doing so led her to make a change in her current teaching assignment which added an assignment into a course that allowed her students to interact and learn from members of multiple
healthcare professions. This growth as a faculty member is a result of this participant evolving as an educator by completing course work as she advances in her professional life towards a certificate. This growth is often overlooked in a faculty member’s workload as it cannot be measured as a credit hour (Smeltzer, Sharts-Hopko, Cantrell, Heverly, Wise, Jenkinson, & Nthenge, 2013). Her role as a faculty member is constantly evolving.

Simulation was described by each of the participants and was outlined in chapter four. Simulation was easily spoken of by all three of the participants, as they readily discussed their comfort with simulation. Each of the eight clinical courses in the School of Nursing curricula have two minimal simulations incorporated. These simulations have occurred mostly with mannequins and are middle to high fidelity level simulations. The participants reported that they work together to develop the simulation experience that they use and at this point in time the simulation experiences include only nursing students and nursing faculty. There are no current interprofessional courses required within the School of Nursing curriculum.

The lived experiences of being a nursing faculty member was described by the three participants during their interviews and were part of the document review from the reflective journals, and from the observations that occurred during the simulation in interprofessional education experience. The use of a focus group that involved the researcher as the facilitator and the seven baccalaureate nursing faculty members provided additional support to the three case study participants’ understandings as a member check.
During the simulation interprofessional education experience, the three baccalaureate nursing faculty all served within their assigned roles as nursing faculty members.

**Theme two: Real life interprofessional experiences.**

The second theme that emerged was the real life interprofessional experiences held by the participants as nurses. Each of the participants had experience working as a nurse in the field prior to moving into the role of faculty member. Each of the participants’ defined interprofessional education with some differences as outlined in chapter four. However, the foundational definition from the World Health Organization seems to apply to each of their definitions, “interprofessional education occurs when students from two or more professions learn about, from and with each other to enable effective collaboration and improve health outcomes” (WHO, 2010, p. 7). This answers the second research question: How do nursing faculty describe simulation in interprofessional education?

While the baccalaureate nursing faculty members had not had curricular experiences with interprofessional education, all three participants had interprofessional experiences to pull from in their nursing practice. Whereas, Anderson and her team (2006) indicate that Interprofessional education has existed in nursing for some time, for the faculty involved in this case study, it is new to them at their position. Each participant had an interprofessional pivotal moment that they experienced as a nurse that they will never forget. All of the experience led the baccalaureate nursing faculty members to the realization that being a part of the team is a crucial part of their role and responsibility.
The understanding of the roles and responsibilities is outlined by IPEC as one of the four domains for interprofessional education. IPEC sent out a call to all healthcare and educational entities to find a way to educate and work together (2011). Understanding the roles of one’s own profession is crucial so that when one joins an interprofessional team then there will be clear optimization of the skillset that each member of the team brings to any given situation. A nurse has to clearly understand her role in order to work as a part of the interprofessional health care team.

In addition, the pivotal moments of the participants having an understanding of the importance of the other healthcare members and realization of the values of the other members of the interprofessional team are found in the IPEC Framework under the domain of value and ethics for interprofessional practice (2011). Having respect, and developing trusting relationship with members of the healthcare team are critical criteria for this domain and were experienced by each of the baccalaureate nursing faculty members during their days of practice as a nurse.

Another thread of the IPEC Framework was visible as the baccalaureate nursing faculty stressed that their experiences in practice were threaded with teams and working as a member of a team. Patient safety is a priority for nursing and as it seems, patient safety is a common goal amongst others in the interprofessional team as well.

The case study participants mentioned communicating with members of the interprofessional team as an important part of being a team member. Communication emerged as a subtheme in the understandings of the baccalaureate nursing faculty members. Interprofessional communication is another domain in the IPEC Framework.
Nurse-2 expressed specifically that her students suffer from a lack of communication and that this has also happened in her experience in practice. She states that one of the problems with communication is the possibility of miscommunication due to the potential for errors while texting. In today’s society, many are texting and using their cell phones and tablets to communicate. This ties into the literature review as communication errors are a critical factor for medical errors (AACN, 2008; IPEC, 2011; & TJC, 2014).

Communication was a critical piece in the development and delivery of the simulation in interprofessional education experience. IPEC lists communication as a key factor for working on an interprofessional healthcare team (2011). This was a current interprofessional experience that involved all three faculty members as well as actors and students from other professions. Communication had to occur between the faculty member and the actors so that everyone was mindful of what was going to happen during the simulation as well as between the faculty members and the students. Students outside of nursing had never experienced a simulation before so this was a new experience for them. The baccalaureate nursing faculty members had to take a leadership role in assisting the students with collaborating with other members of their interprofessional team.

Overall, the baccalaureate nursing faculty members explained that who they are today was formed by their previous experiences as nurses in their clinical settings. Nurses have to be able to move from one task to another task without losing their focus (OBN, 2011). Critical thinking has occurred as a result of reflecting on previous experiences (AACN, 2008; Benner et al., 2010).
Theme three: Aspiration for interprofessional education simulations.

Simulation in interprofessional education was one way for baccalaureate nursing faculty members to provide interprofessional education to their student learners. The faculty members seek to aspire to provide simulations in interprofessional education as a result of their experience with the interprofessional simulations experience as through this experience, the simulation in interprofessional education have now become a part of their lived experiences. Nurse-3 said it best when she said,

We can’t do our jobs without the other professions. We can’t do it well. We can’t have best outcomes on our own. I want to model our appreciation for those other professions to my students. I want to tell them about what I have observed throughout the years.

Clearly, Nurse-3 is aware of how interprofessional simulation is changing the field and how it can assist in preparing her student’s learning experiences through multiple means to be as rich as possible (Creswell, 2012).

Teams and teamwork are one of the domains of the IPEC Framework and apply to the baccalaureate faulty members, as they desire to move towards more of an interprofessional educational experience (IPEC, 2010). Case study participants reported that simulations in interprofessional education could change the way a student leaves the university and enters into the clinical setting. Faculty from different professions could work together to develop simulations in interprofessional education that would evaluate
student’s performances on the IPEC Framework. It is vital for everyone on the team to be aware of and a part of the plan (QSEN, 2012).

The fourth research question: How does participating in a simulation interprofessional education experience influence the teaching practices of baccalaureate nursing faculty in a midwestern university was answered by each participant in her own way.

As a result of participating in this simulation experience, the researcher and Nurse-1 attended an interprofessional learning session held in music therapy. A music therapist held an interprofessional meeting that was highly attended with standing room only by members of a variety of healthcare related professionals and students. The lecture portion was focused on music therapy and what the role of the music therapist would be within the team. Roles and responsibilities are outlined by the IPEC Framework as one of the domains needed for interprofessional collaboration. Towards the end of the lecture, the music therapy speaker had brought enough musical instruments for every member of the audience. Interprofessional collaboration was asked of the audience members, as we had to find someone who we did not know from another profession and identify who we were. Additionally, we learned how to collaborate and play our musical instruments by ourselves with those who had like instruments as well as how we could play together as a team. This was a simulation experience in interprofessional teams and teamwork. Teams and teamwork is an important key for nurses as well as participants of the interprofessional education healthcare team (IPEC, 2011; QSEN, 2012).
The fifth research question: What do nursing faculty understand as their role in informing curriculum changes to include simulation in interprofessional education was answered by the following curricular suggestions from the participants. Nurse-1 and Nurse-2 attended the College’s Interprofessional Symposium. This symposium was an important step for the college in recognizing the importance of interprofessional education. Nurse-2 stated that a curricular crosswalk to help identify where a team of interprofessional faculty could teach courses across different professions would be beneficial. She stated, “this would be an important step for interprofessional education.” The baccalaureate nursing faculty have stated their interest in being a part of a curricular change. Nurse-3 would like to be a doer and be a part of making the curricular change to include interprofessional education.

Simulation was thought by the participants to be a strong way to deliver an interprofessional experience to their students. The IPEC framework domain of value and ethics are needed to place the patient (real or simulated) at the center of what the baccalaureate nursing faculty are doing (2011). All of the faculty participants stated that they had an increased awareness of simulation in interprofessional education and have expressed excitement and enthusiasm in including simulation in interprofessional education into their School of Nursing curriculum. Faculty participants expressed interest in allowing students the opportunity to take part in simulations in interprofessional education so that they are better prepared when they venture out to the professional role and leave the student role behind. Nurses work as a team and this group of baccalaureate
nursing faculty members have stated aspirations to assist their students via the use of simulations in interprofessional educational experiences as they move forward.

All three case study participants expressed different ways of getting involved and participating in future simulations in interprofessional education and in ways to participate in curricular changes. Regardless of the style of involvement for each participant, they are all aspiring to a curricular change that includes simulation in interprofessional education.

**Theme four: Receptiveness of interprofessional education.**

The third research question: What are the perceptions of baccalaureate nursing faculty concerning the value of simulation in interprofessional education, was answered through the theme of receptiveness of interprofessional education. Participants were receptive to simulations in interprofessional education. Underpinning this theme as the IPEC Framework domain of teams and teamwork as the members need to perform effectively on a team in a variety of settings including a simulation experience. Additionally, the IPEC framework domain value and ethics for interprofessional education applied (2011). All members of the healthcare team need to be respectful of the patient (real or simulated) as care is provided for the patient. Patient safety and outcomes are dependent on teamwork (Muller-Juge et al., 2014). There is also a need to value and have respect for all members of the team. This is outlined in the IPEC domain focused on healthcare professionals learning to labor together as a team (2011).

The baccalaureate faculty members spoke of working in silos within their current nursing roles. Benner and her team identified this among other professions as well as
nursing (Benner et al., 2010). Participants understood that by working in a team with other faculty members and students from other professions, the overall experiences would be beneficial to all involved. The literature identified areas where nurses are still working in silos (Angelini, 2011; Benner et al., 2010). Participants provided a few examples of how different professions could work together in an interprofessional format.

The baccalaureate faculty members discussed the value of this interprofessional experience throughout this lived experience. The participants reported that as a result of this simulation in interprofessional education experience, they have seen the value of empowerment provided to their students as a result of understanding what the other professions represented were able to do.

Another value identified was that Nurse-2 was able to identify gaps in what her students knew of other professions. This allowed for her to develop a panel of healthcare professionals for the nursing students in her class. She also recognized that next year she hopes to include students from other professions in this interprofessional learning experience. Nursing is not the only profession to teach students in silos so bringing nursing students together with other professions students will benefit all involved (Angelini, 2011; Benner et al., 2010; IPEC, 2011; QSEN, 2012)

**Theme five: Barriers to interprofessional education.**

The barriers to simulation in interprofessional education emerged as a theme throughout this research process. The barriers noted from the research participants were time, curricular changes, group size, finding the right faculty to teach students willingness to participate, and the reality of simulation. Livesay, Lawrence and Miller
(2015) found similar findings with their study looking at simulation, faculty may feel that they are unprepared for simulation experiences and may need additional support to move beyond those fears. In order to move forward past these barriers, one must ascertain how to overcome these barriers. By applying the IPEC Framework, these barriers could be decreased and curricular changes could move forward.

The IPEC domain of values and ethics for interprofessional education could be applied to the barrier of the reality of simulation. The faculty member’s needed to stress the importance of treating the simulation as if it were the real experience. There needs to be a stressed value for every person involved including a simulated patient.

Communicate clearly what the role of nurse is as well as the roles of the other health care team members, this falls under the roles and responsibilities domain of the IPEC Framework. In order to assist faculty with the time barrier, a clear expectation of what is expected from as simulation in interprofessional education experience must be communicated. One must be careful to recognize any limitations within their own scope of practice. The healthcare team needs to be sure to explain to the patient (simulated or real) how the team will work together. If these needs are clearly communicated barriers will decrease.

The IPEC domain of interprofessional communication is important as it addresses effective communication tools. These tools are crucial when working as an interprofessional team. Listening actively is important to encourage open communication. Maintaining open communication with respectful language is needed to be a successful member of an interprofessional team.
The final IPEC domain, teams and teamwork are needed to assist faculty to overcome the barriers of group size and finding the right team members. There needs to be leadership in place that supports collaborative and team effectiveness. This clearly is in agreement with Tullmann, Shilling, Goeke, Wright, and Littlewood (2013) as they outlined similar issues group size and scheduling barriers that were overcome with faculty effectively working in a team.

**Recommendations for Future**

The process of using simulation in interprofessional education has been a useful experience in allowing the baccalaureate nursing faculty member’s voices to be heard. This research points to a possibility to be important to the field of nursing education, simulation education and interprofessional education. This case study has provided great insight into the lived experiences of baccalaureate nursing faculty members, which will aid in the scholarly and professional literature in several ways.

In the realm of scholarly research, this researcher believes that the understandings of these baccalaureate nursing faculty members will provide a snippet of experiences for other researchers to use as a basis.

In the realm of the professional community of nursing educators, this researcher believes that by having an understanding of three different baccalaureate faculty members, this case study of using simulation in interprofessional education will provide a baseline for those seeking to find a way to incorporate interprofessional education into their already existing nursing curricula’. An additional contribution has been the review of the historical and current literature of nursing education within the literature and by
participants. This compiled case of the baccalaureate nursing faculty’s understandings of interprofessional simulation will be useful in informing curricular changes to incorporate interprofessional simulations.

To the other professional members of the interprofessional healthcare team this researcher believes that by focusing on the baccalaureate faculty members understanding, this research could be used as a way to assist with a shift in the strategic plans and/or respective curricula of nursing programs.

The main contributions of this research is to inform curricula across nursing and other healthcare professions of the understandings of the three baccalaureate nursing faculty’s understandings and involvements of the use of simulation in interprofessional education through the use of the IPEC framework while understanding that the students all of these professions serve are adult learners.

Further recommendations for future research would be to look further at faculty understandings outside of nursing to gain their understandings of simulation in interprofessional education. The researcher’s recommendations involve: 1) developing or agreeing upon a common set of goals and interprofessional standards to adhere to; 2) developing a select group of seasoned faculty members to serve as mentors within the faculty group to help promote interprofessional simulation development and implementation; 3) assigning a portion of the faculty workload to develop interprofessional simulation experiences; 4) providing time to work with health care professionals outside of one’s own profession to support the development of interprofessional educational activities; 5) provide incentives for the creation of
interprofessional courses; 6) write grants for in teams to facilitate Interprofessional education and 7) create a college requirement for all students to participate in an interprofessional course or simulation. Administration support would be needed as this would need to be considered a part of the faculty workload. Also, there would be value in continuing with this research, as this case study was limited to only baccalaureate nursing faculty from one campus. It would be important to see if other nursing faculty members share the same sentiments and understandings on a larger scale provide by the five themes that emerged from this research. Additionally, there would be value in looking at the student and the administrations understanding of simulation in interprofessional education as this would marry well with this study.

**Limitations**

There were limitations within this case study. The most prominent limitation was the participants in the case study. Although the understandings obtained from the three participants were thick and rich, there is no way of knowing if the understandings of simulation in interprofessional education would have been different in seasoned faculty members.

**Conclusion**

Although this research study ended with the final follow up of interviews, the relationships formed and further developed as a result of this research are ongoing. Through the time spent in this research process, clearer understandings of the baccalaureate nursing faculty members emerged. Already, there is informal evidence that as a result of this research, the three participants have and are expanding their
relationships with interprofessional education. This will impact the quality of interprofessional education being provided at this university.

Nurse-1 is looking for ways to add interprofessional education into her existing courses that have built-in simulation. Nurse-2 has already initiated an interprofessional panel during the time of this research. She has reported to the researcher that she will continue with this next year and that she would like to add additional students from different professions. Nurse-3 stopped by this researcher’s office to share that she is expanding on one of her previous experiences with a group of nursing and medical students and is now adding simulation. She has an upcoming event to which the researcher has been invited. These additions to an already busy workload for nursing faculty speak to the level of value that these case study participants lend to interprofessional education. This speaks to inform the field of interprofessional education and the significance in fostering faculty excellence and better student learning experiences in nursing education (Angelini, 2011; Benner et al., 2010).

Throughout this research, the researcher sought to understand the experiences and the use of simulation in interprofessional education for the three baccalaureate faculty members in order to inform nursing curricula about the understandings of baccalaureate nursing faculty members in regards to interprofessional education. By using a case study methodology, the researcher believes that this work will be useful to nursing educators, the nursing community, and to healthcare professional from other fields to better understand how baccalaureate nursing faculty members understood and experienced simulation in interprofessional education. Future work however, will be needed to expand
on the understanding of faculty members outside of the nursing profession, a closer look at student’s experiences and finally, a closer look into the administrator’s understandings of the use of simulation in interprofessional education.

The intended goal of this study to gain an understanding of the baccalaureate nursing faculty member’s understandings of simulation in interprofessional education has been met. Additionally, it is believed that as a result of this research that the three baccalaureate nursing faculty members have reflected on their own understandings and desire for future simulations in interprofessional education as well as other interprofessional experiences. By this researcher taking the time and responsibility of exploring the baccalaureate nursing faculty members understanding of the use of simulations in interprofessional education, these participants have explored their own biases and have considered other interprofessional educational experience including simulation in the future.
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[http://www.jointcommission.org/patient_safety_systems_chapter_for_the_hospital_program/](http://www.jointcommission.org/patient_safety_systems_chapter_for_the_hospital_program/)


[http://hdl.handle.net/2027/mdp.39015000815913](http://hdl.handle.net/2027/mdp.39015000815913)


Appendix A: IRB Approval

A determination has been made that the following research study is exempt from IRB review because it involves:

Category 2 - research involving the use of educational tests, survey procedures, interview procedures or observation of public behavior

Project Title: An Interprofessional Simulation Education Experience: A Case Study with Baccalaureate Level Nursing Faculty

Primary Investigator: Sherleena Ann Buchman

Co-Investigator(s):

Advisor: Teresa Franklin

Department: CHSP Nursing

Office of Research Compliance Staff
Rebecca Cole, AAB, CIP
Robin Stack, CIP
Shelby Rex, BS

Date: May 27, 2015

The approval remains in effect provided the study is conducted exactly as described in your approved application. Any additions or modifications to the project must be reviewed and approved by the IRB (as an amendment) prior to implementation.

IRB approval does not supersede other regulatory requirements, such as HIPAA, FERPA, PPRA, etc.

Adverse events/unanticipated problems must be reported to the IRB promptly.
Appendix B Participation Email

Dear Baccalaureate Nursing Faculty Member,

I would like to offer you the opportunity to take part in a research study involving an Interprofessional Education Simulation experience. This study may involve you participating in a focus group with other baccalaureate nursing faculty, a series of interviews, the simulation experience and completion of a reflective journal regarding your Interprofessional Education Simulation experience. I am pleased to offer you a unique opportunity to participate in this Interprofessional Education Simulation experience. Faculty who participate was assigned to facilitate a simulation experience with a small (3-4 students) groups with students from a variety of health disciplines. Each group will complete a simulation scenario under faculty observation and then debrief and discuss the simulation with the group and faculty. The dates for the Simulation Events are:

TBA
TBA
TBA

If you would like to participate, please send an email with your selected date of participation and preferred contact information to: buchmans@ohio.edu.

I look forward to learning with you!
Sincerely,
Sherleena Buchman MSN RN

For additional information regarding the event, you may contact: Sherleena Buchman buchmans@ohio.edu
Appendix C: Consent Form

Ohio University Adult Consent Form Without Signature
Title of Research: An Interprofessional Simulation Education Experience: A Case Study with Baccalaureate Nursing Faculty

Researchers: Sherleena Ann Buchman

You are being asked to participate in research. For you to be able to decide whether you want to participate in this project, you should understand what the project is about, as well as the possible risks and benefits in order to make an informed decision. This process is known as informed consent. This form describes the purpose, procedures, possible benefits, and risks. It also explains how your personal information was used and protected. Once you have read this form and your questions about the study are answered, you were asked to participate in this study. You should receive a copy of this document to take with you.

Explanation of Study
This study is being done to gain a better understanding of the perceptions of the use of Interprofessional education in a group of nursing baccalaureate nursing faculty. A qualitative methodology through the use of a case study was used to obtain insight into the faculty perceptions of the use of Interprofessional education strategies that will assist nursing educators to better incorporate Interprofessional experiences into a specific nursing curriculum. This methodology allowed for the development of a clearer understanding of how the faculty will apply the theory of Transcultural Nursing in an Interprofessional environment. This knowledge was beneficial to nursing educators who are working with clinical partners in evaluating the influence if Interprofessional education in its role to reduce the theory-practice gap between the classroom/lab and the clinical setting.

If you agree to participate, you were asked to participate in this Interprofessional Education Simulation experience. This study may involve you participating in a focus group with other nursing baccalaureate faculty, a series of interviews, the simulation experience and completion of a reflective journal regarding your Interprofessional Education Simulation experience. Faculty who participate was assigned to facilitate a simulation experience with a small (3-4 students) groups with students from a variety of health disciplines. Each group will complete a simulation scenario under faculty observation and then debrief and discuss the simulation with the group and faculty.

You should not participate in this study if you do not want to participate.

Your participation in the study will last over the next two semesters.
Risks and Discomforts

No risks or discomforts are anticipated

Benefits

This study is important to science/society because this study will offer an intimate view of Interprofessional education from the view of the nursing faculty. This study will identify learning gaps regarding Interprofessional education and provide feedback to curriculum for application to help form program content and enhance content delivery.

Individually, there are no known benefits related to participation in this research study. However, faculty may gain an increase in confidence and understanding of how to better incorporate Interprofessional education into the curriculum.

Confidentiality and Records

Your study information was kept confidential by being secured on the researcher’s computer with a secure password. All audio recording from the focus group and interviews was destroyed upon completion of the transcription. Demographic information was collected and due to the relatively small subject pool for this study, participants was identifiable.

Additionally, while every effort was made to keep your study-related information confidential, there may be circumstances where this information must be shared with:

* Federal agencies, for example the Office of Human Research Protections, whose responsibility is to protect human subjects in research;
* Representatives of Ohio University (OU), including the Institutional Review Board, a committee that oversees the research at OU;
* Faculty Advisor, Teresa Franklin.

Compensation

No compensation was provided.

Contact Information

If you have any questions regarding this study, please contact the investigator Sherleena Buchman @ buchmans@ohio.edu, 740-593-4499 or the advisor, Teresa Franklin @ franklit@ohio.edu, 740-541-8847.

If you have any questions regarding your rights as a research participant, please contact Dr. Chris Hayhow, Director of Research Compliance, Ohio University, (740)593-0664 or hayhow@ohio.edu.

By agreeing to participate in this study, you are agreeing that:

- you have read this consent form (or it has been read to you) and have been given the opportunity to ask questions and have them answered;
- you have been informed of potential risks and they have been explained to your satisfaction;
• you understand Ohio University has no funds set aside for any injuries you might receive as a result of participating in this study;
• you are 18 years of age or older;
• your participation in this research is completely voluntary;
• you may leave the study at any time; if you decide to stop participating in the study, there was no penalty to you and you will not lose any benefits to which you are otherwise entitled.

Version Date: [05/13/15]
Appendix D: Demographic Data

1. How old are you?
2. What is your race? African-American; Asian; Caucasian; Hispanic; Other
3. Are you: Male or Female
4. Are you currently employed at the School of nursing as part time or full time?
5. Have you taught a baccalaureate course in the past three years?
## Appendix E: Interview Guide

<table>
<thead>
<tr>
<th>Research Question</th>
<th>Key Interview Question(s)</th>
<th>Probe Questions</th>
</tr>
</thead>
</table>
| What are the lived experiences of Nursing Faculty?                                | I understand you are a baccalaureate nursing faculty member. Please tell me about your experience as a baccalaureate nursing faculty member.                                                                 | • When did you start as a faculty member?  
• How old were you when you started in education as a faculty member?  
• How did you begin with your current career path?  
• Will you describe a typical day as a faculty member?  
• How do you interact with other faculty members within nursing? Please describe this interaction further.  
• How do you interact with other faculty members outside of nursing? Please describe this interaction further.  
• What are your perceptions of being a nursing faculty member? (What does it mean to you to be a nursing faculty member)?  
• Tell me about your relationship with other nursing faculty members.                                                                                                                                                                                                                                                                                                       |
| How do nursing faculty describe Interprofessional education?                       | Tell me about Interprofessional education.                                                 | • What does Interprofessional education mean to you?  
• Do you feel you are involved in Interprofessional education?  
• If so, how are you involved with Interprofessional education?  
• Please tell me more about your definition or understanding of Interprofessional education.  
• Tell me about your relationship with other faculty members outside of nursing.                                                                                                                                                                                                                                                                                       |
| What are the perceptions of baccalaureate nursing faculty                         | Tell me how you feel about Interprofessional education                                    | • Tell me about your perception of value with the use of Interprofessional education.  
• Have you been involved in                                                                                                                                                                                                                                                                                                                                       |
<table>
<thead>
<tr>
<th>How does participating in an Interprofessional education experience influence the teaching practices of baccalaureate nursing faculty in a Midwestern university?</th>
<th>How has Interprofessional education influenced your teaching?</th>
<th>How have you used simulation in the past?</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Can you tell me if your teaching has been impacted by Interprofessional education?</td>
<td>• Can you tell me if your teaching methodology has been impacted from your use of Interprofessional education?</td>
<td>• Can you tell me if your teaching methodology has been impacted from your use of simulation?</td>
</tr>
<tr>
<td>• If so, how have you previously been involved in Interprofessional education?</td>
<td>• If so, how your teaching methodology been impacted from your use of Interprofessional education?</td>
<td>• If so, how your teaching methodology been impacted from your use of simulation?</td>
</tr>
<tr>
<td>• Describe for me if you have any personal growth from participating in Interprofessional education</td>
<td>• From your understanding of Interprofessional education, will you make any changes to your teaching practices in the future to incorporate Interprofessional education?</td>
<td>• From your understanding of Interprofessional education, will you make any changes to your teaching practices in the future to incorporate simulation?</td>
</tr>
<tr>
<td>• Describe for me if you have any professional growth from participating in Interprofessional education</td>
<td>• Can you identify any barriers to using Interprofessional education?</td>
<td>• Can you identify any barriers to using simulation?</td>
</tr>
<tr>
<td>• Tell me about your life before you participated in Interprofessional education.</td>
<td>• Can you identify any strength to using Interprofessional education?</td>
<td>• Can you identify any strength to using simulation?</td>
</tr>
<tr>
<td>• Please tell me about your life after you have participated in Interprofessional education.</td>
<td>• Can you tell me if your teaching has been impacted by the use of simulation?</td>
<td>• Can you tell me if your teaching has been impacted by the use of simulation?</td>
</tr>
<tr>
<td>• How does participating in an Interprofessional education experience influence the teaching practices of baccalaureate nursing faculty in a Midwestern university?</td>
<td>• Can you tell me if your teaching methodology has been impacted from your use of simulation?</td>
<td>• Can you tell me if your teaching methodology has been impacted from your use of simulation?</td>
</tr>
</tbody>
</table>
| What do nursing faculty understand as their role in informing curriculum changes to include Interprofessional education? | Please tell me about your future role in Interprofessional education. | • Can you identify any strength to using simulation?  
• Do you see a relationship between simulation and Interprofessional education?  
• Do you plan to use any form of simulation involving Interprofessional education in the future?  
• How do you think Simulation with Interprofessional education will fit into your School of Nursing curriculum?  
• How do you think Simulation Interprofessional education will fit into your College curriculum?  
• How do you think Simulation Interprofessional education will fit into your University’s curriculum?  
• What if anything, will you do as a baccalaureate nursing faculty with Simulation Interprofessional education in the next six months?  
• What if anything, will you do as a baccalaureate nursing faculty with Simulation Interprofessional education in the next year? |
|---|---|---|
| What do nursing faculty understand as their role in informing curriculum changes to include Simulation as a tool for Interprofessional Education? | Please tell me about your future role in Simulation Interprofessional education. | • Can you identify any strength to using simulation?  
• Do you see a relationship between simulation and Interprofessional education?  
• Do you plan to use any form of Simulation involving Interprofessional education in the future?  
• How do you think Simulation with Interprofessional education will fit into your School of Nursing curriculum?  
• How do you think Simulation Interprofessional education will fit into your College curriculum?  
• How do you think Simulation Interprofessional education will fit into your University’s curriculum?  
• What if anything, will you do as a baccalaureate nursing faculty with Simulation Interprofessional education in the next six months?  
• What if anything, will you do as a baccalaureate nursing faculty with Simulation Interprofessional education in the next year? |
| | | education in the next year? |
Appendix F: Reflective Journal Guidelines

Please write a reflective journal after any Interprofessional education simulation experience or any other Interprofessional experience you encounter during the time frame of this research. There are no guidelines or timelines for when each one is due. I am asking that you use this as an opportunity to reflect on your involvement in Interprofessional education simulation experience as well as any other type of Interprofessional educational experiences you may encounter. This process was also outlined on the consent form. Please let me know if at any time you have any questions or concerns. I appreciate your willingness to participate.
Appendix G: Simulation Faculty Version

Overview:
You are part of a collaborative care team in charge of Leona Taylor, an 80 year old widowed female, who had a comminuted fracture of the femoral head after a fall 8 days ago. She underwent a right total hip replacement 6 days ago and has had an uneventful postoperative course. Following a total right hip replacement patients are asked to not bend their hip beyond 90 degrees for six weeks. Additionally, Leona has to be extremely careful to not bring her right knee up to her chest or put her legs together as this could cause the hip to pop out of socket. Leona has been exhibiting periods of time where she is anxious and states that she is fearful that she may fall again. Physical Therapy has been working with Leona since post op day 2. Her chart is reflective of her physical therapy progress. The nurse and the physician (or Nurse Practitioner) will both enter the patient’s room to go over the discharge plan with the patient and discuss medication and therapy orders. Both will leave the room. The physician will go to chart and the nurse will call the EMTs to come and pick up the patient for transfer. As a result of Leona’s symptoms of anxiety and stated fears music therapy has been consulted and started a treatment regimen. Leona will have her next music therapy session prior to Leona’s discharge. The nurse will also need to call the RN at the ECF to give report off. Current Vital Signs: BP 126/84 P80 R18 T97.7 oral SPO2 98% on room air. Wound edges are well-approximated, without drainage. Pedal pulses 2+ bilat. Pt is A & O x 3, pale, warm and dry. Resp easy.

Past Medical History: GERD, osteoporosis. Medications: Colace, Norco 5 mg 1 q 4-6 hours prn pain; Lovenox, omeprazole, calcium, vitamin D. Wt: 100#    Ht: 5’1”

Patient’s daughter is at bedside with patient, who is awaiting transfer to rehabilitation center that is housed in a local extended care facility (ECF).

Objectives

1. To actively communicate as an effective member of an interprofessional team (Communication).
2. To demonstrate emerging collaborative skills while developing a patient-centered care plan (Collaboration).
3. To describe the unique perspective, value, contributions, and responsibilities that healthcare professionals bring to the geriatric interprofessional team (Roles and Responsibilities).
4. To demonstrate the ability to collaborate with the patient and family as well as develop an understanding of the potential barriers to communication with geriatric patients including health literacy, cultural barriers, cognitive, psychosocial, and physical impairments (Collaborative Patient-Family Centered Approach).
Equipment needed:
1. Female mannequin
2. Female clothes appropriate for an 80 year old
3. Glasses
4. Make up
5. ID Band
6. Chair for daughter
7. Table top set up
8. Stethoscope
9. Sphygmomanometer
10. Thermometer

Mannequin set up:
Dressed as a female and wearing makeup. BP 126/84 P80 R18 T97.7 oral SPO2 98% on room air.
Asking faculty running mannequin to speak as the patient. Patient is not complaining of pain. The patient is very anxious and states to her daughter that she is really scared to go to the rehab center because she thinks she may fall again. Patient and daughter can make small talk about upcoming Christmas holiday.

Participants and role:

Patient: Will use high fidelity mannequin for this simulation (could also use a standardized patient)
Daughter: At the bedside concerned with her mother’s anxiety and fear as well as her physical wellbeing. Will carry on small talk conversation regarding the upcoming Christmas holiday with the patient. This was served by a nursing faculty member posing as a daughter.
Registered Nurse Hospital: Will meet with the patient and explain the discharge process. Will interact as part of the Interprofessional team as she interacts with physician and discusses the medications with the patient and daughter. Will call the EMTs to pick up the patient. Will call the RN at the ECF to provide report using SBAR.
Physician or Nurse Practitioner: Will order medications for discharge to rehab. (Will continue home meds listed above). Will discuss need for compliance with Physical therapy and follow up care.
Physical Therapy: Report from previous shift available for nurses and physician to review.
Emergency Medical Technician: Will take call for transport. Will arrive to pick up patient. Will obtain report. Simulation will end directly prior to physically moving the patient.
Music Therapy: Will meet with the patient and address the anxiety and fear of falling through music (they are bringing their own instrument).

Registered Nurse at the ECF: Will answer the phone and receive report from the hospital RN. Will read back the report to the hospital RN.

Debriefing / Reflection:
1. Tell me what you think went well today?
2. Give me examples of how the team communicated well today?
3. Tell me what you think needs improvement?
4. Give me examples of how the team could have communicated better today?
5. How did you work together as a team?
6. How did you involve other members of the team?
7. How did you involve your patient?
8. How did you involve your family member?
9. What will you take away from this experience today?
10. Overall, what did you think about this experience?
11. If you could change anything about today’s experience, what would you change and why?
Appendix H: Simulation Students

Overview:
You are part of a collaborative care team in charge of Leona Taylor, an 80 year old widowed female, who had a comminuted fracture of the femoral head after a fall 8 days ago. She underwent a right total hip replacement 6 days ago and has had an uneventful postoperative course. Following a total right hip replacement patients are asked to not bend their hip beyond 90 degrees for six weeks. Additionally, Leona has to be extremely careful to not bring her right knee up to her chest or put her legs together as this could cause the hip to pop out of socket. Leona has been exhibiting periods of time where she is anxious and states that she is fearful that she may fall again. Physical Therapy has been working with Leona since post op day 2. Her chart is reflective of her physical therapy progress. The nurse and the physician (or Nurse Practitioner) will both enter the patient’s room to go over the discharge plan with the patient and discuss medication and therapy orders. Both will leave the room. The physician will go to chart and the nurse will call the EMTs to come and pick up the patient for transfer. As a result of Leona’s symptoms of anxiety and stated fears music therapy has been consulted and started a treatment regimen. Leona will have her next music therapy session prior to Leona’s discharge. The nurse will also need to call the RN at the ECF to give report off. Current Vital Signs: BP 126/84 P 80 R 18 T 97.7 oral SPO2 98% on room air. Wound edges are well-approximated, without drainage. Pedal pulses 2+ bilat. Pt is A & O x 3, pale, warm and dry. Resp easy.

Past Medical History: GERD, osteoporosis. Medications: Colace, Norco 5 mg 1 q 4-6 hours prn pain; Lovenox, omeprazole, calcium, vitamin D. Wt: 100#  Ht: 5’1”

Patient’s daughter is at bedside with patient, who is awaiting transfer to rehabilitation center that is housed in a local extended care facility (ECF).

Objectives

1. To actively communicate as an effective member of an interprofessional team (Communication).
2. To demonstrate emerging collaborative skills while developing a patient-centered care plan (Collaboration).
3. To describe the unique perspective, value, contributions, and responsibilities that healthcare professionals bring to the geriatric interprofessional team (Roles and Responsibilities).
4. To demonstrate the ability to collaborate with the patient and family as well as develop an understanding of the potential barriers to communication with geriatric patients including health literacy, cultural barriers, cognitive, psychosocial, and physical impairments (Collaborative Patient-Family Centered Approach).
Participants and role: Patient & Daughter are in the room

Registered Nurse Hospital: Will meet with the patient and explain the discharge process. Will interact as part of the call the EMTs to pick up the patient. Will call the RN at the ECF to provide report using SBAR.

Physician or Nurse Practitioner: Will order medications for discharge to rehab. (Will continue home meds listed above).

Will discuss need for compliance with Physical therapy and follow up care.

Physical Therapy: Report from previous shift available for nurses and physician to review.

Emergency Medical Technician: Will take call for transport. Will arrive to pick up patient. Will obtain report. Simulation will end directly prior to physically moving the patient.

Music Therapy: Will meet with the patient and address the anxiety and fear of falling through music they are bringing their own instrument).

Registered Nurse at the ECF: Will answer the phone and receive report from the hospital RN. Will read back the report to the hospital RN.
Leona Taylor
80 Years Old
No Known Allergies

POST OP DAY 2

Subjective:
Pt. is an 80 y/o female status post R THA. Pt. surgery includes a posterolateral approach, cemented THA which indicates surgical precautions including: flexion >90 degrees, hip adduction past neutral, and any IR, pt. is currently WBAT secondary to cemented THA. Patient is received by PT in pt. room. Pt. is supine in bed with HOB flat and resting comfortably.

Objective:
Pt. reports current pain of 4/10 with pain medications prn every 4-6 hours. Pt. reports increase in pain up to 8/10 and anxiety during bed mobility and transfers.

<table>
<thead>
<tr>
<th>Bed Mobility / Transfers</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Scooting:</td>
<td>Mod assist with leg lifter, 6/10 pain</td>
</tr>
<tr>
<td>Rolling:</td>
<td>Mod assist, 6/10 pain</td>
</tr>
<tr>
<td>Supine to Sit:</td>
<td>Min assist, 4/10 pain</td>
</tr>
<tr>
<td>Sit to Stand:</td>
<td>Max assist, 7/10 pain</td>
</tr>
<tr>
<td>Ambulation:</td>
<td>Mod assist with NSRW for 25ft, 5/10 pain,</td>
</tr>
<tr>
<td></td>
<td>decreased R step length and heel strike,</td>
</tr>
<tr>
<td></td>
<td>decreased stance phase on L, decrease WB</td>
</tr>
<tr>
<td></td>
<td>on R secondary to pain.</td>
</tr>
</tbody>
</table>

Strength:
LEFT
Hip Flexion (iliopsoas): 4-/5
Hip Extension (glutes / hamstrings): 4/5
Hip Abduction (glute med / TFL): 4/5
Hip Adduction (adductor group): 4/5
Knee Flexion (hamstrings): 4/5
Knee Extension: (quadriceps): 4/5
Ankle Plantar Flexion (gastroc / soleus): 4/5
Ankle Dorsiflexion (anterior tibialis): 4/5

RIGHT
Hip Flexion (iliopsoas): NT
Hip Extension (glutes / hamstrings): NT
Hip Abduction (glute med / TFL): NT
Hip Adduction (adductor group): NT
Knee Flexion (hamstrings): 4/5
Knee Extension: (quadriceps): 4/5
Ankle Plantar Flexion (gastroc / soleus): 4/5
Ankle Dorsiflexion (anterior tibialis): 4/5

AROM:
Left: All hip AROM is WFL for the left hip / knee / ankle.
Right: Pt. knee and ankle AROM is WFL. Pt. hip AROM is limited to 20 degrees actively in standing with 8/10 pain, hip extension is limited to neutral with 8/10 pain, hip adduction is in neutral and NT secondary to surgical precautions, hip abduction to 10 degrees with 8/10 pain.

Patient surgical incision appears clean and healing appropriately with stitches in place. No discharge present at incision site.

Pt. skin inspection is intact and healthy upon inspection with no redness or tenderness over any bony prominences.

Pt. instructed on anti-embolic exercises and educated to perform 3 x 10 every waking hour.

Pt. educated on and repeated all surgical precautions back to this PT.

Assessment:
Pt. tolerated PT well with some complaints of pain / discomfort in the area of the incision and the THA. Pt. expresses anxiety during all transfers and ambulation. Nursing informed of pt. increases in anxiety and pain.

Plan:
Continue with skilled PT for ROM, ambulation and pain management. Discuss with physician / nursing pt. increases in anxiety.
Leona Taylor  
80 Years Old  
No Known Allergies

POST OP DAY 3

Subjective:
Pt. is an 80 y/o female status post R THA. Pt. surgery includes a posterolateral approach, cemented THA which indicates surgical precautions including: flexion >90 degrees, hip adduction past neutral, and any IR, pt. is currently WBAT secondary to cemented THA. Patient is received by PT in pt. room. Pt. is supine in bed with HOB flat and resting comfortably.

Objective:
Pt. reports current pain of 3/10 with pain medications prn every 4-6 hours. Pt. reports increase in pain up to 8/10 and anxiety during bed mobility and transfers.

<table>
<thead>
<tr>
<th>Bed Mobility / Transfers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Scooting:</td>
</tr>
<tr>
<td>Rolling:</td>
</tr>
<tr>
<td>Supine to Sit:</td>
</tr>
<tr>
<td>Sit to Stand:</td>
</tr>
<tr>
<td>Ambulation:</td>
</tr>
</tbody>
</table>

Strength:
LEFT
Hip Flexion (iliopsoas): 4-/5
Hip Extension (glutes / hamstrings): 4/5
Hip Abduction (glute med / TFL): 4/5
Hip Adduction (adductor group): 4/5
Knee Flexion (hamstrings): 4/5
Knee Extension: (quadriceps): 4/5
Ankle Plantar Flexion (gastroc / soleus): 4/5
Ankle Dorsiflexion (anterior tibialis): 4/5

RIGHT
Hip Flexion (iliopsoas): NT
Hip Extension (glutes / hamstrings): NT
Hip Abduction (glute med / TFL): NT
Hip Adduction (adductor group): NT
Knee Flexion (hamstrings): 4/5
Knee Extension: (quadriceps): 4/5
Ankle Plantar Flexion (gastroc / soleus): 4/5
Ankle Dorsiflexion (anterior tibialis): 4/5

AROM:
Left: All hip AROM is WFL for the left hip / knee / ankle.
Right: Pt. knee and ankle AROM is WFL. Pt. hip AROM is limited to 30 degrees actively in standing with 7/10 pain, hip extension is limited to neutral with 7/10 pain, hip adduction is in neutral and NT secondary to surgical precautions, hip abduction to 13 degrees with 6/10 pain.

Patient surgical incision appears clean and healing appropriately with stitches in place. No discharge present at incision site.

Pt. skin inspection is intact and healthy upon inspection with no redness or tenderness over any bony prominences.

Pt. instructed on anti-embolic exercises and educated to perform 3 x 10 every waking hour.

Pt. educated on and repeated all surgical precautions back to this PT.

Assessment:
Pt. tolerated PT well with some complaints of pain / discomfort in the area of the incision and the THA. Pt. expresses anxiety during all transfers and ambulation. Pt. pain has decreased as functional ROM continues to increase.

Plan:
Continue with skilled PT for ROM, ambulation and pain management. Discuss with social work pt. discharge plan.
Leona Taylor
80 Years Old
No Known Allergies

POST OP DAY 4

Subjective:
Pt. is an 80 y/o female status post R THA. Pt. surgery includes a posterolateral approach, cemented THA which indicates surgical precautions including: flexion >90 degrees, hip adduction past neutral, and any IR, pt. is currently WBAT secondary to cemented THA. Patient is received by PT in pt. room. Pt. is supine in bed with HOB flat and resting comfortably.

Objective:
Pt. reports current pain of 3/10 with pain medications prn every 4-6 hours. Pt. reports increase in pain up to 6/10 and anxiety during bed mobility and transfers.

<table>
<thead>
<tr>
<th>Bed Mobility / Transfers</th>
<th>Mod assist with leg lifter, 5/10 pain</th>
</tr>
</thead>
<tbody>
<tr>
<td>Scooting:</td>
<td>Mod assist, 4/10 pain</td>
</tr>
<tr>
<td>Rolling:</td>
<td>Min assist, 2/10 pain</td>
</tr>
<tr>
<td>Supine to Sit:</td>
<td>Mod assist, 4/10 pain</td>
</tr>
<tr>
<td>Sit to Stand:</td>
<td>Mod assist, NSRW for 50ft, 4/10 pain, decreased R step length and heel strike, decreased stance phase on L, decrease WB on R secondary to pain.</td>
</tr>
</tbody>
</table>

Strength:
LEFT
Hip Flexion (iliopsoas): 4-/5
Hip Extension (glutes / hamstrings): 4/5
Hip Abduction (glute med / TFL): 4/5
Hip Adduction (adductor group): 4/5
Knee Flexion (hamstrings): 4/5
Knee Extension: (quadriceps): 4/5
Ankle Plantar Flexion (gastroc / soleus): 4/5
Ankle Dorsiflexion (anterior tibialis): 4/5

RIGHT
Hip Flexion (iliopsoas): NT
Hip Extension (glutes / hamstrings): NT
Hip Abduction (glute med / TFL): NT
Hip Adduction (adductor group): NT
Knee Flexion (hamstrings): 4/5
Knee Extension: (quadriceps): 4/5
Ankle Plantar Flexion (gastroc / soleus): 4/5
Ankle Dorsiflexion (anterior tibialis): 4/5

AROM:
Left: All hip AROM is WFL for the left hip / knee / ankle.
Right: Pt. knee and ankle AROM is WFL. Pt. hip AROM is limited to 45 degrees actively in standing with 6/10 pain, hip extension is limited to neutral with 6/10 pain, hip adduction is in neutral and NT secondary to surgical precautions, hip abduction to 15 degrees with 6/10 pain.

Patient surgical incision appears clean and healing appropriately with stitches in place. No discharge present at incision site.

Pt. skin inspection is intact and healthy upon inspection with no redness or tenderness over any bony prominences.

Pt. instructed on anti-embolic exercises and educated to perform 3 x 10 every waking hour.

Pt. educated on and repeated all surgical precautions back to this PT.

Assessment:
Pt. tolerated PT well with some complaints of pain / discomfort in the area of the incision and the THA. Pt. expresses anxiety during all transfers and ambulation. Pt. pain has decreased as functional ROM continues to increase.

Plan:
Continue with skilled PT for ROM, ambulation and pain management. Discuss with social work pt. discharge plan. Discuss pt. home set up with family and discharge planning with occupation therapy.
POST OP DAY 5

Subjective:
Pt. is an 80 y/o female status post R THA. Pt. surgery includes a posterolateral approach, cemented THA which indicates surgical precautions including: flexion >90 degrees, hip adduction past neutral, and any IR, pt. is currently WBAT secondary to cemented THA. Patient is received by PT in pt. room. Pt. is supine in bed with HOB flat and resting comfortably. Patient family is present in room.

Objective:
Pt. reports current pain of 3/10 with pain medications prn every 4-6 hours. Pt. reports increase in pain up to 5/10 and anxiety during bed mobility and transfers.

<table>
<thead>
<tr>
<th>Bed Mobility / Transfers</th>
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<tbody>
<tr>
<td>Scooting:</td>
<td>Min assist with leg lifter, 5/10 pain</td>
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<tr>
<td>Rolling:</td>
<td>Min assist, 4/10 pain</td>
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<tr>
<td>Supine to Sit:</td>
<td>Mod ind, 2/10 pain</td>
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<tr>
<td>Sit to Stand:</td>
<td>Min assist, 3/10 pain</td>
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<tr>
<td>Ambulation:</td>
<td>Mod assist with NSRW for 100ft, 3/10 pain, decreased R step length and heel strike, decreased stance phase on L, decrease WB on R secondary to pain.</td>
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</table>

Strength:
LEFT
Hip Flexion (iliopsoas): 4-/5
Hip Extension (glutes / hamstrings): 4/5
Hip Abduction (glute med / TFL): 4/5
Hip Adduction (adductor group): 4/5
Knee Flexion (hamstrings): 4/5
Knee Extension: (quadriiceps): 4/5
Ankle Plantar Flexion (gastroc / soleus): 4/5
Ankle Dorsiflexion (anterior tibialis): 4/5

RIGHT
Hip Flexion (iliopsoas): NT
Hip Extension (glutes / hamstrings): NT
Hip Abduction (glute med / TFL): NT
Hip Adduction (adductor group): NT
Knee Flexion (hamstrings): 4/5  
Knee Extension: (quadriceps): 4/5  
Ankle Plantar Flexion (gastroc / soleus): 4/5  
Ankle Dorsiflexion (anterior tibialis): 4/5  

AROM:  
Left: All hip AROM is WFL for the left hip / knee / ankle.  
Right: Pt. knee and ankle AROM is WFL. Pt. hip AROM is limited to 65 degrees actively in standing with 6/10 pain, hip extension is 10 to neutral with 6/10 pain, hip adduction is in neutral and NT secondary to surgical precautions, hip abduction to 17 degrees with 6/10 pain.  

Patient surgical incision appears clean and healing appropriately with stitches in place.  
No discharge present at incision site.  

Pt. skin inspection is intact and healthy upon inspection with no redness or tenderness over any bony prominences.  

Pt. instructed on anti-embolic exercises and educated to perform 3 x 10 every waking hour.  

Pt. educated on and repeated all surgical precautions back to this PT.  

Assessment:  
Pt. tolerated PT well with some complaints of pain / discomfort in the area of the incision and the THA. Pt. expresses anxiety during all transfers and ambulation. Pt. pain has decreased as functional ROM continues to increase. Pt. ambulation continues to increase. Patient will require d/c with NSRW for home ambulation.  

Plan:  
Continue with skilled PT for ROM, ambulation and pain management. Discuss with social work pt. discharge plan. Discuss DME prescription with MD for NSRW.
### Appendix J: Timeline of Research Process

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Appendix K: Reflective Journal

Describe how if at all the IPE Simulation experience has impacted your professional development.

Describe how if at all the IPE Simulation experience has impacted your interdisciplinary skills development overall.

Describe how if at all will this IPE simulation experience impact your practice as a nurse educator as you move forward?