EXPLORING LICENSED PRACTICAL NURSING GRADUATES' PERCEPTIONS OF ACTIVITIES BASED ON KOLB'S EXPERIENTIAL LEARNING THEORY

By

Keondra Rustan

JOY KIEFFER, PhD, RN, CCTN, Faculty Mentor and Chair

PAXSON BARKER, PhD, MS, RN, Committee Member

CHARLES KOZOLL, PhD., Committee Member

Curtis Brant, PhD, Interim Dean, School of Education

A Dissertation Presented in Partial Fulfillment

Of the Requirements for the Degree

Doctor of Philosophy

Capella University

July 2018

Abstract

Experiential learning strategies have proven to beneficial in educating Registered Nurses (RNs) at the baccalaureate degree level. However, there is a great limitation on the amount of research available regarding the use of these techniques with licensed practical nursing (LPN) students. There is a need to examine these educational techniques on LPN students as they make up a large percentage of the health care workforce and care for a vulnerable part of the United States population. The purpose of this basic qualitative study was to explore the experiences of LPN graduates with experiential learning strategies, and determine if experiential learning strategies enhanced their preparedness for their transition from student to practitioner and critical-thinking skills in the clinical setting upon graduation. Data were collected using semistructured, open-ended interview questions. The sample included LPN graduates who had experience with experiential learning strategies in their degree programs. The interviews were audio-recorded and transcribed. The data entered into Atlas.ti, software was analyzed and coded. The results of the study revealed that experiential learning strategies were reported to be beneficial for these LPNs by increasing confidence and improving critical skills and critical thinking. The participants stated that they were also able to apply what they learned from the experiential learning strategies to their clinical practice. Future research is needed to determine if experiential learning strategies are being utilized in LPN programs to maximize these reported positive outcomes.

Dedication

This dissertation is dedicated my family, especially my mother, fiancé, and two older sisters, who have been my cheerleaders through this process. They helped me to remember whenever I felt less motivated to keep trying and do my best. Thank you so much for your support. I appreciate you and love you more than you know.

Acknowledgments

I would like to acknowledge Dr. Kieffer for going above and beyond to encourage me and inspire in the completion of this manuscript. I am grateful to my dissertation committee, Dr. Paxson and Dr. Kozoll for their encouragement and assistance throughout this process. I would also like to acknowledge those who lent me financial support on this academic journey.

Table of Contents

List of Tables

CHAPTER 1. INTRODUCTION

Background of the Study

Although the use of experiential learning has been thoroughly documented (Byrd et al., 2012; Kratzke & Bertolo, 2013; Lavoie, Pepin, & Cossette, 2015; Maruca, Diaz, Kuhnly, & Jefferies, 2015) with Registered Nurses (RNs) who earned a Baccalaureate of Science in Nursing (BSN) degree, the use of experiential learning (Kolb, 1981; Hill, 2017) has not significantly been explored with Licensed Practical Nurse (LPN) students (National League for Nursing [NLN], 2014). This study uses Kolb's (1981) theory of experiential learning as the main method of experiential learning strategies; this theory was developed by Kolb in 1981 and involves the participant having a concrete experience after learning about it and then reflecting upon the experience to build new knowledge. Experiential learning is defined as learning by doing, learning while doing, or practical learning (Hill, 2017; Kolb, 1984). Experiential learning can include the application of clinical skills such as medication administration, indwelling urinary catheter insertion, physical assessment (Byrd et al., 2012; Kim, Ko, & Lee, 2012; Kratzke & Bertolo, 2013). When using those clinical skills with experiential learning strategies, reflection is required after the experience; during the reflection process, new knowledge may be acquired (Hill, 2017; Kolb, 1981). Kolb's theory of experiential learning has been a proven strategy to

assist with the development and improvement of critical thinking, confidence, and clinical skills of RN students, including those with a baccalaureate's degree (Shin, Sok, Hyun, & Kim, 2015).

The use of experiential learning may increase the number of practice-ready novice nurses (Kim et al., 2012; Lavoie et al., 2015). Kolb's (1981) theory of experiential learning concentrates on the process of learning rather than the outcomes and enables the learner to experience a learned concept, reflect upon the concept, and create new knowledge based on the reflection of the experience. Experiential learning techniques can be utilized through a variety of methods to improve learning outcomes and learning retention in students. Its use with RN students, holding a baccalaureate's degree, demonstrates improvement and expanding critical nursing skills including critical thinking, physical assessment, Foley catheter insertion, and more (Baker & Anandhi, 2013; Beattie, Koroll, & Price, 2010). This study examined the experiences of LPN graduates with Kolb's (1981) theory of experiential learning as instructional strategies or learning activities.

This portion described the background of the study as it relates to the larger body of knowledge. The remaining portions of Chapter one included the need for the study, purpose, significance of the study, and a description of the research questions used as a basis for the study. Chapter one concluded with a definition of terms, research design, field testing and trial run of the interview questions, assumptions and limitations, and the layout for the remainder of the study.

Need for the Study

The literature search conducted on nursing students' education indicated that experiential learning has a positive effect on the education of RN students, especially baccalaureate of science of nursing (BSN) degree level students, but there is little known of its impact on LPN

students (Kirkman, 2013; Rutherford-Hemming, 2012; Tosterud, Hedelin, & Hall-Lord, 2013). Some LPN graduates complete their education without obtaining effective critical-thinking skills and many essential clinical skills (Bajgoric, Appiah, & Wass, 2014; Morrell & Ridgway, 2014). Examples of these essential may clinical skills include physical assessment, intravenous (IV) catheter, Foley catheter insertion, and medication administration. These clinical skills and the right to practice them are regulated by the Nurse Practice Acts and medical facilities of the states in which they practice (Lanier, 2017). Many LPN graduates verbalize a lack of preparedness to assume the role of a practicing nurse, and a vague awareness of their role as an LPN upon graduation, and it is suggested that experiential learning, such as skills lab, problem-based learning, case studies, simulation, and more may improve their competence and confidence (Beattie et al., 2010). These nurses may be unprepared to care effectively for their patients upon graduation (Unsworth, McKeever, & Kelleher, 2012). This study analyzed the reported experiences of LPNs graduates with experiential learning strategies during their time in nursing school, and determine if experiential learning strategies enhanced their preparedness for their transition from student to a practitioner and critical-thinking skills in the clinical setting upon graduation.

Purpose of the Study

The purpose of this basic qualitative research study was to examine the encounters of Licensed Practical Nurses (LPNs) graduates who underwent experiential learning strategies in nursing training programs and determine if they report that those experiential learning strategies enhanced their preparedness for their transition from student to a practitioner and critical-thinking skills in the clinical setting upon graduation. According to the National League for Nursing (2014), there is a deficient focus on best practices to educate LPNs which may lead to

poor quality and safety outcomes for the patient and a void in the health care provider continuum. This research study helped analyze the concept of experiential learning as an experienced learning strategy that may increase the number of practice-ready LPNs who are prepared to provide quality and safe patient care.

Significance of the Study

The significance of this basic qualitative study is to expand upon the scientific knowledge of the utilization of experiential learning techniques in nursing education through the examination of the learning experiences of LPN graduates who were exposed to experiential learning techniques in their nurse training programs. This study will add to the research literature on the role of experiential learning by emphasizing the experiences of LPNs. The results of the use of experiential learning is reflected in the literature (Kim et al., 2012; Kirkman, 2013). However, there is limited information on its use and effects with LPN students. There is a need to explore the educational techniques used on LPN students (Morrell & Ridgway, 2014; National League for Nursing, 2014; Walker, Olson, & Tytler, 2013; Whittingham, 2012) as they make up approximately 724,500 jobs in the health care field and care for a vulnerable part of the population (Kaufman, 2009; United States Department of Health & Human Services, Administration for Community Living [ACL], 2015; United States Department of Labor Bureau of Labor Statistics, 2017). The use of Kolb's (1981) theory of experiential learning may enhance critical-thinking skills in nurses (Hamilton & Klebba, 2011). Critical-thinking skills are essential to enable nurses to meet the demands of caring the sizeable vulnerable population (United States Department of Health & Human Services ACL, 2015).

Research Question

The main research question explored during this study was, From the perspectives of the licensed practical nursing graduates, how did the experiential learning strategies, or simulation opportunities, in their nursing programs enhance their preparedness for the transition to the clinical setting upon graduation? The subquestions were as follows:

1. What types of practices do the licensed practical nurses have with experiential learning?

    2. How did learning strategies, if any, increase the licensed practical nurses understanding of clinical techniques?

    3. What do the licensed practical nurses believe helped them have a better understanding of their roles or scope of practice?

    4. How have the licensed practical nurses increased their confidence in their clinical skills with the use of certain learning strategies?

    5. What influence did experiential learning have on the academic progress of the licensed practical nurses?

Definition of Terms

Baccalaureate of Science of Nursing (BSN) Degree

A registered nurse (RN) prepared with a *baccalaureate degree* with an emphasis on leadership and critical thinking (Sarver, Cichra, & Kline, 2015). A Baccalaureate of Science of nursing candidate must pass the NCLEX-RN exam to become a registered nurse.

Clinical Skills

Clinical skills are tasks that are required to care for a patient effectively, that may involve procedure, intervention, or an assessment (Stricklin, 2016).

Critical Thinking

Critical thinking requires having fundamental knowledge and awareness in complex

practice or understanding the full picture (Turkel, Marvelous, Morrison, & Singletary,

2016). Critical thinking also requires users to synthesize the data and the use of skills to

guide behavior (The Foundation for Critical Thinking, 2015).

Indwelling Urinary Catheter

An *indwelling urinary catheter* is a catheter that is inserted through the urinary meatus to

the urethra to the patient's bladder to empty the bladder and enable close monitoring of

urinary output (Dy, Major-Joynes, Pegues, & Broadway, 2016).

Intravenous Catheter (IV)

An *intravenous catheter* is usually inserted peripherally into a patient's vein deliver to

blood, fluids, and medications (Fourie, 2015).

Kolb's theory of experiential learning

Kolb's theory of experiential learning requires that the learner goes through a

transformative experience to create new knowledge after going through four stages:

observation, thinking, experience, and reflection (Lisko & O'Dell, 2010).

Licensed Practical Nurse (LPN)

A *licensed practical nurse (LPN)* earns a diploma and their scope of practice varies from

state to state but is often considered to have less education than the RN (Garbin &

Chmielewski, 2013). They must pass the NCLEX-PN exam to become an LPN.

Medication Administration

Medication administration is the skill of giving prescribed medications to patients via the

right patient, right medication, right dose, right time, right route, and right documentation

after obtaining knowledge on their use, side effects, and pertinent patient education (Flynn, 2016).

Nursing Education

Nursing education and training are given to individuals who intend to pass a licensing exam (NCLEX-RN or NCLEX-PN) to enable them to practice as nurses (RN or LPN) and care for patients using various skills. Their education is delivered with a variety of methods using evidence-based practice (Kalb, O'Conner-Von, Brockway, Rierson, & Sendelbach, 2015).

Physical Assessment

Physical assessment is an examination of a patient's body from head-to-toe using look, palpation, and auscultation; it requires the use of critical thinking and clinical skills for proper utilization (Aldrige-Bent, 2011).

Registered Nurse (RN)

A *registered nurse* earns a diploma, associate degree, or baccalaureate degree in nursing, and must pass the NCLEX-RN exam to become an RN. Their scope of practice varies from state to state (Walker et al., 2013).

Scope of Practice

The *scope of practice* for LPNs and RNs includes a description of all activities in which that nurse may engage in with his or her current level of licensure (Lanier, 2017). For RNs the scope of practice also includes delegation in which they may assign tasks to LPNs and unlicensed assistive personnel (Lanier, 2017; National League for Nursing [NLN], 2014).

Research Design

This study used a basic qualitative research design. Qualitative studies generally use broad research questions to interpret or understand social issues (Bergdahl & Bertero, 2014; Lodico, Spaulding, & Voegtle, 2010). This qualitative research study involved the exploration of a concept to explain, describe, and understand educational and social phenomena often using interviews (Merriam & Tisdell, 2016). This study explored the encounters of recent LPN graduates who encountered various experiential learning strategies during their education and their reports of which learning strategies were most beneficial to enabling them to become practice-ready upon graduation. The study also examined their feelings of confidence in their practice and their understanding of their scope of practice after experiencing these instructional techniques. The qualitative interviews conducted used open-ended, semistructured, guided questions because they focused on how individuals perceive their experiences and how they make sense of their lives (Merriam & Tisdell, 2016). This study focused on how the LPN graduates perceived their experiences with experiential learning during their nursing programs and its influence on their education and nursing practice.

A basic qualitative research design uses interviews, and document analysis to collect information on an interest using the researcher as a tool (Lodico et al., 2014). If a significant number of participants answer the questions in the same manner, then it is viewed as a trend (Merriam & Tisdell, 2016). The data sets are used to identify recurring patterns and common themes and are assigned a code (Merriam & Tisdell, 2016). The data sets show a trend or a pattern, which produces findings that are rich and descriptive, which aligns with the goals of the study.

Field Test and Trial Run of the Interview Questions

Before the start of the study, a field test was conducted to determine face validity of the questions and notes were kept on any adjustments made. The field test had three experts in nursing education, not involved in the study, read over and examine the interview questions. The nursing education experts were all LPN faculty members who determined that the questions were strong, ethical, would answer the research question, clear, and were without bias. No changes were required to maintain the integrity of the questions. A second field test was conducted using experts in research, and some changes were made to both the research and interview questions to improve clarity and relation to the central research question.

The conducted trial run used the first two interviews as a method of testing the validity of the interview questions; these two interviews are not included in the analysis of the study. The interviews were conducted one-on-one in a private interview room at the location of the interviewee's choosing. The interviews were audio-recorded, and field notes were taken. This experience gave this novice researcher an opportunity to practice their interviewing and listening techniques and ensure the utilization of adequate audio-recording abilities.

Assumptions and Limitations

Assumptions

There are eight assumptions for this study including these LPN graduates having previous exposure to experiential learning or hands-on learning strategies and their understanding what the terminology means. It was assumed that a group of LPN graduates would voluntarily participate in this study. Another assumption is that a group of LPN graduates answered all the interview questions completely and honestly. Moreover, other assumptions are that the data collected answered the research question, the tools used for data collection were correct and

9

would lead to data that answered the research question, and the basic qualitative design was the most appropriate one for this study. Qualitative research focuses on analyzing the lived experiences of the participants rather than a numerical analysis or comparison (Merriam & Tisdell, 2016). Also, it is assumed that the LPN graduates all benefited from hands-on or experiential learning strategies that the schools in which the graduates were enrolled used Kolb's (1981) theory of experiential learning similarly as an instructional technique and the exploration of their experiences with experiential learning or hands-on learning strategies would benefit the science of nursing education. There is also the assumption that there was a common understanding of what activities are defined as experiential.

Limitations

One limitation of the qualitative methodology is the limits it places in the generalizability of the study (Merriam & Tisdell, 2016). In qualitative studies, the generalizability of the study lies in the exportability of the theoretical framework (Merriam & Tisdell, 2016). The fact that the participants were obtained from only two Western U.S. states further limits the study. Although the experiences that were recovered were of great value to the body of knowledge, more varied information could be obtained if the research is later applied to other states. Another limitation is that because the researcher was the interpreter of results, there was potential for biased interpretation of study results (Merriam & Tisdell, 2016).

Delimitations

There are only a small number of delimitations or boundaries of the study. One delimitation was that only LPN graduates were included, not RN graduates. RN graduates were not used because there is a great deal of information available that reports the experiences of RN graduates with experiential learning strategies. Another delimitation would be that the sample

was not limited to recent graduates. The aim of this study was the explore the overall reported experiences of LPN graduates as a whole rather than make a comparison of the experience based on practical clinical experience. The other delimitation is that the LPN graduates were not from one specific specialty in nursing.

Organization of the Remainder of the Study

Chapter 1 included an introduction to the study and described the background, context, and conceptual framework used to design the study. The problem, purpose, research questions, rationale, and significance of the study were explained, and the definitions of common terms used in this study are included in chapter 1, so the reader can understand the terminology being utilized. The assumptions, limitations, and delimitations give the reader greater perspective into the researcher's insight when reading this dissertation, which included information on the use of experiential learning and how it can be used to benefit bridging the gap from a student to a practitioner in nursing. Chapter 1 also included information on why this study is important and how it benefits the field of nursing through the creation of more skilled LPNs to care for complex patient populations.

Chapter 2 goes into the depth of the literature that surrounds this issue and experiential learning strategies, as well as an extensive explanation of this study's conceptual framework; Kolb's (1981) theory of experiential learning. Chapter 3 involves a description of the basic qualitative research methodology utilized in this study, which includes the research questions, the study design, population and sample, procedures, instruments, and ethical considerations. Chapter 4 includes a description of the qualitative data analysis results conducted during the study as well as the background of the researcher, and it presents and explains the data analysis. Finally, Chapter 5 includes a description of the study interpretation, limitations to the study,

implications of the study, and recommendations for further study. Chapter 5 helps the reader to understand what impact this study may have on the body of knowledge for nursing practice and nursing education.

CHAPTER 2. LITERATURE REVIEW

Chapter 2 covered an exhaustive literature review that discusses the method in which the

literature being reviewed was researched including the search terms as well as the search engines

or databases that were utilized. Chapter 2 also depicted the definition of Kolb's (1981) theory of

experiential learning and how it is used in nursing practice and research. The literature review

covered in chapter two additionally includes literature surrounding key terms that are used

throughout this study.

Methods of Searching

A review of literature relating to the conceptual model, a review of topics that apprise the

study, a review of qualitative methodology, and an analysis of the literature review are presented

in Chapter 2. The Capella University library was the primary source for the literature review.

Search terms used in the literature review included *licensed practical nursing (LPN) students*,

experiential learning, nursing education, *LPN students and experiential learning*, *LPN students*

and nursing education, simulation and LPN students, *licensed practical nurses*, *registered nurses*

(RNs), *licensed practical nurses' education*, *RN students and experiential learning*, *BSN students*

and experiential learning, *simulation in nursing education*, *Kolb's theory of experiential*

learning, and *experiential learning in nursing education*. Search engines used for the literature

review included ProQuest Education, CINAHL Complete, Ovid Nursing, Academic Search

Premier, and ERIC. Kolb's (1981) theory of experiential learning provided the framework for the study.

The focus of this qualitative study was to explore the learning experiences of LPN graduates who had come into contact with experiential learning strategies in their nurse training programs. There was a gap in the literature regarding the use of experiential with LPN students in LPN educational programs (National League for Nursing [NLN], 2014; Walker et al., 2013). Review of the literature demonstrated the need to understand the experiences of LPNs with experiential learning, and to determine if that is a beneficial and effective method of instruction and enable instructors to utilize this tool in the classroom (Whittingham, 2012). Although the literature reveals positive outcomes in the use of experiential learning strategies with RN students (Nelson, Cook, & Ingram, 2013; Tosterud et al., 2013), there was a lack of literature available on the use of experiential learning strategies in LPN programs and how it affects their transition into their practice (Adams, 2015). This information will aid educators in the instruction of LPN students with their scope of practice, critical thinking, and clinical skills (Simones et al., 2010). It is also thought that experiential learning strategies can be used to development nurse residency programs (Donaworth, 2017).

Theoretical Orientation for the Study

The conceptual framework of this study included the concept of Kolb's (1981) theory of experiential learning which encompasses the user to learn while doing and then reflect upon the experience (Hill, 2017). The use of simulation and skills labs in nursing programs are an example of the application of Kolb's (1981) theory of experiential learning (Abe, Kawahara, Yamashina, & Tsuboi, 2013; Akella, 2010). Nursing education that is provided to students has the expectation that the students will be able to care for patients competently after completion of

school and passing the boards (National League for Nursing, 2014). The study explored the use of Kolb's (1981) theory of experiential learning (Hill, 2017) with LPN students and examined the impact of that theory in relation to their competence in critical thinking and clinical nursing skills such as physical assessment, intravenous catheter insertion, urinary catheter insertion, medication administration, and vital signs.

Experiential Learning

The theory that supports this study is Kolb's (1981) theory of experiential learning (Hill, 2017). Experiential learning enables the instructor to be flexible and adapt to the students' learning styles (Kolb, 1981; Hill, 2017). Many nurses are noted to be lacking in critical thinking and clinical skills upon graduation from their nursing programs (Morrell & Ridgway, 2014). Kolb's theory of experiential learning has been found to be beneficial to RN students to promote critical thinking and improve clinical skills (Beattie et al., 2010). The investigation of the use of experiential and other learning strategies has not been thoroughly explored with LPN students (Baker & Anandhi, 2013; Garbin & Chmielewski, 2013). Kolb's (1981) theory of experiential learning states the effective learning progresses through four stages: concrete experience, reflective observation, abstract conceptualization, and active experimentation (Hill, 2017). The debriefing portion of experiential learning is the most important part of the experience as it is where the most learning occurs and connections to lecture take place (Fey & Jenkins, 2015). The learners who go through these stages have increased learning retention and enhanced critical thinking. The stages involve the learner going through a new experience, observing for inconsistencies between experiences and understanding, reflecting on the experience, and then performing the practical application of learned content (McLeod, 2013; Tosterud et al., 2013).

Concrete learning strategies can help students experience the concept of what they are learning, thus making them more interested in what they are learning, which may increase retention (Akella, 2010; Coffman, 2016). For experiential learning strategies like simulation to be successful faculty and staff need to be adequately trained to use it to its most effectiveness (Coffman, 2016). Pugsley and Clayton's (2003) study used baccalaureate of Science in Nursing (BSN) degree students to examine the effect of experiential learning on students' attitude about research. Pugsley and Clayton (2003) found that students perceive experiential learning as more beneficial than a traditional lecture. They suggested an implication for further research would be to replicate their study on LPN students to see if the results would be the same (Pugsley & Clayton, 2003). According to Hamilton and Klebba (2011), experiential learning can be used to increase critical thinking in nursing students. Experiential learning requires learners to practically apply what they have learned using their clinical skills (Akella, 2010). This original dissertation study provided information on the experiences of these LPN graduates with experiential learning techniques in their nursing programs. This study also explored the process of active learning techniques, a process in which the learner may examine their knowledge and apply it, and which learning strategies are deemed most beneficial by these LPN graduates with their transition from student to practitioner.

Review of the Literature

The literature review section covers geriatrics, licensed practical nurses (LPNs), registered nurses (RNs), critical thinking, Kolb's (1981) theory of experiential learning, clinical skills, Scope of practice, and basic qualitative study design. These chosen terms relate to the dissertation topic and research questions. Geriatrics was chosen due to the impact that LPNs have on geriatric care as these nurses represent a large portion of the nursing workforce. Per the

16

National League for Nursing [NLN] (2014), 70% of licensed care in nursing homes is provided by LPNs, and 25.2% of LPNs work in community-based or ambulatory care facilities. Many of these LPNs lack a full understanding of their scope of practice (Whittingham, 2012). Kolb's (1981) theory of experiential learning was the theoretical framework investigated in this study. Clinical skills and critical thinking are requirements that nurses need to have to be able to provide safe and competent care to patients in an interdisciplinary environment (Brown & Bostic, 2016; Gantt, 2010a; Gantt, 2010b). Norman (2012) found through a literature review that experiential learning strategies enhanced critical thinking and clinical skills.

Matthews (2011) found that different methods of learning have not been thoroughly investigated for LPN students, especially problem-based learning. Different learning strategies should be utilized to enable knowledge transference and learning retention. Dickman, Milligan, and Kodadek (2013) stated that using experiential learning strategies with the chronic care model, during clinical for RN students, led to the increased practical application of classroom concepts regarding chronic care. Miller (2014) discovered that simulation that was accompanied by effective lecture greatly improved learning outcomes for LPNs. Experiential learning strategies are found to show increased student and faculty engagement (Hill, 2017). The reflective process of experiential learning instills growth and connection of concepts (Cant & Cooper, 2011; Wain, 2017). Experiential learning strategies can also be used to develop a nurse residency program and educate staff nurses (Ball, Doyle, & Oocumma, 2015; Bultas, Hassler,

Ercole, & Rea, 2014; Donaworth, 2017). These concepts can be used and applied to LPN students during their clinical rotations as well.

Geriatrics

By the year 2030, there will be 72.1 million people living over the age of 65, which will be 19% of the population (United States Department of Health & Human Services, Administration for Community Living ACL, 2015). Individuals who are aged 85 years old and older will be the fastest growing group of the population (Heller, Oros, & Durney-Crowley, 2013). Tagliareni, Cline, Mengel, McLaughlin, and King (2012) tried to incorporate the use of the Advancing Care Excellence Series (ACES) framework to improve the quality of care for geriatric patients and determined that there is a significant need for improvements in the field of geriatric care. The ACES program started with faculty development before focusing on the students' development of age appropriate actions regarding patient care (Tagliareni et al., 2012). In addition to possibly having chronic illnesses geriatric patient have a list of conditions classified as pressure ulcers, incontinence, falls, functional decline, and delirium (Brown & Bostic, 2016; Donaworth, 2017). Nurses often find it difficult to care for these patients and those with dementia (Donaworth, 2017). Nurses need further training to provide effective care and comfort for these patients (Valente-Ribeiro, Cruz-Pontifice, Dourado-Marques, & Pontifice-Ribeiro, 2017).

The increase in geriatric population is largely due to the increase in life expectancy, however, this comes with an increase of individuals with acute and chronic conditions; without proper training, this will prove to be challenging to health care providers (Heller et al., 2013).

18

For example, 85% of persons aged 65 or older suffer from more nutritional deficits than they did when they lived at home in a dependent manner; this is due to poor staffing and poor training to meet the demands of caring for those with these chronic conditions (Crogan, Shultz, & Massey, 2001; Valente-Ribeiro et al., 2017; Wood, 2017). There are combinations of changes in nursing education as well as nursing practice that are needed to ensure improvement in patient outcomes (Heller et al., 2013). These patients are often admitted to a long-term care facility and dependent on the care of competent health care providers (Wood, 2017).

In the last years, there has been an increase in acuity and dependency in long-term care without an increase in staffing levels, skill mix, or staff knowledge with a decrease in the amount of skilled staff to meet this demand (Silvestre, Bowers, & Gaard, 2015, p. 52). There has also been a decline in assisting the geriatric community with their nutrition as well as their ADLs (Valente-Ribeiro et al., 2017; Wood, 2017). Challenges are also prevalent in long-term care facilities when providing care as the roles of registered nurses and licensed practical nurses are often not clearly delineated (Silvestre et al., 2015). There is a trend of health care going towards the community (Lee, Pickstone, Facultad, & Titchener, 2017). However, most nursing schools educate their students to practice in acute care environments (Donaworth, 2017; Silvestre et al., 2015). Best practices need to be explored to facilitate the graduation of competent practice ready nurses (Rush, Adamack, Gordon, Janke, & Ghement, 2015). One example of a development of a best practice is the development of the ACES program in which students are charged with

translating their knowledge into actions that consider the age and condition of their patients (Tagliareni et al., 2012).

Nursing Education

Nursing education is meant to prepare nurses to practice as clinicians upon successful passing of the boards (Eyler, 2009; National League for Nursing [NLN], 2014). Learning strategies should be utilized in a manner that promotes knowledge retention and transference (Eyler, 2009). McLaughlin, Freed, and Tadych (2006) developed a study that determined that creative strategies in the nursing classroom are beneficial to the learning retention of the students and may be useful to the clinical application of that learned content. If the students can clinically apply learned content, that will increase the number of practice ready nurses upon graduation (McLaughlin et al., 2006; National League for Nursing [NLN], 2014). The aim of educating student nurses is to enable them to apply the concepts learned in the classroom to clinical practice (Dowie & Phillips, 2011; Kirkman, 2013). At its beginning nursing education was practice-based while clinical practice is still at its core, nursing education uses higher education at the base of its setting (Dowie & Phillips, 2011). Current practices in nursing education use active learning and experiential learning strategies to educate students in an effective manner that promotes knowledge retention and transference (Dowie & Phillips, 2011). Experiential learning strategies can include simulation which involves the learners participating in clinical care in a controlled setting (Kirkman, 2013). Experiential learning strategies and simulation can be used to develop critical practical skills (Kirkman, 2013; Sebold, Willrich-Boell, Reis-Girondi, & Guedes dos Santos, 2017). These critical practical skills may include physical assessment, medication administration, vital signs, intravenous catheter insertion, indwelling urinary catheter insertion, nasogastric tube insertion, and more (Morrell & Ridgeway, 2014). The more active the learning

strategy is, the easier it is to transfer knowledge (Kirkman, 2013). Simulation increases

psychomotor and cognitive competencies (Sebold et al., 2017). The development of practical

skills is due to knowledge retention and transference of prior knowledge to learning, learning to

new learning, and learning to the application (Kirkman, 2013). Nursing education should be a

seamless process that delivers the educational content in a matter that prepares student nurses for

a variety of experiences upon graduation (Institute of Medicine [IOM], 2010). Experiential

learning strategies can be applied to a variety of learners and aid in the application of various

learned clinical concepts (Lisko & O'Dell, 2010). Nursing education should prepare students to

evaluate patients, anticipate orders, stabilize patients, and reevaluate them while providing safe

and competent care (Institute of Medicine [IOM], 2010; Lisko & O' Dell, 2010). Although RNs

and LPNs have similar skills, RNs are expected to critically apply these skills daily at a more

advanced level (Janzen, Melrose, Gordon, & Miller, 2013).

    The necessity of these skills is due to the ever-changing patient demographics, medical

technologies, and nursing scope of practice (Janzen et al., 2013). Experiential learning and

constructivism are examples of creative strategies that enhance student application (DeCoux

Hampton, 2012; Lisko & O'Dell, 2010). Nursing education that involves experiential learning

strategies should aid in bridging the gap between novice and competent health care professionals

(Bennett, 2017; Farid, Naz, Ali, & Feroz, 2012; Galloway, 2009). Without proper learning

strategies and exposure nurses will be unable to complete basic yet critical nursing tasks such as

blood pressure monitoring or physical assessment (Nelson, Cook, & Ingram, 2013). More

diverse learning strategies are needed in nursing education to improve patient outcomes (Adams,

2015). Nursing education should also include interprofessional concepts to improve preparation

nurses to work in the environment (Arbogast, 2010; Humbles, McNeal, & Paul-Richiez, 2017).

Clinical skills and critical thinking are essential not only for nurses to provide safe and competent patient care but also for nurses to be successful in their work environment (Institute of Medicine [IOM], 2010).

Critical Thinking

According to Abe et al. (2013), critical thinking is defined as thinking beyond the big picture and using those skills to provide care for a patient in a competent manner. The foundation for critical thinking (2015) defined critical thinking as the disciplined process in which the user actively and skillfully conceptualizes, applies, analyzes, and evaluates data obtained from observation, experience, conversation, or reflection and uses it as a guide to a belief or action. Critical thinking has the two components: a set of information generating and processing skills and a habit to use those skills to guide behavior; this is based on intellectual commitment (The Foundation for Critical Thinking, 2015).

In nursing critical thinking can be described as questioning an unsafe order or anticipating physician orders for a patient (Fero, Witsberger, Wesmiller, Zullo, & Hoffman, 2009; McMullen & McMullen, 2009). For example, a nurse uses critical thinking when he or she obtains a blood pressure reading from a patient that is abnormal or unsafe; they would have a questioning attitude and report it to the physician (McMullen & McMullen, 2009; Turkel, Marvelous, Morrison, & Singletary, 2016). Those who use critical thinking raise vital questions and often creative solutions to complex issues (The Foundation for Critical Thinking, 2015). Nurses who use critical thinking have positive patient outcomes, complex decision-making skills, and competent patient care (McMullen & McMullen, 2009). These nurses can plan for any adverse changes in the patient's condition while working in an interdisciplinary team (Fero et al., 2009). Critical thinking also helps students to understand their skill levels and understand when

to ask for help (Beattie et al., 2010; Kim et al., 2012; Martin, 2012). To be a nurse who thinks critically, the nurses should be inquisitive and well-informed (Facione, 2013). A critically thinking nurse also anticipates trends and works well in an interdisciplinary team (Currey, Eustace, Oldland, Glanville, & Story, 2015). Critical thinking is an essential skill of a nurse and aids in keeping the patients safe while promoting competent holistic care (Hamilton & Klebba, 2011). Individuals who think critically often behave in a more rational, reasonable, and empathetic manner (The Foundation for Critical Thinking, 2015). These are desirable attributes of nurses (Hamilton & Klebba, 2011).

Active learning, experiential learning, and student-centered learning strategies are often viewed as effective methods of teaching critical thinking skills (Cazzell & Anderson, 2016; Distler, 2007). Simulation can be used to teach and enhance students' critical-thinking skills (Cazzell & Anderson, 2016; Dalton, Levett-Jones, & Gee, 2015; Distler, 2007; Kaddoura, 2010). Key components in teaching critical thinking are linked to subject matter, course content, and reflection (Hamilton & Klebba, 2011). The simulation experience will make more of an impact on critical-thinking skills if it is applied early in their nursing education (Andrade-Dias, Scherlowski-Leal David, & da Costa Vargens, 2016). Other methods of instruction like simulation are needed to help students to acquire critical thinking as clinical sites are becoming more limited (Beattie et al., 2010). These strategies increase the intellectual exchange between students and faculty (Distler, 2007). Sufficient time is needed to plan the correct educational strategy to use to teach critical thinking in the most effective manner (Hamilton & Klebba, 2011). Educational techniques should be explored to determine which methods are best to develop critical thinking and clinical skills in students (Kirkman, 2013; McClellan & Hyle, 2012). Repeated exposure to these practices increases a learner's ability to retain and transfer

knowledge to the clinical setting, which promotes critical thinking (Abe et al., 2013). Critical

thinking aids nursing and utilizing clinical skills and judgment more effectively in the clinical

environment (Beattie et al., 2010; Cazzell & Anderson, 2016).

Clinical Skills

Clinical skills consist of activities performed during patient care (Felton & Royal, 2015).

Competence in the performance of clinical skills is a requirement of all nurses (Power & Cole,

2017). Clinical skills may include administration of oral and intravenous medications, charting

in the medical record, obtaining vital signs, changing wound dressing, physical assessment and

insertion and care of Foley catheters (Power & Cole, 2017; "Practical Nursing," 2015). Proper

utilization of these clinical skills often requires the learners to go through many steps in a

meticulous order (Flynn, 2016; Sebold et al., 2017; Wilkes, Cowin, Johnson, & Zheng, 2014).

One such clinical skill would be the peripheral insertion of intravenous catheters which involves

many steps with aseptic technique (Fourie, 2015). If intravenous catheters are not inserted

according to the proper steps, then the patient could acquire an infection, nerve damage, or other

injuries (Fourie, 2015). Physical assessment is performed from head to toe and requires

meticulous examination of a patient, which includes vital signs and a pain assessment to

determine next steps in the patient's plan of care (Aldridge-Bent, 2011). These clinical skills are

best taught in simulation or skills lab during the nursing program using experiential learning

strategies (Power & Cole, 2017; Rosenstein, Sweeney, & Gupta, 2012; Rutherford-Hemming,

2012; Sibthorp et al., 2011).

Experiential learning strategies which can include simulation can be used to bridge the gap

in clinical skills between theory and practice, by having learners actively apply learned content

(Bennett, 2017). Practicing these skills in simulation and skills labs before caring for real patients

relieves anxiety for students related to the competent performance of these clinical skills (Houghton, Casey, Casey, Shaw, & Murphy, 2013; Tosterud et al., 2013). The simulation and skills lab to practice these skills must be adequately stocked with sufficient equipment to practice these skills (Barrott & Hope, 2011). Faculty using simulation or experiential learning strategies must be properly trained to instruct students to have the most effective learning experience (Bajgoric et al., 2014; Barrott & Hope, 2011).

Both RNs and LPNs are expected to obtain these skills and more upon completion of their nursing program (Smith, 2010; Tanner, 2010). These are difficult skills for students to acquire and often require repeated practice and exposure to ensure competence (Abe et al., 2013; Bajgoric et al., 2014; Stables, 2012). Repeated exposure through experiential learning strategies such as simulation promotes lifelong learning and increased competence and confidence (Sibthorp et al., 2011). Simulation can help bridge this gap from theory to practice (Power & Cole, 2017). Nurses are expected to acquire a competent level of clinical skills before their entry into their professional practice (Morrell & Ridgway, 2014).

Registered Nurses (RNs)

Registered nurses (RNs) are often the supervisors of LPNs because they often are educated in leadership skills and have degrees such as an associate's or a baccalaureate (Walker et al., 2013). LPNs and RNs receive a similar education (curriculum), yet their scopes of practice differ (Cook, 2009; Ulrich, 2014). Many current licensed RNs were previously LPNs that advanced their education to obtain a promotion at work and improve their understanding of medicine (Whittingham, 2012). Upon completing a graduate degree registered nurses are also able to become educators, managers, case managers, nurse practitioners, and certified nurse anesthetists (Donaworth, 2017). A full understanding of the scope of practice is required to be a

safe and effected nurse (Walker et al., 2015; Young, 2016). RNs can delegate to LPNs and other

unlicensed personnel (Lanier, 2017; Ulrich, 2014). Currently, many facilities are requiring entry-

level RNs to have a baccalaureate degree, which further expands the scope of practice in relation

to critical thinking and leadership and encompasses the six main concepts of RNs (Suva et al.,

2015). The six main concepts of RNs are caring, knowledge, empathy, work, communication,

and clinical skills (Wilkes et al., 2014).

Caring is regarding care for patients and having compassion for their experience (Wilkes

et al., 2014). Knowledge of the field in which they practice is required of RNs and the use of

critical thinking (Wilkes et al., 2014). Work is related to work ethic, being a hard-worker is an

essential quality of an RN (Wilkes et al., 2014). Communication is also critical as health care

providers work in teams, repeating back orders or actions ensures that clarity is met, and safe

care is provided (Wilkes et al., 2014). Empathy is the ability to understand the feelings of

another person's situation (Wilkes et al., 2014). Clinical skills are as previously defined. Many

RNs can work in higher learning institutions and hospitals with more acutely ill patients whereas,

in many areas LPNs are restricted to physician offices, home health, and long-term care facilities

(Partin, Payne, & Slemmons, 2011). Nursing education that utilizes active learning and

experiential learning strategies is critical to ensure retention and the development of necessary

skills (Cant & Cooper, 2009; Partin et al., 2011). Experiential learning strategies use retention to

promote retention and creation of new knowledge (Wain, 2017). RNs with baccalaureate degrees

are expected to demonstrate higher critical thinking and leadership skills than associate degree

prepared RNs and LPNs (Brown, Baker, Jessup, & Marshall, 2015). RNs are expected to acquire

knowledge of working with members of the interdisciplinary care team, including LPNs and unlicensed personnel to whom they delegate (Arbogast, 2010; Ulrich, 2014).

Licensed Practical Nurses (LPNs)

Licensed Practical Nurses (LPNs) can work in a variety of settings such as long-term care facilities, acute and ambulatory care centers, and in community settings such as home health (National League for Nursing [NLN], 2014). LPNs handle home-based and long-term care, which often deals with chronic conditions (Frith, Anderson, Fan, & Fong, 2012; "Practical Nursing," 2015). LPNs are educated with a diploma but their scope of practice is ever expanding; some LPNs report working with ventilators in a home care setting (National League for Nursing [NLN], 2014). This ever-expanding scope of practice for LPNs warrants changes in the delivery of their education so that they will be trained to act effectively within their scope of practice (Faulk, Parker, Lazenby, & Morris, 2008). Chronic conditions imply that the patients will need nursing care often and LPNs may provide this care (United States Department of Health & Human Services ACL, 2015). Morell and Ridgway (2014) state that many health care facilities are finding that nursing graduates are not practice-ready upon entry into the workforce and suggests that faculty seek methods of educating them. Experiential learning strategies may be utilized to teach scope of practice, critical thinking, and clinical skills (Rutherford-Hemming, 2012; Stricklin, 2016; Wain, 2017; Whittingham, 2012).

Newly graduated LPNs are expected to be able to work collaboratively with an interdisciplinary team upon graduation (Hepp, Suter, Jackson, Deutschlander, Makwarimba, Jennings, & Birmingham, 2015; Simones et al., 2010, p. 140). These new LPNs are also expected to delegate to unlicensed personnel properly (Banaszak-Holl, Castle, Lin, Shrivastwa, & Spreitzer, 2015). LPNs are also expected to receive delegation from registered nurses, armed

with the knowledge of their scope of practice and able to ensure that they are trained to perform the tasks (Lanier, 2017; Simones et al., 2010). Newly licensed LPNs are unsure about their scope of practice, and some experts are unsure as well (Garbin & Chmielewski, 2013; Melrose & Wishart, 2013; Siegel & Yung, 2010; Simones et al., 2010, p. 19). When nurses do not fully understand their scope, it leads to workplace conflict, unsafe practices, and has legal implications (Eagar, Cowin, Gregory, & Firtko, 2010; Young, 2016). There also has not been a great emphasis on research evaluating educational strategies used with LPN students (Baker & Anandhi, 2013; Kaufman, 2009).

Scope of Practice

 The scope of practice for nurses varies from state to state and by type of nurse (RN or LPN) (Eagar, Cowin, Gregory, & Firtko, 2010). The scope of practice is often included in the state's nurse practice act and details a list of activities that the particular nurse is allowed to engage in at his or her licensure level (Lanier, 2017). However, some states are noted to not include a list of activities in their nurse practice act, rather a list of rules and statutes that govern or provide a guideline for nursing practice (Young, 2016). A nurse's scope of practice may be changed through in-services, practical experience and continuing education (Eagar et al., 2010).

From a legal and professional standpoint, nurses are responsible for determining their scope of practice so that they can provide safe and effective competent patient care (Lanier, 2017). The scope of practice gives nurses an algorithm for what a nurse at their current licensure level would do in that situation; following this algorithm may prevent patient harm and legal

repercussions (Whittingham, 2012). However, the nurse must also consider his or her own ability to carry out the proposed activity before acting (Young, 2016).

When delegating tasks to LPNs or unlicensed assistive personnel the nurse delegating must have the authority to conduct the tasks otherwise they cannot delegate the task, because it will not be properly supervised (Garbin & Chmielewski, 2013; Lanier, 2017). Nurses cannot delegate a task that does not fall within their scope of practice (Day, Turner, Anderson, Mueller, McConnell, & Corazzini, 2015; Lanier, 2017). Practicing outside of their scope of practice would be in violation against their state's nurse practice act and may cause the nurse to receive disciplinary action from the board of nursing (Lanier, 2017; Whittingham, 2012).

State boards of nursing use scope of practice to determine if nurses who receive complaints were found to be negligent or having behaved with malpractice at the time of the incident (Lanier, 2017). Some boards of nursing have found that not all activities that are within a nurse's scope of practice have been taught in the academic setting; in fact some academic settings provide limited instruction on scope of practice as an entity of itself and charges the nursing students to conduct their research on scope of practice (Simones et al., 2010; Whittingham, 2012). The state boards of nursing found that curricula should be updated to aid nursing students in their understanding of the scope of practice prior to graduation (Young, 2016). The board of nursing uses this information to determine if the nurse will have disciplinary charges against him or her that may include suspension or loss of nursing license (Lanier, 2017). A nurse should use both their state board's nursing scope of practice and their facility's policy to determine what activities can be performed (Young, 2016). To practice safely and within the scope of practice a nurse should be educated to perform the task, have an order for the task, have a facility policy in place that supports it, and have adequate supervision level while performing

the task if they are an LPN (Brown, Baker, Jessup, & Marshall, 2015; Lanier, 2017; Young, 2016).

Basic Qualitative Study

Basic qualitative study or basic qualitative inquiries are used to explore phenomena evaluated based on the experiences of the participants (Lodico et al., 2010; Merriam & Tisdell, 2016; Yates & Leggett, 2016). Qualitative research aims to understand some aspect of social life and its methods generating words rather than numbers (Ingham-Broomfield, 2015; Pearson, Jordan, Lockwood, & Aromataris, 2012; Snowden & Martin, 2010). This information is used to understand experiences and attitudes of others the what, how, and why (Green, 2014; McCusker & Gunaydin, 2015). The inductive reasoning method for data analysis is used in qualitative research and works from the bottom up going from specific concepts to generalizations (Ingham-Broomfield, 2015; Snowden & Martin, 2010). Qualitative studies also use variable samples from a single individual to groups (Ingham-Broomfield, 2015). This form of research can be used to examine perception (Lodico et al., 2010; McCusker & Gunaydin, 2015).

Basic qualitative studies can be conducted using interviews, which puts the experiences in the words of the participants (Ingham-Broomfield, 2015, p. 35; Merriam & Tisdell, 2016). The quality of the research depends on the quality of the researcher as the researcher is the tool and will collect and analyze information (McCusker & Gunaydin, 2015; Pearson et al., 2012). If the researcher keeps a reflective journal, that will help to decrease the probability of bias during the data collection and analysis process (Ortlipp, 2008). Data collection and analysis may occur simultaneously in qualitative research (Ingham-Broomfield, 2015). Qualitative studies require rigors methods to ensure credibility, transferability, and validity (Clarke, 2014; Houghton et al.,

2013; Rees, 2010). This original dissertation study used semistructured interviews with open-ended questions to elicit the experiences of the LPN graduates regarding learning strategies used in their nursing education.

Synthesis of the Research Findings

The literature revealed that there are learning gaps with the transition of LPN nursing graduates from student to practicing nurse (Beattie et al., 2010). Many facilities have found that new licensed practical nursing graduates lack the ability to apply learned skills when there is an interruption in the norm, such as a patient breaking their sterile field by touching the area of insertion (Beattie et al., 2010). Many nurses graduate and begin working without a full understanding of their scope of practice (Lanier, 2017; Young, 2016). These facilities have also found that licensed practical nursing (LPN) graduates also are deficient in the management of conflicts be it with a peer or a patient (Morrell & Ridgway, 2014). There is an increase in the population of the elderly and those with complex chronic illnesses, which requires a great number of skilled LPN to care for them (United States Department of Health & Human Services ACL, 2015). Historically, LPNs were created to be the eyes and ears of physicians and RNs ("Practical Nursing," 2015). It is essential to measure the best practices in their instruction as well as their feelings about their education.

The health care environment supports the increased autonomy of nurses but requires them to obtain the education and critical skills to enable them to practice to the full extent of their scope of practice (Institute of Medicine [IOM], 2010). Experiential learning strategies that include simulation have proven to work effectively for RNs; however, not enough research is available to accurately show its effect on LPNs (Matthews, 2011). Many nurses, LPNs especially, practice without meticulously understanding their scope, and this lack of

31

understanding leads to medication errors, practicing outside of their scope, patient harm, and potential lawsuits (Unsworth et al., 2012). The review of the literature identified articles that reveal problems that are associated with nurses but does not depict strategies to solve these problems (Morrell & Ridgway, 2014; National League for Nursing, 2014; Walker et al., 2013; Whittingham, 2012).

Experiential learning has been used a great deal in nursing education with great success to help teach concepts and aid in the honing of critical skills for RN students (Akella, 2010). Experiential learning allows learners to reflect on actions, connect concepts to the classroom and clinical setting, and develop behavioral changes that have positive impacts on patients (Baker & Anandhi, 2013). When instructors and staff who are adequately trained, experiential learning is most effective (Dowie & Phillips, 2011).

The literature review revealed a great need for the development and exploration of strategies to decrease the gap between student and practicing nurses and increase the number of practice-ready nurses. Experiential learning strategies may be an effective method of improving student outcomes (Kim et al., 2012; Miller, 2014). Early scholarly writing focuses on the use of experiential learning strategies in context with didactic concepts, while newer scholarly products focus on the use of repeated exposure to the experiential learning strategies to enable the students to go back and apply their behavioral changes more readily after reflection (Abe et al., 2013). Although experiential learning strategies have been studied methodically with RN students, the effects of experiential learning strategies on LPN students are understudied.

Critique of Previous Research Methods

Approximately 109 articles were reviewed in the development of this literature review. Of those articles 65 addressed simulation and experiential learning in nursing education, 12

addressed trends in nursing education, 12 addressed trends in health care, 20 addressed educating RNs, and five addressed educating LPNs. The following paragraphs provide an overview of what was learned from the articles.

There were many common themes that occurred relating to the use of experiential learning strategies in nursing education. The most common theme was the successful and effective use of experiential learning strategies to teach critical skills (Abe et al., 2013; Houghton et al., 2013; Kim et al., 2012; Miller, 2014; Rosenstein et al., 2012; Rutherford-Hemming, 2012; Sibthorp et al., 2011; Tosterud et al., 2013).

Due to this study's exploration of the experiences of LPNs with experiential learning techniques, the literature exploring the use of experiential learning with nursing education was thoroughly evaluated for quality. Frameworks from Rees (2010) and Girden and Kabacoff (2011) were used for this process as they evaluate both quantitative and qualitative studies.

According to Rees (2010), when evaluating research articles, the purpose of the study, background information, methodology, data collection tools and analysis, sample information, ethical considerations, results and conclusions, strengths and limitations of the study, and an examination of application to practice. Girden and Kabacoff (2011) stated that articles should be examined with these evaluative questions in mind: categories: "(a) the rationale and purpose of the study, (b) design of the study, (c) statistical analyses of the data, and (d) the conclusions reached by the author(s)" (p. xiv, para 1).

 Of the articles pertaining to LPN's, the majority were qualitative, approximately 30 were quantitative, and none were of mixed methodologies. Many articles like Kirkman (2013), Rosenstein at al., (2012), Rutherford-Hemming (2012), and Sibthorp et al., (2011) used only first-year RN students, and while the sample sizes were good, the studies were limited to first-

year RN students and not LPN students. The studies that have explored the use of experiential learning strategies with LPN students often focus on simulation as the sole strategy (Miller, 2014; Brown et al., 2015). Miller (2014) and Brown et al., (2014) both concluded that the use of simulation as a strategy to teach LPNs to care for sensitive patient populations is essential as it improved their understanding of the concepts taught. This researcher did not locate many quality articles about LPN education.

The articles regarding the use of experiential learning with RNs had a variety of focus one is the repeated exposure to experiential learning strategies, simulation, in particular, is shown to improve their clinical skills and critical thinking (Abe et al., 2013; Beattie et al., 2010; Farid & Ali, 2012). Other articles were shown to describe the use of experiential learning strategies as having a meaningful impact on the clinical skills, critical thinking, and confidence of registered nursing students (Aldridge-Bent, 2011; Bajgoric et al., 2014; Baker & Anandhi, 2013; Beattie et al., 2010; Bennett, 2017; Brown & Bostic, 2016; Byrd et al., 2012; Cazzell & Anderson, 2016; Coffman, 2016; Dalton, Levett-H2015; Farid & Ali, 2012). Those articles showed a great deal of evidence for its successful use with RN students and the deficit amount of literature for its use with LPN students.

Although the research findings may indicate support for the use of experiential learning strategies with RN students, there is little clarification on its effectiveness with LPN students (Hamilton & Klebba, 2011; Morrell & Ridgway, 2014). There is also limited information on how to use experiential learning strategies to increase the quality of nurses and the increase the number of practice-ready nurses (Hamilton & Klebba, 2011; Houghton et al., 2010; Morell & Ridgway, 2014). The observed deficiency in the literature on the use experiential learning strategies with LPN students may indicate a need for further study.

Summary

Chapter 2 included a review in the literature pertaining to the use of experiential learning in nursing education and the particular lack of research regarding LPN education. A review of the literature and critique of previous methods were also included. The conceptual framework used in this study was described and a review of the basic qualitative research methodology was provided.

The conceptual framework for this study was Kolb's (1981) theory of experiential learning. Experiential learning is a strategy that allows learners to have a practical experience about a concept after being taught that concept in class and learn from the experience by action and reflection. The reflective process is used to bridge any learning gaps and enable knowledge retention (Akella, 2010; Cant & Cooper, 2011; Dowie & Phillips, 2011; Eyler, 2009).

The review of literature examined trends in health care and nursing education that support the need for more learner centered, active learning strategies to give the nurses the tools to meet the rigors of a complex health care system. Health care is becoming a very complex profession with the increase in the population of the elderly and those with chronic illness and the amount of advanced technology that is being used to provide effective care for these patients. The expectations of newly licensed nurses are higher than ever, and many are not able to meet these expectations. This limited number of practice-ready nurses gives rise to the need to explore more effective educational strategies that enable LPNs to meet this demand (Arbogast, 2010; Ball, Doyle, & Oocumma, 2015; Bennett, 2017; Faulk, Parker, Lazenby, & Morris, 2008; Kaufman, 2009).

Research that explores the experiences of LPNs with experiential learning and its effectiveness are conducive to garnering a full understanding of its uses. More studies that

include an examination of LPNs and their experiences with experiential learning strategies will lead to a better understanding of the perceived effectiveness of experiential learning strategies. This original dissertation study is different because it focuses on exploring the lived experiences of LPNs who had exposure to experiential learning techniques in their nursing programs and the impact those techniques had during their transition into practice.

Chapter 3 covers the methodology that is used for this study and why a basic qualitative study is a superior methodology to use for research of this type as it answers the research question and subquestions that were explored in this dissertation. The Table 1. *Interview Questions in Relation to Research Questions* is included in the next section as well. Chapter 3 also expands on the research design and includes information on the population and sample used that match the methodology chosen.

CHAPTER 3. METHODOLOGY

Purpose of the Study

The purpose of this basic qualitative research study was to analyze the experiences of Licensed practical nurses (LPNs) graduates who experienced experiential learning strategies in nursing school and determine if they report that those experiential learning strategies enhanced their preparedness for their transition from student to a practitioner in the clinical setting upon graduation. The researcher also sought to learn if experiential learning strategies were deemed effective by LPN graduates in the facilitation of their transition from the role of student to that of a practitioner. Per Hill (2017) there is a decrease of practice-ready nurses entering initial positions in nursing. This study determined if receiving instruction with experiential strategies enhanced their preparedness for roles as practicing nurses regarding the scope of practice, critical skills (e.g., intravenous catheters, indwelling urinary catheters, critical thinking, and nasogastric (NG) tube insertion), and confidence.

Research Question

The main research question for this original dissertation study was through the perspectives of licensed practical nursing (LPN) graduates, who had experiential learning strategies in their nursing programs, how did experiential learning strategies enhance their preparedness for the transition to the clinical setting upon graduation?

Subquestions:

1. What types of experiences do the licensed practical nurses have with experiential learning?

2. How did learning strategies, if any, increase the licensed practical nurse's understanding of clinical techniques?

3. What do the licensed practical nurses believe helped them have a better understanding of their roles or scope of practice?

4. How have the licensed practical nurses increased their confidence in their clinical skills with the use of certain learning strategies?

5. What influence did experiential learning have on the academic progress of the licensed practical nurses?

Research Design

A basic qualitative research design was used for this study. A qualitative study is more effective for this type of study because it provides descriptions rather than quantifying data (Yates & Leggett, 2016). This study sought to examine the described experiences of LPN graduates with experiential learning strategies. A qualitative study uses the researcher as a tool enabling them to self-reflect while examining the experiences of individuals to create new knowledge (Snowden & Martin, 2010; Yates & Leggett, 2016). Because this study used the experiences or perceptions of LPNs, it used nonnumerical data or words (Merriam & Tisdell, 2016). Per Merriam & Tisdell (2016) Qualitative research focuses on context and requires a data collection instrument that has a deep understanding of the meaning behind the research and has that in mind when collecting and interpreting data sets. The data obtained was from the

viewpoint of the graduates and described their views on the influence of experiential learning strategies. A semistructured interview using open-ended questions was used to collect the data.

The method of research design was chosen based on meticulous examination of the literature on nursing education, experiential learning, and qualitative studies and developed a research question. The literature provided proof that there was limited information on the experiences of LPNs with experiential learning strategies (Melrose & Wishart, 2013; Miller, 2014). Experiential learning strategies require the user to apply learned content practically and reflect upon the experience immediately after (Akella, 2010).

Experiential learning strategies have been proven as a successful educational technique in the training of registered nurses (Aldridge-Bent, 2011; Baker & Anandhi, 2013; Bennett, 2017; Day et al., 2015). However, literature about the use of experiential learning strategies with LPNs is limited (Eagar, Cowin, Gregory, & Firtko, 2010; Miller, 2014). This study has increased the amount of information available on the use of experiential learning strategies with LPNs.

Target Population and Sample

This study used a basic qualitative study to examine the experiences of LPN graduates with experiential learning strategies during their nursing programs that utilized Kolb's (1981) theory of experiential learning. The following sections present detailed information on the population at large, the sample used, procedures including participant selection, how the participants were protected, and data collection protocols. The section additionally included data analysis, instruments, the researcher's role, the guiding interview questions, and ethical considerations. Each of these concepts was carefully analyzed and used to answer the central research question and subquestions.

Population

The population is a distinct collection of individuals that are known to have similar characteristics (Merriam & Tisdell, 2016). The target population was LPN graduates who were licensed in two Western states and were exposed to experiential learning strategies during their nursing programs. Experiential learning strategies can include the use of simulation, the skills labs, and other activities that can be utilized in the classroom with active learning strategies such as case studies, practicing clinical skills in a skills lab, or clinical setting. The chosen target population was used to generalize conclusions from this study, and the sample will be selected from them (Merriam & Tisdell, 2016).

Sample

The sampling type chosen for this qualitative study used was purposive because the sample was selected based on the judgment of the researcher in a manner without probability; for this study, licensed practical nurses were chosen because they will yield data to answer the research question (Lodico et al., 2010). The goal of purposive sampling within a qualitative methodology is not to select the larger number of participants as it relates to the population, but rather the participants that have the most detailed and rich information (Lodico et al., 2010). Expert sampling was used because it requires the use of individuals with expertise or experience in the concept being studied (Lodico et al., 2010). The sample chosen were all LPNs who had been exposed to experiential learning strategies during their nursing programs. There were no parameters regarding gender, race, years of licensure, specialty in nursing, or whether a degree or diploma was obtained. Excluded LPNs were those without exposure to experiential learning strategies in their nursing programs. In qualitative research, there is not a preset quantity of

participants because data are collected until the datum is saturated (Yates & Leggett, 2016; Merriam & Tisdell, 2016).

Procedures

This section provided a step-by-step depiction of the methodology protocol utilized after receiving full approval to conduct this study from the Capella University Institutional Review Board (IRB). It featured information on the sampling method and how the participants were protected as well as information on recruitment. There is also information available on how the data was collected and then analyzed based on the most accurate and effective processes for the chosen research design (Lodico et al., 2010; Merriam & Tisdell, 2016).

Participant Selection

Purposive sampling was used to select participants for this study. Purposive sampling is sampling with a purpose; the researcher chooses the desired individuals who are pertinent to the studied phenomenon (Merriam & Tisdell, 2016; Yates & Leggett, 2016). In this dissertation study, those individuals were LPN graduates who were exposed to experiential learning strategies during their nurse training programs. The selection process of participants for the study was without regard to sex, ethnicity, sexual orientation, or any other demographic determinants. The recruitment process for this study started with contacting the two Western U.S. state boards of nursing to obtain permission and access to their list of licensed LPNs. Once the list was obtained, each LPN on the list was mailed a flyer depicting a concise overview of the study, the inclusion requirements, and who to contact if they met the requirements and were interested participating in the study. Each potential participant had their questions answered to their satisfaction. Once the participants felt comfortable, and the researcher felt that they met the qualifications of exposure to experiential learning strategies in their nursing programs, and held

41

an active LPN license, the consent form was then emailed to the participants for review. It is of vital importance to obtain informed consent before interviewing the participants (Merriam & Tisdell, 2016). Once the consent form was signed and returned via email, the researcher contacted the participant to set up a date for the interview, which was conducted via Skype or telephone and audio-recorded.

Protection of Participants

Protection of participants during research is vital and requires the researcher to provide informed consent, anonymity, and full disclosure (Merriam & Tisdell, 2016). This dissertation study received full approval from the Capella University Institutional Review Board (IRB) before beginning data collection. To obtain informed consent, the participants were chosen on a voluntary basis and were informed about the study prior to consenting to participate in the study. The participants were sent an email that explained the nature of the study, its voluntary nature, and anonymity. The researcher also answered questions from the participants to the participants' satisfaction. Participants should not be coerced into participation and have the process explained to them before signing a consent form, and the consent form should be signed prior to participating in the study (Merriam & Tisdell, 2016). It was explained to the participants that they could leave the study at any time. The participants were given anonymity, and their information was coded (Participant 1, 2, 3, etc.), and their names were withheld throughout the data collection and analysis. All the information collected from the participants was encrypted in a cloud file, and physical notes were locked in a fire-proof safe at the researcher's home.

Field Test and Trial Run

Before the start of the study, a field test was conducted to determine face validity of the questions and notes were kept on any adjustments made. The field test used three experts in

nursing education, who were not involved in the study to read over and examine the interview questions to look for biases and ensure clarity. The nursing education experts were all LPN faculty members who determined that the questions were strong, ethical, would answer the research question, clear, and were without bias. No changes were needed to change the integrity of the questions. A second field test was conducted using experts in research, and some changes were made to both the research and interview questions to improve clarity and relation to the central research question.

The conduction of a trial run the first two interviews as a method of testing the validity of the interview questions; these two interviews were not included in the analysis of the study. The interviews were conducted one-on-one in a private interview room at the location of the interviewee's choosing. The interviews were audio-recorded, and field notes were taken. This experience gave this novice researcher an opportunity to practice their interviewing and listening techniques and assure adequate audio-recording abilities were utilized.

Data Collection

The data collection procedures were initiated after consent was obtained. The researcher then sent out an email detailing the study and its purpose with the researcher's contact information. At the time of recruitment, an incentive of a $10 Starbucks gift card was offered for participation in the study. The researcher selected LPN graduates who had exposure to experiential learning strategies in their nursing programs, and who are currently practicing as LPNs. The researcher determined that the participants had exposure to experiential learning strategies by questioning the potential participants about their exposure to experiential learning strategies. Those who stated that they did not have exposure were ruled out. The audio-recorded interviews were scheduled at varying times per the convenience of the participants and

conducted through Skype or telephone. Typically, after obtaining the signed consent form from the participants, the interviews were conducted within a week. The interviews lasted anywhere from one to two hours. The semistructured interview questions were open-ended and written as guided, but not leading questions. The interviews were audio-recorded, and field notes were taken during the interview process. Once the interview was concluded, the participants were emailed the $10 Starbucks gift card. The researcher continually prepared, collected, organized, and analyzed the data. The researcher transcribed the interviews and sent the participants the transcription to ensure it described their lived experiences. The data analysis process was ongoing throughout the study. The physical or paper notes were stored in a fire-proof safe, and the electronic copies are in an encrypted cloud file. In seven years, these data sets are set to be destroyed by shredding the paper documents and deleting the encrypted files.

Data Analysis

The data sets were obtained from the semistructured interviews. After the interviews concluded, the data sets were transcribed into a Word document, coded by the researcher, and later analyzed using Atlas.ti software. The data analysis process was ongoing throughout the study, the researcher transcribed each interview after the interview was completed, placed it into Atlas.ti, and looked for trends. Before Atlas.ti was used to code the data the researcher used different colored highlights to group common responses; for example, hands-on learning was coded in pink. The researcher transcribed the recordings of the participants, and they were given names such as Participant 1, Participant 2, and so on, to maintain anonymity and reduce the risk of bias. The data was transcribed into Microsoft Word and saved as a pdf. The transcribed data sets were inputted into Atlas.ti for analysis after each interview. Within Atlas.ti, quotations were selected based on codes that were created from common responses and reliability to the research

questions. The codes were set after the eighth interview was transcribed and inputted into the Atlas.ti software. Atlas.ti used the query tool to retrieve the coded data and enable the researcher to view trends or patterns (Scientific Software Development GmbH, 2015).

Analysis of the data underwent this process: prepare and organize data review and explore the data, create themes/codes, code the data into categories, and present codes in a cohesive manner. The data sets were coded and analyzed for recurring themes to determine the experiences of the LPNs with experiential learning techniques during their nursing programs (Merriam & Tisdell, 2016). The data sets were coded based on chosen names for recurring themes. After the interviews, inductive reasoning was used to aid the researcher in exploring trends in the data (Lodico et al., 2010). To further explore and analyze the data, electronic coding was used with Atlas.ti software and the Saldana (2008) coding manual for qualitative researchers. The Merriam (2002) textbook was used to help with this process. After the interview was completely transcribed, the participants were sent their transcription and the preliminary interpretation of the interview via email to ensure that it accurately represented their experiences. This process is known as member-checking (Lodico et al., 2010; Merriam & Tisdell, 2016).

Instruments

There were only a few instruments used in this study. The instruments were the researcher, a laptop that used Skype and recording software, a telephone, a pen, and paper. These items were used to collect and analyze the data. The use of these instruments is future discussed in the following sections.

The Role of the Researcher

Based on the research question it was determined that the research would yield qualitative data (Merriam & Tisdell, 2016). The researcher has completed courses on both

quantitative and qualitative methodologies during her doctoral studies at Capella University. The novice researcher has not conducted any formal research before this dissertation study. Completing these courses has increased the researcher's competency in both methodologies (Merriam & Tisdell, 2016). The researcher is a simulation lab coordinator and uses Kolb's (1981) theory of experiential learning in the development and management of the simulation program at the site of employment. The researcher set aside these preconceptions of the benefits of simulation through conduction of the field test to examine the questions for any bias due to experience as a simulation instructor. The researcher kept a reflective journal to keep the researcher's thoughts visible throughout the conduction of the study known as bracketing (Ortlipp, 2008).

Guiding Interview Questions

The main research question for this original dissertation study was through the perspectives of licensed practical nursing (LPN) graduates, who had experiential learning strategies in their nursing programs, how did experiential learning strategies enhance their preparedness for the transition to the clinical setting upon graduation? For this study, a semistructured qualitative interview was conducted using open-ended questions. Guided questions were used to promote consistency in the type of data that is to be collected (Gillham, 2005; Lodico et al., 2010). The interview questions were field-tested to ensure that they are not coercive or leading. The interviews were conducted on an individual basis. This technique yielded the best perspectives of the LPNs regarding the experiential learning methods they deemed best to enhance their nursing education and transition into practice. The interview questions were:

1.   Tell me of a time when you were able to apply what you learned in the classroom to your clinical experience.

2.   Give me an example of a learning style or method that works best for you in the classroom.

3.   Give me an example of a learning style or method that works best for you in the clinical setting.

4.   Give me some examples of any experiences that you have had with hands-on learning or learning by doing. What was the activity? What course was it used with?

5.   Explain how well hands-on learning or learning by doing work for you.

6.   Explain the experiences that you have had with hands-on learning in your nursing program.

7.   Please provide examples of types of hands-on learning activities that you have found most challenging to understand and apply?

8.   Tell me what types of learning strategies were included in your educational program?

9.   Describe your favorite style of lecture. Explain the style of the lecture that your instructors used. How did that style make it memorable and enjoyable for you?

10. Tell me about any learning activities that were not lecture styled.

11. Tell me about any influence you feel that hands-on learning has had on your clinical skills, critical thinking, and confidence.

12. Tell me which learning strategies were most beneficial in your studies and clinical skills.

13. Please explain which learning activities do you consider influenced your clinical skills and critical-thinking the most.

14. Tell me about any activities that you think should be increased in your nursing program.

15. What learning activities assisted you in understanding your nursing role and your state's scope of practice for LPNs?

Table 1. *Interview Questions Relation to Research Questions*

Research Question	Related Interview Questions
Central Research Question: From the perspectives of licensed practical nursing (LPN) graduates, who had experiential learning strategies in their nursing programs, how did experiential learning strategies enhance their preparedness for the transition to the clinical setting upon graduation	1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15
What types of experiences do the licensed practical nurses have with experiential learning?	1, 4, 6, 7, 8, 9, 10, 12, 13
How did learning strategies, if any, increase the licensed practical nurse's understanding of clinical techniques?	1, 3, 11, 12, 13
What do the licensed practical nurses believe helped them have a better understanding of their roles or scope of practice?	15
How have the licensed practical nurses increased their confidence in their clinical skills with the use of certain learning strategies?	1, 3, 11, 12
What influence did experiential learning have on the academic progress of the licensed practical nurses?	2, 5, 8, 14

Ethical Considerations

Confidentiality is of utmost importance in any study that includes the use of human participants. This study involved the analysis of LPN graduates' lived experiences with experiential learning, so it required a method of protecting the privacy of the participants. All potential participants were given the opportunity to sign a consent form after being informed about the study and its voluntary nature to protect privacy and ensure that coercion had not taken place, When the data sets were collected the participants' names were never used, they were referred to as participant 1, participant 2, and so on.

Confidentiality of the participants was kept throughout the study's entirety. The participants' names were never used, and the interviews were all conducted separately. The data sets were obtained was also kept separately and labeled by participant number rather than name. This method was included in the research plan and approved by the Capella University Institutional Review Board.

Ethical considerations also included receiving full approval to conduct the study from the Capella University Institutional Review Board (IRB) prior to beginning data collection and obtaining a sample of LPN graduates without using the researcher's place of employment or coercion. Another ethical challenge was offering incentives to the participants before the time they were invited to participate. The researcher transcribed the interviews, and each participant was given a number. The interviews were conducted over the phone or via Skype depending on the participant's preference. The transcription was sent to the individual participant to be examined for the validity of their lived experience. The data will be kept for seven years, locked in a fire-proof safe, and electronically stored on a cloud drive for protection.

Summary

Chapter 3 presented a description of the basic qualitative methodology that was applied to this study. The purpose of the study was discussed followed by an examination of the research question and research design. Then the population, sample, and procedures were depicted. Finally, the instruments, guided interview questions, and ethical considerations were also discussed.

Academic writings from Merriam and Tisdell (2016), Yates and Leggett (2016), and others were used to shape the methodology of this study; they were used from the design phase all the way to the data analysis and interpretation phases. The goal of the study was to explore the experiences of LPNs with experiential learning strategies in their nursing programs to determine if the experiential learning strategies were beneficial in their transition from student to practitioner. Ethical considerations were applied to protecting the participants, conducting interviews, maintaining their anonymity and recruitment, data analysis and collection procedures, and preservation of the data after the completion of the study. Chapter 4 will include the presentation and discussion of the actual data and Table 2. *Data Codes and Themes*.

CHAPTER 4. PRESENTATION OF THE DATA

Introduction: The Study and the Researcher

The purpose of this basic qualitative study was to explore the experiences of licensed

practical nurses (LPNs) who were exposed to experiential learning strategies during their nursing

programs to determine if they were beneficial to their transition into practice. This study was of

interest to the researcher because the literature on the state of nursing, nursing education, and

current health trends, noted that nurses were found not to be practice-ready (Morrell & Ridgway,

2014). Nurses who are not practice-ready are graduating and becoming licensed without

obtaining the essential critical nursing skills to meet the demands of caring for patients with

complex conditions or use advanced technologies (Hamilton & Klebba, 2011; Houghton et al.,

2010; Morell & Ridgway, 2014).

Experiential learning strategies have been proven to improve critical thinking and clinical

skills in nurses and other health care providers (Abe et al., 2013; Houghton et al., 2013; Kim et

al., 2012; Miller, 2014; Rosenstein et al., 2012; Rutherford-Hemming, 2012; Sibthorp et al.,

2011; Tosterud et al., 2013). The use of experiential learning strategies has been investigated

with registered nursing (RN) students; however, there was limited access to research on its

effects with LPNs (Kirkman, 2013; Rosenstein et al., 2012; Rutherford-Hemming, 2012;

Sibthorp et al., 2011). The researcher wanted to discover if experiential learning strategies were useful in aiding the transition of LPNs from students to practicing nurses.

To obtain this information from the participants, the researcher conducted one-on-one semistructured interviews using open-ended questions. Qualitative interviews are an effective method to obtain information on the experiences of individuals (Lodico et al., 2010). The researcher has experience conducting interviews from the perspective of a hiring manager and being a part of a hiring committee. The researcher conducted these types of interviews and practiced conducting qualitative interviews during the trial run of this dissertation study.

The researcher has a strong professional background in the use of experiential learning strategies specifically with the use of simulation. The researcher is a member of several professional organizations that are involved in the use of experiential learning and currently works in the field of simulation. This experience with experiential learning strategies has made the researcher very passionate about these strategies and created a small risk for bias; bracketing strategies were used to combat potential bias (Merriam & Tisdell, 2016).

The only formal training that the researcher had received before conducting the study was during the doctoral program in research-based courses that focused on qualitative, quantitative, and mixed method methodologies. To better understand the qualitative methodology, the researcher read peer-reviewed articles and textbooks on the methodology and evaluating methods (Lodico et al., 2010; Merriam & Tisdell, 2016; Rees, 2010). The peer-reviewed articles and textbooks aided the researcher in determining which data collection method was best to answer the research question and how to analyze the data most effectively (Lodico et al., 2010; Merriam & Tisdell, 2016; Rees, 2010; Yates & Leggett, 2016).

Description of the Sample

This study used LPNs as its sample to answer the research question. There were a total of ten participants with varying clinical experiences. After the eighth interview, no new codes or themes were detected; therefore, data saturation was reached (Merriam & Tisdell, 2016). Approximately 70% of the participants attended for-profit private institutions for their LPN training whereas the other 30% attended community college.

Research Methodology Applied to the Data Analysis

The qualitative method requires the use of words rather than numerical data and invites the researcher to explore the phenomenon (Merriam & Tisdell, 2016). The study used semistructured interviews using open-ended questions, which were recorded, while field notes were taken. One on one interviews are best to explore the experiences of the participants (Lodico et al., 2010). The researcher then transcribed the data, and the transcription was sent to the individual participants to have them examine the contents to ensure that the transcription expressed their true experience called member-checking (Merriam & Tisdell, 2016). The researcher also wrote notes in a journal after each interview to reflect on the experience to examine any biases known as bracketing (Lodico et al., 2010; Merriam & Tisdell, 2016). Reflection on the interview and sending the participants their transcripts to view and edit ensures that the data displayed expresses the participants' experiences (Merriam & Tisdell, 2016). Finally, Atlas.ti was used to analyze the data by the creation of codes from reoccurring themes and the location of trends in that code that were derived from data sets. The Atlas.ti software enables the researcher to use a document to create quotations that are attached to codes and monitor for frequency in the appearance of those codes or trends (Scientific Software

Development GmbH, 2015). Any codes that occurred often were deemed pertinent and were graphed for frequency (Table 4.2).

There were challenges in recruiting participants for the study due to the researcher moving during data collection due to low participant response; some potential participants were concerned about the study being fraudulent. However, there were no problems in the data analysis process. The researcher knew that Atlas.ti software could be challenging to use, so tutorials in the use of Atlas.ti software were utilized. The researcher also practiced within the program with demo data to improve proficiency in its use (Scientific Software Development GmbH, 2015).

Presentation of Data and Results of the Analysis

The data sets are presented in the following paragraphs, table, and participant quotes. Results are presented as they occurred during in vivo coding. In vivo coding is when a label or short sentence is assigned to a code (Merriam & Tisdell, 2016; Saldana, 2008). The researcher used this by coding quotations from the study. The themes are depicted based on their significance to the central research question and subquestions. The data collected answered each of the central research question and subquestions that guided the basic qualitative study. The data sets are presented with the interview questions and as it relates to the literature and research questions in the paragraphs below and Table 2.

Interview Question 1

Interview question 1 was: Tell me of a time when you were able to apply what you learned in the classroom to your clinical experience. This question answers the central research question and research subquestions 1, 2, and 4. All the participants gave examples of medication administration for this question.

Participant 3 explained it best by stating,

"Let's see here. I think the easiest example was we had fake order sets that were either with a med cart like you would use in an SNF *[skilled nursing facility]*, or a Pyxis-like machine. I mean not a Pyxis, but it's very similar. So, we could go through the fake order sets and either call for clarification with the doc…the doc being one of our instructors or a lab tech) or go and administer the medication accordingly and then that transferred very directly into our time on the floor. And I don't know about your training, but for us, as LPNs we had, I think a total of 600ish hours on the floor supervised, and the last chunk was a week here in our third quarter of our one-year training where we were full-time partners of the SNF, and so doing those drills in the lab with fake order sets and fake patients and um fake doctors actually transferred."

Participant 1spoke of running a code:

"That, I could change that up with running a code. We learned the information in class and obviously ever setting is going to be different because there are procedures that they have written. Like my ER here is not going to be the same as my ER in Herndon, we run it just a bit differently, but we had in class they talked about what a code was, we practiced it in simulation and then we went out and actually got to do a code in a hospital setting. And those two pieces together really solidified in the clinical setting of how to do that."-Participant 1.

Medication administration is an essential skill in nursing as it requires the administrator to give the right dose, right route, right time, and right drug to the right patient and provide the right documentation ("Practical Nursing," 2015). Experiential learning strategies can be used to teach the students this critical skill (Bajgoric et al., 2014; Baker & Anandhi, 2013; Bennett, 2017; Bultas et al., 2014). Experiential learning strategies enable the learner to retain concepts that are taught (Bajgoric et al., 2014).

The literature and previous quotation answer the central research question by describing how the participant went from using fake medication administration records or MARs and orders in the classroom to practicing in the skills lab, to independently passing medications on the floor. The participant stated that these skills transferred, and the literature promotes the use of experiential learning strategies and their ability to aid in the transference of knowledge.

Interview Question 2

Interview question 2 was: Give me an example of a learning style or method that works best for you in the classroom. This question answers the central research question and research subquestion 5. Participants 2, 4, 7, 8, and 10 expressed that story-telling and hands-on learning worked best in the classroom. However, this information was best depicted by participant 2 with the statement,

"I liked how we sort of got an explanation and they would kind of show us while talking about it. And then we would get to sort of practice it ourselves, and kind of team up into pairs usually, and be able to practice on each other. So, I remember a lot of…we did a lot of assessments. So, we were doing the whole full-body assessment, but we broke it down into bits, so that we could then practice each part with our partners, so that was good."

Participant 5 stated, "Definitely a mix of hands-on um like hearing the lecture and applying those things with hands-on like getting the medications." While participant 10 preferred hands-on, "um show me. I need to be shown things, so hands-on is best."

"Um, I don't like the online component of ATI, but the books themselves worked pretty well for me. So, its super condensed and if something's unclear, then I will go back to my main textbook. In lecture how, that ends up is we don't do that much lecture, or we didn't do that much lecture in the quarter that I discovered this. We had five or six enormous whiteboards in

our room and there'd be an hour or two of lecture, and each class would be broken into groups, each group would have to do a topic for the synopsis of the week on one of the whiteboards. And you'd end up with a 15-foot wide whiteboard that's four or five feet tall. Just each one of them would be full of almost everything that you'd need to know on the test and then at the end of it. You know they'd give you 15 minutes and then you'd move to the next module, the whole class would rotate around the room. And so you'd you say well I prepped for this one and you would clean up your classmates' notes and then 15 minutes later you would rotate again, and you'd clean up your classmates' notes and the instructor would after everyone had a chance to look at every module that's written up on the wall, the instructor goes through and either adds details or erases some stuff or says hey you guys really need this before the exam. And that works super well for me. PowerPoints are my absolute worst learning experience." -Participant 3.

Much of literature supports bringing hands-on or experiential learning strategies into the classroom (Power & Cole, 2017). Experiential learning strategies in the classroom can increase student engagement and knowledge retention (Matthews, 2011; McClellan & Hyle, 2012; McLaughlin et al., 2006). There is also a need for further research for the use of experiential learning strategies in the classroom setting (Hill, 2017).

The data from this interview question and literature cited support how the described learning strategies increased the LPN's understanding of clinical techniques, and the experiences that the students have with experiential learning strategies.

Interview Question 3

Interview question 3 was: Give me an example of a learning style or a method that works best for you in the clinical setting. This question answers the central research question and research subquestions 2 and 4. All the participants, except participant 9, verbalized that having

more autonomy, or shadowing a nurse, worked better for them because they were doing "hands-on and it felt more like being a nurse." Participant 9 liked to be coached by their clinical instructors more but stated that they "preferred doing hands-on like a working nurse in clinical as well."

Participant 4 expressed it best regarding what works best in the clinical setting, "There were two types of teachers in clinicals, ones that would set you off on your own and be with a certain actually working nurse on the floor and be able to come around and check on you periodically which is fine. Which is actually more like a reality type of training when you go to a new job, and they have that type of training, you know shadowing with somebody. So, that's good. But, there are other teachers who keep you as a group pretty much the whole time and basically have us take over some of the load off the floor nurses duties whether it be just Accu Checks *[checking a patient's blood sugar level]* or whatever, which is fine because we do need practice, but if that is the only way they did that, then we don't get an idea of what the whole shift would be like in terms of doing that. So, we would be great at like we'll take over all the nurses' Accu Checks, but we might just be running around doing that and not learning much of other things."

The literature states clinical is a highly effective method of educating and preparing nurses, and it is helpful when paired with experiential learning strategies that stimulate critical thinking and clinical judgment (Institute of Medicine [IOM], 2011; Kaddoura, 2010; Kalb et al., 2015; McMullen & McMullen, 2009). Allowing the students to apply and display what they know enhances clinical skills and may depict learning gaps (Norman, 2012; Power & Cole, 2017).

The literature and the participants' statements described what works best to help them with clinical techniques and the types of experiences that they have had with hands-on learning. Practicing these skills instead of just observing in the clinical setting helped with knowledge retention and transference of skills.

Interview Question 4

Interview question 4 was: Give me some examples of any experiences that you have had with hands-on learning or learning by doing. What was the activity? What course was it used with? This question answers the central research question and research subquestion 1. All of the participants were able to describe experiences that they had with experiential learning strategies or learning by doing. Participant 3 described her experience by saying, "Absolutely, so we'd have…umm… I don't remember the schedule anymore, but we'd definitely have days spent, and they were frequent, maybe once a week. Occasionally twice a week, we'd be in the lab all day long to practice catheterization, IV *[intravenous]* placement, or NG *[nasogastric]* tubes. But with the exception of IV placement and NG tube placement which we had the pleasure of practicing on each other."

Participant 3 stated, "Absolutely, so we'd have…umm… I don't remember the schedule anymore, but we'd definitely have days spent, and they were frequent maybe once a week. Occasionally twice a week, we'd be in the lab all day long to practice catheterization, IV placement, or NG tubes. And you're a nurse, right?"

The literature supports the use of experiential learning strategies whether in the skills lab, simulation lab, or classroom as an effective learning strategy (Akella, 2010). Experiential learning strategies improve learning retention and clinical practice (Akella, 2010). Kolb's (1981) theory of experiential learning is the basis for this study and its use at the core involves a

concrete experience with reflective practice (Akella, 2010; Eyler, 2009; Hamilton & Klebba, 2011).

The data collected in this study describe the definition of experiential learning strategies, which are hands-on activities that are performed in the lab. The literature expands upon this thought and describes experiential learning strategies based on Kolb's (1981) theory as an active learning strategy associated with a reflective process that creates new knowledge (Akella, 2010).

Interview Question 5

Interview question 5 was: Please explain how well hands-on learning or learning by doing work for you. This question answers the central research question and research subquestion five. All of the participants stated that "learning by doing" worked well for them. Participant 4 had an interesting statement when answering this question, "Hands-on learning works really well. You can look at a video or look at something, but to actually do something yourself really solidifies certain skills. Or you come up with challenges that you wouldn't think would be associated with that activity."

Participant 2 stated,

"I liked it yeah; it was a bit out of my comfort zone. It wasn't until we got to the end of the year that we had to do it in front of our peers. So, I think there was like maybe five or six groups of us. Four or five. One of us would be in the sim room, and the other people would be able to hear what was going on and like sort of take notes, but it was good. It was just a lot combined; it was putting everything together. So, you'd go in, you'd do the full assessment, and you'd do various different skills. It was just kind of what do you call that, you just kind of had to go with it as it went. So, it was very challenging."

In summary, of all the data collected during this question, hands-on learning enabled the participants to create a variety of situations, so that they would become more comfortable with those skills. Hands-on learning enables the instructor to create a safe learning situation in which they can make mistakes and practice before caring for actual patients. The literature was explored to see if hands-on learning can create positive and meaningful experiences.

The literature states that hands-on learning or experiential learning strategies enable the participant to experience a variety of situations without causing harm to anyone while gaining practical experiences and creating new knowledge from reflective processes (Kolb, 1984; Shin et al., 2015; Stables, 2012).

The answers to this interview question and the literature correlate with the central research question. The participants all agreed that hands-on learning helped them to perceive challenges that they would not expect to encounter and practice anticipatory preventive methods. That practice helped the participants become more comfortable with skills in the clinical setting. The literature suggests that having this time to practice enhances those skills as well (Shin et al., 2015; Stables, 2012).

Interview Question 6

Interview question 6 was: Please explain the experiences that you have had with hands-on learning in your nursing program. This question answers the central research question and research subquestion 1. Most of the participants experienced hands-on learning in the skills lab setting. Participant 5 gave this example of hands-on learning experience, "They pretty much broke it down so that you would have your lecture in week one and then week two you would do it like at clinics. Well, first you would do it in lab, and then you would do it in clinic. So, it was

like a three-step process. So, it was a lot of hands-on involvement with applying what we learned in the classroom."

Participant 7 had this to say about hands-on learning,

"We did a pretty fair amount. I could probably have broken it up a bit more. We had lecture in the morning and clinical or lab in the afternoon. It would probably have been better if we had broken up more clinicals and labs and then class. Instead of a big block of class and then a big block of lab in the afternoon."

Participant 5 also spoke of "a good mix of classroom time with the practical application of those skills."

The literature suggests that students experience a concept in a classroom setting and then have ample time to reflect upon that experience to tie in key concepts and create new knowledge (Shin et al., 2015; Smith, 2010; Wain, 2017). The process of hands-on practice (doing) and reflection on action (what was done) and in-action (while it is being done) is essential to experiential learning strategies having a beneficial effect on students' clinical practice (Shin et al., 2010; Tanner, 2010; Unsworth et al., 2017).

The literature and the data collected from the participant correlate as they further expand on the experiences that they had with experiential or hands-on learning strategies in their nursing programs. Also, the literature describes the benefits of experiential learning strategies with the transition to clinical practice (Shin et al., 2010; Tanner, 2010; Unsworth et al., 2017).

Interview Question 7

Interview question 7 was: Please provide examples of types of hands-on learning activities that you have found most challenging to understand and apply. This question answers the central research question and research subquestion 1. All of the participants stated that the

hands-on learning strategies that required multiple steps were the ones that most challenging to understand and apply. Participant 7 used nasogastric tubes as an example, "Probably the feeding tube stuff and stuff like that because I had never done it before. I still don't, but I suppose that would be one of the things that I really find hard to apply because I don't really do it."

Participant 9 also spoke of another concept that was hard to apply because it had many steps and was not something that was performed every day,
"Yeah like giving colostomy care, that's something that is difficult to replicate out in the clinical setting and more nerve wrecking. It's one of those skills that takes more practice and more hands-on time than maybe some other ones, at least for me."

Participant 5 had the best answer to this question with the statement, "Probably the really complicated procedures that had several steps, like the insertion of NG tubes, for example. You know the ones that had like a 20-step process that you had to do stepwise, and you can't leave out any. Those are the most challenging."

The literature explains some of the challenges that nursing students have with clinical skills such as urinary catheter insertion, IV starts, and nasogastric tube insertion. Students find it difficult to maintain sterile technique ("Practical Nursing," 2015; Tanner, 2010;). Clinical skills require a great deal of practice and should be mastered before attempting on human patients (Power & Cole, 2017; Stables, 2017). Experiential learning can be used to teach these skills (Kirkman, 2013; Kolb, 1984; Smith, 2010). The literature and data from this study correlate regarding the experiential learning strategies used in these nursing programs as the participants described their experiences with learning challenging clinical skills.

Interview Question 8

Interview question 8 was: Please tell me what types of learning strategies were included in your educational program. This question answers the central research question and research subquestions 1and 5. All the participants mentioned having a variety of classroom, clinical, skills lab, and simulation opportunities in their nursing programs. Participant 8 described their learning strategies in their nursing program with this statement,

"Yea so, I think the military style is: teach, show, do. For me, personally, that's the perfect learning style. First, you are taught instructions of what tasks or skills you need to know, then you are shown the proper techniques of everything, and then you go into the actual clinical settings, and we had to do it. And, there was always a check sheet where you were being [call dropped] seems like we got disconnected."

Participant 2 stated that there was a great deal of lectures,

" Well, a lot of lectures and a lot of testing. Um that was pretty much it, sit down classroom, read this thing, we'll cover it tomorrow kind of lectures. And then testing and then we'd have a lab on some procedure or another, and finally at the end of the term, we'd do clinicals. So just a lot of sit down, lots and lots of books, too many to even absorb."

Participant 5 spoke of gamification,

"So, we did some games, kind of like Jeopardy. Like memory type games. We did a lot of team stuff like we would break up into teams and do like skits for our class on a skill or a disease process. A lot of presentations like poster board like things. We did some activities in my group like making a video of it. And we do like a slide show with pictures. There were a lot of different methods."

The statement from participant 8 roughly describes experiential learning strategies, which are thought to be an extremely effective method of educating students (Dowie & Phillips, 2011; Eyler, 2009; Hill, 2017). Experiential learning strategies require the individual to be exposed to a concept, actively apply or practice the concept and then reflect upon the experience to connect key concepts and build new knowledge (Hamilton & Klebba, 2011; Hill, 2017; Kolb, 1984). Participant 8 described an experiential learning strategy, that is also reflected in the literature.

Interview Question 9

Interview question 9 was: Please describe your favorite style of lecture. Please explain the style of lecture that your instructors used. How did that make it memorable and enjoyable for you? This question answers the central research question and research subquestion 1. In summarizing the common theme when asked this question, the participants reported that they enjoyed "storytelling," or when "the teacher was fun." "Storytelling is when an instructor uses his or her own nursing experience to apply to what is being taught so that the students can see or hear about the concept being applied to the concept that they are learning," said participant 1. Participant 6 gave this statement about their favorite style of lecture,

"Well, we had this, we had two teachers, it wasn't a traditional four-year program, it was a technology…technical school. We had two teachers, and one of the…she was pretty witty and was a holistic RN, so she had a long history of nursing as well, but she was just so…she just kind of made it fun. One time she came in and she was like this is how you don't dress for an interview, she had like a Rasta hat on and all this jewelry with wrinkled clothes. So, she sorta demonstrated a lot by visual aids, and that was great, so she just sorta made it more fun. Not to say the other nurse wasn't good, she just wasn't as fun, it just sorta engaged us more with that kind of stuff."

Participant 4 stated, "Instructors that stood out were highly experienced, they can share or draw out examples that pertain to what we are discussing in their experience, and that is helpful to show us what to expect in real life. But there were teachers who had a lot of experience but really did not know how to teach theoretical stuff. So that's not good either, if they know the stuff and are supplementing it with experience, that's great, but they had a ton of experience but theoretically academically the whole science process body mechanics or processes there were teachers who lacked in that area, and that's not good either because I'd have questions and my questions wouldn't be answered."

Storytelling is critical in nursing education as it enables the instructor to give the students perspectives and experiences of skilled nurses in situations that apply to classroom concepts (Haigh & Hardy, 2010). Storytelling also gives the students opportunities to reflect on the experience being explored so that they can apply it to their practice (Haigh & Hardy, 2010). Storytelling was clearly described in situations that the participants encountered in their nursing programs in which the students would have to demonstrate critical skills in certain situations. This type of experiential learning technique aids in the understanding of clinical techniques and will have a positive effect on academic progress (Shin et al., 2010; Tanner, 2010; Unsworth et al., 2017).

Interview Question 10

Interview question 10 was: Please tell me about any learning activities that were not lecture. This question answers the central research question and research subquestion 1. All the participants mentioned participating in active learning strategies, skills lab, clinical, and simulation as part of their nursing programs. Participant 9 detailed an active learning strategy used in the classroom with this statement,

"Yes, it mostly towards that beginning of the class, and to be honest, I didn't really see the value in them. The students had 30 seconds to do something. I don't know. It was one of those things where they would put a question on the board and say those of you who…how would you answer the question A or B and if you thought the answer was A you would go to the right side of the room, and if you thought the question was B then you would go to the left side of the room. So, it was an attempt to be a dynamic atmosphere, and we had a number of those where you had to get up and move and make lists. Some of them were okay, but some of them were not."

Participant 1 spoke of intravenous catheter starts, "IV starts are the number one thing that I became extremely good at in the clinical setting because of the training that I had in simulation and in our lab. Because our instructors were there and they gave us tips and tricks to be able to apply that out in the real world, and those tips and tricks were not given to us in our book material."

The literature stated that active learning strategies could be used to encourage student engagement and knowledge retention (Adams, 2015; Baker & Anandhi, 2013). Using these strategies effectively is what enables students to obtain highly effective clinical skills, critical thinking, and confidence (Aldridge-Bent, 2011; Bajgoric et al., 2014). The participants' statements and the literature correlate regarding the influence these activities had on their academic progress. The participants clearly defined the activities that were helpful and were initiated properly, and the ones that were not as helpful and may have required more planning.

Interview Question 11

Interview question 11 was: Please tell me of any influence you feel that hands-on learning has had on your clinical skills, critical thinking, and confidence. This question answers the

central research question and research subquestions 2 and 4. All of the participants, except one, felt that hands-on learning had a major impact on their clinical skills, critical thinking, and confidence. Participant 9 felt "that clinical was most helpful for confidence due to the coaching received from the clinical instructor." Participant 1 best supported the used of hands-on learning with this statement,

"With the experience that I had in school when I went to an actual setting, I felt like I was prepared to handle anything that came my way. If I didn't have that hands-on experience in our lab in simulations, I think I would have been more scared to go into with a patient because it would be the first time I would be there doing a procedure and really not knowing how."

Participant 4 stated. "Any experience that's physically done, whether its lab or in clinical setting adds to our confidence because experience is everything. Its part of the experience, physically doing something, conducting something. So, it is definitely helpful."

Participant 5 spoke of the conceptualization," I think it's had a lot, especially like conceptualization. During leadership those concepts help. By doing it and having it applied in school first really helped when I became a nurse on my own."

The literature supported the use of hands-on to improve clinical skills, critical thinking, and confidence. Most students and faculty find that experiential learning strategies or hands-on learning enhance clinical skills, critical thinking, and confidence (McMullen & McMullen, 2009; Norman, 2012; Partin et al., 2011; Rosenstein et al., 2012). The answers obtained from the participants and the current literature; support the central research question of this study. LPNs need critical-thinking, clinical skills, and confidence to perform their jobs most effectively ("Practical Nursing," 2015; Morrell & Ridgway, 2014).

Interview Question 12

Interview question 12 was: Please, tell me which learning strategies were most beneficial in your studies and clinical skills. This question answers the central research question and research subquestions 1, 2, and 4. All the participants stated that hands-on learning strategies worked best for their studies and clinical skills. However, participant 1 answered this best with this statement, "Hands on and seeing what it is actually correlated to was the best learning tool for me. So, if they talked about heart medication and then they showed us a video of, and then they showed us a video of what that medication did for the patient that worked best for me. That was the best tool for me because I am a hands-on, visual learner. Sitting there for lecture and just listening to someone talk was difficult, but when they paired different things to solidify the information, it was better for me."

Participant 6 stated," Again applying the book learning to the hands-on and using my hands-on definitely was the best strategy for me." Participant 8 had a unique perspective, " Yea the um teach, show, and do. Being taught first, then shown how to do that task, and then being actually allowed to do that task in real time, real-world. To be able to become competent and confident that when you graduate, you will be able to perform those skills."

Beattie et al. (2010) confirmed with their study that experiential or hands-on learning strategies could be used successfully to improve upon and teach clinical skills. Hands-on learning enables the participant to practice what they have learned in class and enhance their clinical skills and critical thinking (Stables, 2012; Tanner, 2010; Tosterud et al., 2013; Unsworth et al., 2012). The answers to this interview question and the current literature support the central research questions of this study through demonstrating that hands-on learning worked best for these participants' understanding. They described how having a discussion or lecture, then seeing

69

a demonstration video before practicing the skill, which informed the researcher about the type of experiential learning strategies that the participants were exposed to in their nursing programs. Rutherford-Hemming (2012) also supported the used of active learning and hands-on learning strategies to improve knowledge retention.

Interview Question 13

Interview question 13 was: Please explain which learning activities do you consider influenced your clinical skills and critical-thinking the most. This question answers the central research question and research subquestions 1 and 2. All the participants verbalized feeling that hands-on learning helped their skills the most. Participant 6 said it very well with the statement, "What learning style? I think the hands-on…and that really served me when I was an EMT as well. Again, going out in the field just made a huge difference and we went out in the field as a class sometimes. We also could sign up for extra study time, and I did a volunteer stint in an area of remote medical, and we did a lot of hands-on, but emergencies came up sometimes, and we were able to just go in and deal with that. It just made a huge difference. So again…. hands-on, hands-on."

Participant 7 verbalized agreement, "Probably the hands-on, to actually do the hands-on stuff."

Participant 8 had this to say, "It's everything, without it I would just you know yea. It would be hard to just teach someone something. I think even the smartest individual to just be taught something and to memorize it to pass the exam and you can pass the exam, but without ever having the opportunity to apply that skill you will not understand that not everything will happen perfect as you read or have seen on television and the won't be able to apply the skill set in a real-world setting, it would only set people up for familiar so yea being able to apply what you learn actually for me is paramount, incredible."

There is a great deal of literature that supports the use of hands-on or experiential learning strategies in support of enhancing clinical skills and critical thinking (Kim et al., 2012; McMullen & McMullen, 2009; Sebold et al., 2017). Hands-on learning enables students to practice these skills in an environment that is considered safe and make mistakes without causing harm; over time this process may increase confidence (Beattie et al., 2010; Power & Cole, 2017). The current literature and the statements from the participants in this study provided answers to the central research question of this dissertation study. They expressed that hands-on learning can enhance their preparedness to transition to clinical setting upon completion of their education. The literature demonstrates the ability to improve clinical skills and critical thinking which are essential attributes of nurses (Shin et al., 2010; Tanner, 2010; Unsworth et al., 2017).

Interview Question 14

Interview question 14 was: Please tell me of any activities that you think should be increased in your nursing program. This question answers the central research question and research subquestion 5. For this interview question, the majority of the participants answered that hands-on learning should be increased. Participant 5 mentioned the importance of the application of learning through hands-on with the statement,

"…definitely hands-on stuff. Being able to apply what you are learning in a hands-on way. I think more exposure to different things that are more applicable now though. Having to make like snap decisions. So, that would be more like leadership role encouraged. Because you know in nursing school you are so babied that all of sudden when you are out on your…on you are like oh my God, I have to deal with this. So, maybe like getting a little more exposure to taking on a little more when you're on the floor. Having more exposure to the specialties, like

having guest speakers who aren't teachers. Like just having former students would help as well to give those students a different perspective."

Participant 6 spoke of a need for emergency management,

"I think that frankly, a little more of emergency management would help. I mean I have a lot of that because I was an EMT but sort of specific to nursing. Like we had to do an emergency room paper, but I think some more like um.. sort of set ups more emergency things happen, so you'd have to do things quickly and think on your feet. I am thinking that we didn't have a lot of that even in the emergency room in clinical. The emergency room didn't have true emergencies or things that were sort of imminent we have to practice that in the home a lot, because we don't get a lot of that in the home either. And I think that those styles get kind of rusty so when emergencies come up it takes a second. So yea um just a little more hands-on with real emergent stuff would be helpful and I don't know what other programs have so I'm just going off mine." Participant 10 had similar comments, but went on further to say, "repeated hands-on activities are important."

There is literature to support increased exposure to experiential or hands-on learning activities (Stricklin, 2016; Tosterud et al., 2013). Experiential learning strategies may help to bridge the gap from student to practitioner (Suva et al., 2015; Whittingham, 2012). The statements from the participants and the current literature answer the central research question of this study as they depict the desire for an increased amount of hands-on learning for students in nursing school because they feel that it is beneficial to their practice. Participant five felt "that the experiences from hands-on learning if increased, will transfer more to the clinical setting."

Interview Question 15

Interview question 15 was: What learning are some activities that assisted you in understanding your nursing role and your state's scope of practice for LPNs? This question answers the central research question and research subquestion three. All of the participants, except participant ten, stated that they learned about their scope of practice in the classroom. Participants 10 said, "…that scope of practice was never really covered in nursing school." Participant 9 answered this best with the statement,

"…when I think of scope of practice…yea…you learn in the classroom there is a differentiation of what an LPN can do versus what an RN can do. The RN…that they work within a clinical setting may be unaware of what those distinctions are those walls between the two roles. And so, for example, I had a nurse that said that we are going to be working on this IV together…I want us to do this IV push, and one of the things that you learn in the classroom with your instructor is that LPNs are not allowed to do an IV push. We can do a lot with IVs…we can start them, we can replace them, we can monitor them. In a clinical setting, you have to make sure to remember those things to make sure that you are not doing something that is outside of your role."

Participant 4 stated,

"That would be clinical. Scope of practice would be in it; information was always given on a theoretical basis, um really given because even to this day when I'm working um, you can something wonder if this is in my school of practice and you would wonder about this particular thing for instance. Those questions come up because you're physically doing them so clinical setting would be really good opportunities to really solidify what our roles are and what the RNs roles are versus the LVN. How much we can help, how much we shouldn't. Um, those kinds of things."

In the literature, it is thought that although the classroom can help initiate the teaching of key concepts of the scope of practice, experiential learning strategies are essential in teaching scope of practice (Simones et al., 2010; Tanner, 2010). Perhaps conducting a simulation using both RNs and LPNs can improve upon their understanding of the scope of practice (Simones et al., 2010). As of now, the scope of practice has been mostly taught in the classroom. However, as the literature expresses, experiential learning strategies can be used to teach scope of practice to nurses effectively. These semistructured interviews with open-ended questions enabled the researcher to gather a variety of rich, contextual data about the experiences of experiential learning or hands-on learning with these LPN graduates.

Immediately following each interview (Appendix E), the researcher wrote in a journal her thoughts on how the interview went, any perceptions that were obtained, and the examination of any biases. Reflective journaling is an effective method to eliminate possible biases (Ortlipp, 2008). After a reflective break, the interview, in combination with any field notes made, were transcribed. The procedures for in vivo coding were utilized for interview data analysis. In vivo coding is applied to the participant's own words or quotations (Saldana, 2008). The following paragraphs describe information obtained using in vivo coding and inductive analysis.

The core themes were hands-on, clinicals, skills lab, intravenous catheter, and medication administration. Hands-on learning can be conducted in a classroom and clinicals are always conducted in a health care setting such as a hospital or medical office (Shin et al., 2010). In general, it was noted that the participants found hands-on learning as the best type of learning to help facilitate their practice. Some felt that more clinical was needed, but the overwhelming majority felt that hands-on learning in the lab setting worked best as it allowed a safe environment for mistakes. Participant ten stated, "hands-on worked best…I would have to say

repeated hands-on. Not just you do it once, and you never touch it again for the entire course, you know."

The inductive analysis process involves the researcher collecting data from each interview and analyzing it individually before compiling all the interview data together and analyzing the data (Saldana, 2008). This process was used to analyze the data gleaned from the qualitative interviews. The data from the inductive analysis is presented in Table 2.

Table 2. *Data Codes and Themes*

Code	Theme	Example of Theme	Frequency	Participant #
HO	Hands-on-Actively Practicing concepts, experiential learning, problem-based learning	"Hands-on is definitely at the top of the list, because like I said if we did not have that hands-on training if we just had information it is hard to put those two things together when you are actually with a patient."	48	1,2,3,4,5,6,7,8,9,10
CL	Clinicals-Learning outside the classroom	"In clinicals, we were put in multiple different places to give us different learning environments."	30	1,2,3,4,5,6,7,8,9,10
SL	Skills Lab-practicing nursing tasks a lab	"It was the lab mostly."	25	1,2,4,5,6,7,9,10
IV	Intravenous catheter-Practicing venipuncture	"IV starts is the number one thing that I became extremely good at in the clinical setting because of the training that I had in simulation and in our lab."	16	1,2,3,4,7,8,9,10
MA	Medication Administration-Giving fictional or real patients medications	"um out of nursing school because you are always passing medications on different patients so knowing the right doses, different type of medications you are giving, what contraindications are with those medications that may prevent you from giving them is something that I applied	14	1,2,3,4,5,7,8,9,10

Code	Theme	Example of Theme	Frequency	Participant #
		immediately out of school to my practice as a nurse."		
SN	Simulation-Live action practice	"Yea we did have a simulation lab where we did, we ran codes, IV starts, um catheter, all of our practical learning knowledge prior to going to an actual physical setting, we did it in simulation."	11	1,2,9,10
ST	Storytelling-Learning by another's experience	"She had a good way of storytelling that put you there, and you can tell by her storytelling about her caring and her patience."	10	2,4,5,7,8,10
PP	PowerPoint-Visual learning aids	"PowerPoints could be helpful just so we can see the topic that they are talking about, but when you are relying on, I did not care for instructors who had PowerPoint, who basically just went through reading their PowerPoints. PowerPoints might be good for seeing the topic, but I learned best from instructors that followed the topic using their own PowerPoints but would lecture the content in detail, for each point".	9	3,4,6,8,9
SP	Scope of Practice-What they can do	"Well … in the first quarter of our training they were like here is the webpage and here is how you find our way around it, and we were given a handful questions to answer by poking around the WAC and broken into groups, and that was pretty darn simple really. And then it's all up to facility policy of course."	8	2,3,4,5,6,7,8,9
AT	Assessment- Looking over the situation	"Then we would get to sort of practice it ourselves and kind of team up into pairs usually and be able to practice on each other.so I remember a lot of, we did a lot of assessments."	6	2,4,8,9

Code	Theme	Example of Theme	Frequency	Participant #
CA	Urinary catheters- placing a catheter in the bladder	"Occasionally twice a week, we'd be in the lab all day long to practice catheterization, IV placement, or NG tubes."	6	3,4,5,6
CE	Confidence- Empowerment	"Oh yea, it had a great impact. I think that learning stuff out of books it's necessary because it gives" you all the things you need to know, but once I got into hands-on, I got comfortable in what I was doing. It made a huge difference in my confidence like oh I really know what I am doing after reading it.	5	4,6,7,8,9
CT	Critical thinking- Seeing the big picture	"Yea, I think critical-thinking was like a big one for me to get used to. I think the common sense was just trying to be applied to a nursing standpoint."	4	2,5,7,9
NG	Nasogastric tubes- Skill that requires multiple steps	"But with the exception of IV placement and NG tube placement which we had the pleasure of practicing on each other; the rest of the time you are practicing with latex body parts or manikins, and it's just not the same."	4	3,5,7

As illustrated in Table 2 the most common themes were hands-on learning strategies, skills lab, medication administration, storytelling, simulation, and clinicals; which were found to be the most helpful strategies to facilitate their transition from student to practitioner. Many participants enjoyed storytelling over PowerPoints and lectures because it helped them relate to the real world more readily. Overall, hands-on learning strategies were found to be more favorable than passive learning strategies. Clinicals felt more realistic to the participants and enabled them to practice their skills learned in the lab or through simulation on a living patient.

The participants also felt experiential learning strategies assisted them greatly with skills that require a number of steps such as nasogastric tube insertion, indwelling urinary catheter insertion, and intravenous catheter insertion. The participants enjoy participating in critical thinking or activities that require them to anticipate care and plan for interruptions in care or complications of their patients' conditions. The analysis of the themes showed that the participants felt that experiential learning strategies were of great benefit to their transitions from scholar to practitioner.

Summary

Chapter 4 discussed the sample and setting for conduction of the data collection as well as research methodology and analysis process. There were no changes in the procedure from the research plan; the researcher followed the same guidelines as planned. The researcher conducted a basic qualitative study using semistructured, open-ended interview questions to collect data; the audio-recorded interviews were conducted via Skype and over the telephone. Due to the nature of the research question and based on the guidelines of Merriam & Tisdell (2016) it was determined that a qualitative study that included interviews would be the best method to explore the experiences of LPNs with experiential learning strategies in their nursing programs, and its effect on their transition from student to practitioner. The semistructured, open-ended questions were used to obtain descriptive data, which tells the story or perspectives of the participants (Merriam & Tisdell, 2016).

Inductive analysis and in vivo coding was used to analyze the data (Merriam & Tisdell, 2016; Saldana, 2008). The data sets were collected and transcribed after the researcher completed a reflective journal notation. The transcription was then sent to the participants to ensure that the transcription genuinely reflected their experience. To conclude the data collection

process, the transcriptions were examined for common themes, and codes were created that were attached to quotations using the Atlas.ti software. Atlas.ti software was used to analyze the data because it is a helpful qualitative tool. The most common themes, as depicted in Table 4.2, were hands-on learning strategies, skills lab, storytelling, simulation, medication administration, and clinical activity. In Chapter 5, these data sets are discussed and interpreted.

CHAPTER 5. DISCUSSION, IMPLICATIONS, AND RECOMMENDATIONS

Summary of the Results

The purpose of this basic qualitative study was to explore the experiences of the licensed practical nurses (LPNs) with experiential learning strategies during their nursing programs and determine their benefit in their transition from student to practitioner. The study is needed because while there is an increase in the population of individuals with complex illnesses and the elderly, there has been a decrease in the number of practice-ready nurses (Mashburn et al., 2009). It has been noted that experiential learning is beneficial to registered nurses (RNs) and Baccalaureate of Science in nursing degree prepared nurses (BSNs) (Dalton et al., 2015; Kaddoura, 2010). This study sought to discover if experiential learning strategies are beneficial to LPNs.

The methodology that was used for the study was a basic qualitative study, and the data sets were collected by semistructured, open-ended interview questions. The qualitative method is the best method to collect data, as the purpose was to explore the experiences of LPNs with experiential learning. The use of these interviews enabled the researcher to learn the experiences of the participants (Merriam & Tisdell, 2016).

The literature review yielded a great deal of information on the use of experiential learning strategies, however, at the time of the completion of this dissertation, there was still a

limited amount of literature available on the use of experiential learning strategies and LPNs. Day et al. (2015) used experiential learning strategies to teach delegation to RNs. If this was applied to LPN studies, it might help them to improve understanding of their scope of practice. Much of the literature found related to RNs but there were a few articles that related to the use of these strategies with LPNs (Faulk et al., 2008; Melrose & Wishart, 2013; Simones et al., 2010; Tagliareni et al., 2012; Walker et al., 2013). Most of the articles detailed research that determined that experiential learning strategies such as simulation were extremely beneficial in improving student outcomes, critical thinking, and clinical skills (Gore & Thomson, 2016; Macaden, Smith, & Croy, 2016).

The central research question that guided the study was, from the perspectives of the LPN graduates, how did experiential learning strategies or simulation enhance their preparedness for the transition to the clinical setting upon completion of their education? The purpose of the study was to learn the meanings that the participants had attributed to their experiences with experiential learning strategies. Many of the participants said that hands-on learning (experiential learning) greatly aided in their transition from student to practitioner.

Interview questions were developed to address the LPNs' definition of experiential learning, any correlation with increased confidence in clinical skills with the use of certain learning strategies, how learning strategies increased understanding of clinical techniques, types of experiences that they had with experiential learning, the influence that experiential learning had on the academic progress, and what helped them to have a better understanding of scope of practice.

Seven common themes that arose from the data collection process included hands-on learning strategies, skills lab, storytelling, simulation, medication administration, intravenous

catheter, and clinicals. Clinicals are events where students perform clinical skills in actual clinical settings such as medical offices, hospitals, long-term care facilities, and more under the supervision of a nursing instructor (Beattie et al., 2010; Maruca et al., 2015). These themes highlight what learning strategies were most useful in their transition and the skills in which they were utilized. All seven themes correlated with what was found as beneficial with RN students; there was limited literature available on LPN students and the use of experiential learning strategies (Bajgoric et al., 2014; Baker & Anandhi, 2013; Miller, 2014; "Practical nursing," 2015; Rush et al., 2015; Rutherford-Hemming, 2012; Sarver et al., 2015).

Discussion of the Results

Nursing practice is deeply rooted in nursing research; every intervention that is performed in nursing is evidenced based or based on research (Kenner, 2017). There have been studies on the use and benefits of experiential learning strategies in RN students (Beattie et al., 2010; Nelson et al., 2013; Tosterud et al., 2013). However, there is a limited amount of research devoted to the use of experiential learning strategies and LPNs (Baker & Anandhi, 2013; Garbin & Chmielewski, 2013; Miller, 2014).

The findings of this study supported the use of increased experiential learning strategies with LPNs during their nursing programs. The results of this study address the main research question: From the perspectives of the LPN graduates, how did experiential learning strategies or simulation enhance their preparedness for the transition to the clinical setting upon completion of their education? All of the participants discussed and gave examples of how various experiential learning strategies enhanced and aided their transition from student to practitioner. Overall based on the results of the study, the participants stated that the experiential learning strategies that they experienced greatly enhanced their preparation as it allowed them to practice in a controlled

82

setting before performing the tasks on a patient. Based on the statements from the participants the more engaging the activity was, the more they learned, retained and transferred. Transference is critical in nursing education because sometimes content that is solely lectured is not always easily transferable to clinical practice by students. The participants also included thoughts on how experiential learning increased their critical thinking and confidence to practice effectively as nurses. During the interviews, all of the participants depicted stories about concepts they remembered from nursing school that helped them in their practice. Table 4.2 expressed the common themes and denoted quotes from the participants to support the themes. There is substantial evidence in the data of this study to support the use of experiential learning techniques with LPN students during their nursing programs, which is further substantiated in the current literature demonstrating experiential learning technique success in the RN student populations (Beattie et al., 2010; Brown et al., 2015; Byrd et al., 2015; Cazzell & Anderson, 2016; Dalton et al., 2015; Day et al., 2015; Dickman et al., 2013; Farid et al., 2012; Felton & Royal, 2015; Gore & Thomas, 2016). The data from this study also encourages the discussion of repeated exposure to experiential learning strategies ensuring knowledge retention.

Conclusions Based on the Results

Much of the literature reviewed for this study, uncovered support of experiential learning with RN students (Heller et al., 2013; Hill, 2017; Kaddoura, 2010; Kim et al., 2012; Kirkman, 2013; Kratzke & Bertolo, 2013; Lisko & O' Dell, 2010; Macaden et al., 2016) but there was limited research that explored its use and benefits with LPN students (Garbin & Chmielewski, 2013; Humbles et al., 2017; Kaufman, 2009; Miller, 2014). The results of this study determined that the LPN graduates reported that their experiences with experiential learning strategies in

their nursing programs were very beneficial in their transition from student to practitioner and enhanced their clinical skills and critical-thinking skills.

Numerous quotes described the impact that experiential learning strategies had on their academic and clinical experiences. For example, participant five stated that experiential learning strategies should be increased in the nursing program. Participant five gave this very informative statement,

"Definitely hands-on stuff. Being able to apply what you are learning in a hands-on way. I think more exposure to different things that are more applicable now though. Having to make like snap decisions. So that would be more like leadership role encouraged. Because you know in nursing school you are so babied that all of sudden when you are out on your own you are like oh my god I have to deal with this. So maybe like getting a little more exposure to taking on a little more when you're on the floor."

This statement demonstrated that he/she finds experiential learning strategies or hands-on learning so beneficial to his/her learning experience that he/she thinks that his/her program should increase the amount that is included. The participant found that experiential learning strategies encouraged thinking on your feet. However, this participant also thought that more leadership activities should be included in nursing school to prepare students to be able to be out on their own when they are practicing as nurses.

Participant ten had this to say of hands-on learning:

"All the stuff we did in clinical was hands-on, and for me, that was the best experience. Learning something in the book doesn't do you any good when you are actually faced with the stuff in front of you, because you totally forget steps and everything. So, um things like starting an IV or taking out someone's catheter, stuff like that. Doing it in clinical is what teaches people,

not talking about theory in the classroom. So that's one example. And another example would be the IV; I had to discontinue an IV on somebody in clinical. That was a good learning experience with hands-on."

These quotes and the others included in the results section provided evidence that the participants view experiential learning strategies as beneficial to their learning experience. The participants found the experience of being able to practice a task in a controlled setting first (hands-on or experiential learning) was beneficial in improving their confidence and clinical skills in a clinical setting. The results of the study also showed that the participants found storytelling to be a beneficial method of instruction as well. The participants' statements about their scope of practice also showed that more instruction on the scope of practice with engaging activities is needed for adequate preparation to practice. The findings of this study will challenge future researchers to focus more on the use of these strategies with LPNs, as they provide most of the care that the elderly and those with chronic illnesses receive (Macaden et al., 2016; Maruca et al., 2015; Matthews, 2011; Melrose & Wishart, 2013; "Practical nursing," 2015; Siegal & Young, 2010; Silvestre et al., 2015; United States Department of Health & Human Services ACL, 2015).

Comparison of Findings with Theoretical Framework

and Previous Literature

The findings of this research study support the use of experiential learning strategies that are rooted in Kolb's (1981) theory of experiential learning. According to Smith (2010), Kolb's theory of experiential learning involves, "[a]concrete experience followed by [b] observation and experience followed by [c] forming abstract concepts followed by [d] testing in new situations" (p. 1, para 7). The participants in this study also found experiential learning strategies helpful in

their transition from student to practitioner with an emphasis on the scope of practice and the enhancement of critical skills. However, there was limited research obtained on the use of experiential learning strategies with LPNs (Hill, 2017).

Many of the participants were able to recall specific instances of learning strategies that were helpful to them and made the learning process memorable. Examples of these strategies were hands-on learning in the laboratory and simulation, storytelling during lectures, and shadowing with coaching from clinical instructors and practicing nurses. Experiential learning strategies enabled the learner to practice critical skills in a controlled learning environment and reflect on their practice to enable knowledge retention and transference; this may improve clinical practice and confidence (Akella, 2010; Shin et al., 2010; Tanner, 2010). Practicing these skills in a safe setting where they could get effective feedback was a desirable experience for the participants much like those in the Felton and Royal (2015). Most of the participants found storytelling to be a very helpful and engaging method of instruction, as it helped them to see how concepts being taught related to their future practice. Storytelling also enabled the learner to experience and learn from the experience of an actual practitioner as it relates to what content is being covered (Haigh & Hardy, 2010). Some of the participants found coaching and shadowing during clinicals helpful in boosting their confidence to perform tasks in the clinical setting. Shadowing and coaching allowed the learner to experience the feeling of performing a clinical task on a patient with an expert providing them prompt and constructive feedback, which may increase feelings of self-efficacy (Eyler, 2009; Hill, 2017). The participants in this study verbalized the support in the use of these learning techniques.

The results of this study supported the use of experiential learning strategies in LPN programs and invite the exploration of these strategies in repeated occurrences to help teach LPN

students these critical skills and help them with retention, as found in the Abe et al. (2013) study with registered nursing students. In the Abe et al. (2013) study the participants were found to have increased competence after repeated exposure to experiential learning strategies. Experiential learning strategies can be used more effectively in LPN nursing programs and used in nurse residency programs upon the LPNs being hired into their first nursing job.

Interpretation of the Findings

The findings of this study supported the use of experiential learning strategies in LPN programs. The value of the use of experiential learning strategies is thought to be largely due to the evidence presented in the literature review. However, the statements from the participant add value to the examination of its use as well. The participants' overall statements show that their reported experiences with experiential learning have greatly improved their confidence, clinical skills, and critical thinking. They stated that they retained the concepts that were taught with experiential learning strategies. They verbalized that repeated exposure to experiential learning strategies when learning a new concept is preferred and that storytelling was more engaging than a simple lecture and more applicable to their practice. They reported that more exposure to experiential learning strategies could be used to improve their leadership skills as well. Many researchers have determined the use of experiential learning strategies with RN students (Abe et al., 2013; Akella, 2010; Kim et al., 2012; Kirkman, 2013; Tosterud et al., 2013). Another plausible reason that the participants preferred experiential learning strategies would be that Kolb's (1981) experiential learning theory is evidenced to improve learning retention. These results show that the use of experiential learning strategies with LPNs should be further increased and studied.

Limitations

There were a few limitations that could have affected the outcome of this study. One limitation of this study is that it had a sample size of only ten participants. Others would be that it only used graduate LPNs and not current LPN students, and it only used Kolb's (1981) theory of experiential learning and not some other learning theory. Additionally, because the researcher moved during the middle of data collection, many of the participants were from the Northern most state whereas about 30% of the sample size came from the latter. The researcher attempted to conduct the study in the state of residence so that the interviews could be face to face, however, due to the researcher's relocations and participant preference the interviews were conducted through Skype and the telephone. Because a qualitative study limits the generalization of studies, the study may have produced different results if the sample was more evenly distributed (Lodico et al., 2010). This was a qualitative study that explores the experiences of the LPNs with experiential learning strategies in their nursing programs, but a quantitative study that compares their progress or abilities using an evidence-based scale or tool may yield more experimental data (Merriam & Tisdell, 2016).

Implications for Practice

The findings in qualitative studies cannot be generalized (Merriam & Tisdell, 2016). The implications of this study are based on the extensive literature review and the data collected from this study. Individuals involved in the training of LPNs can use this study to examine the use of LPNs with experiential learning strategies and how it affected their transition from scholar to practitioner. After reading this study perhaps the instructors and stakeholders in LPN education will develop or explore strategies to increase the amount experiential learning strategies in LPN training programs. Nursing researchers continue to add to the body of knowledge about

experiential learning and its use with RN students, but perhaps due to the findings of this study, they will encourage more investigation of these strategies with LPN students during their nurse training programs.

Recommendations for Further Research

Due to the small sample size and concentration in the two Western states, it is recommended that another study with a larger sample, perhaps from other states to determine if locality will change perspectives. Another recommendation would be to collect data using an online survey instead of qualitative interviews, as many potential participants were not comfortable with an actual interview but would have preferred online surveys. The participants verbalized discomfort about driving out to meet a stranger and feeling that their anonymity may be compromised if others overheard the interview. Using online surveys may enable the researcher to recruit more participants for a more evenly distributed sample (Lodico et al., 2010; Merriam & Tisdell, 2016). Research also should be conducted to determine if classroom learning can be translated into effective practice and if there is a more effective method to teach experiential learning strategies into the classroom; this could validate the practice and identify if changes are necessary. Storytelling was also found to be a very popular method of instruction; perhaps further research is needed on increasing or exploring its effectiveness. This study has provided some validation on the perceived effectiveness of experiential learning strategies with LPNs and created questions on the effectiveness of other instructional methods such as storytelling, active learning strategies, problem-based learning, and more.

Conclusion

This study analyzed the experiences of LPN graduates with experiential learning strategies during their nurse education programs to determine their value as they transition from

student to practitioner. It is imperative to adequately train LPNs because there is a growing need to address the problem of a smaller number of practice-ready nurses to care for the growing number of individuals living with complex illness and increased population of the elderly (Tagliareni et al., 2012; United States Department of Health & Human Services ACL, 2015; Valente-Ribeiro et al., 2017; Whittingham, 2012; Wood, 2017). Experiential learning strategies have proven to be successful in teaching RNs critical skills and improve their transition from student to practitioner (Abe et al., 2013; Gantt, 2010a; Simones et al., 2010; Suva et al., 2015; Ulrich, 2014; Walker et al., 2013; Wilkes et al., 2014). This study determined that these LPNs' believed their experiences with experiential learning strategies in their nursing programs were also beneficial as they gave multiple examples that experiential learning strategies were crucial to their transition from a student role into their practitioner role, and development of their critical skill set utilized to care for patients upon graduation. The data from this study developed two further questions such as, (a) are the experiential learning strategies used in LPN nursing programs adequate? (b) do LPN educators understand the extent that experiential learning strategies benefit their students?

References

Abe, Y., Kawahara, C., Yamashina, A., & Tsuboi, R. (2013). Repeated scenario simulation to improve competency in critical care: A new approach for nursing education. *American Journal of Critical Care*, *22*(1), 33-40. doi:10.4037/ajcc2013229

Adams, M. H. (2015). President's message: Moving beyond our comfort zone to propel nursing education toward reform and transformation. *Nursing Education Perspectives*, *36*(1), 3-4. Retrieved from http://journals.lww.com/neponline/Citation/2015/01000/Moving_Beyond_Our_Comfort_Zone_to_Propel_Nursing.1.aspx

Akella, D. (2010). Learning together: Kolb's experiential theory and its application. *Journal of Management and Organization, 16*(1), 100-112. doi:10.5172/jmo.16.1.100

Aldridge-Bent, S. (2011). Advanced physical assessment skills: Implementation of a module. *British Journal of Community Nursing, 16*(2), 84-88. doi:10.12968/bjcn.2011.16.2.84

Andrade-Dias, J. A., Scherlowski-Leal David, H. M., & da Costa Vargens, O. M. (2016). Science nursing and critical-thinking: Epistemological reflections. *Journal of Nursing, 4*(10), 3669-3675. doi:10.5205/reuol.9681-89824-1-ED.1004sup201619

Arbogast, M. (2010). Factors influencing use of unlicensed assistive personnel in the intra-operative environment. *Journal of Legal Nurse Consulting, 21*(2), 8-12. Retrieved from http://www.aalnc.org/d/do/308

Bajgoric, S., Appiah, J., & Wass, V. (2014). Sustainability in clinical skills teaching. *The Clinical Teacher, 11*(4), 243-246. doi:10.1111/tct.12141

Baker, L., & Anandhi, A. (2013). Student-centered teaching through experiential learning and its assessment. *North American Colleges and Teachers of Agriculture Journal*. 86-88. Retrieved from https://www.nactateachers.org/images/Jun13_3-Student-centered_Teaching_through_Experiential_Learning_and_its_Assessment.pdf

Ball, K., Doyle, D., & Oocumma, N. I. (2015). Nursing shortages in the OR: Solutions for new models of education. *Association of periOperative Registered Nurses Journal, 101*(1), 115-136. doi.org/10.3912/OJIN.Vol22No03PPT54

Banaszak-Holl, J., Castle, N. G., Lin, M. K., Shrivastwa, N., & Spreitzer, G. (2015). The role of organizational culture in retaining nursing workforce. *The Gerontologist, 55*(3), 462-471, doi:10.1093/geront/gnt129

Barrott, J., & Hope, A. (2011). Developing an equipment library for clinical skills and simulation training. *British Journal of Community Nursing, 16*(8), 399-401. Doi:10.12968/bjcn.2011.16.8.399

Beattie, B., Koroll, D., & Price, S. (2010). Designing nursing simulation clinical experiences to promote critical inquiry. *College Quarterly, 13*(1).

Bennett, L. L. (2017). The gap between nursing education and clinical skills. *Association of Black Nursing Faculty Journal, 28*(4), 96-102. Retrieved from http://web.b.ebscohost.com/abstract?direct=true&profile=ehost&scope=site&authtype=crawler&jrnl=10467041&AN=125885622&h=2q84kouOrLce5fPJk5d%2bLQsK5nnHqMJQkkurgQyxm6YNWxCFl6QeST%2fySK7RRgESo0bGslbL4AYKrqdFd4fbkg%3d%3d&crl=c&resultNs=AdminWebAuth&resultLocal=ErrCrlNotAuth&crlhashurl=login.aspx%3fdirect%3dtrue%26profile%3dehost%26scope%3dsite%26authtype%3dcrawler%26jrnl%3d10467041%26AN%3d125885622

Bergdahl, E., & Bertero, C. (2014). The myth of induction in qualitative nursing research. *Nursing Philosophy, 16*(2), 110-120. doi:10.1111/nup.12073

Brown, C., Baker, M. Jessup, M., & Marshall, A. P. (2015). EN2RN-transitioning to a new scope of practice. *Contemporary Nurse, 50*(2–3), 196–205. Retrieved from http://dx.doi.org/10.1080/10376178.2015.1111766

Brown, M., & Bostic, D. (2016). Strengthening the clinical laboratory with simulation-enhanced interprofessional education. *Clinical Laboratory Science, 29*(4), 237-240. Retrieved from https://www.asclsce.org/c113262/FOCUS-Interprofessional-Simulation

Bultas, M. W., Hassler, M., Ercole, P. M., & Rea, G. (2014). Effectiveness of high-fidelity simulation for pediatric staff nurse education. *Pediatric Nursing, 40*(1), 27-42. Retrieved from https://www.ncbi.nlm.nih.gov/pubmed/24757918

Byrd, M. E., Costello, J., Gremel, K., Schwager, J., Blanchette, L., & Malloy, T. E. (2012). Political astuteness of baccalaureate nursing students following an active learning experience in health policy. *Public Health Nursing, 29*(5), 433-443. doi:10.1111/j.1525-1446.2012. 01032.x

Cant, R. P. & Cooper, S. J. (2011). The benefits of debriefing as formative feedback in nurse education. *Australian Journal of Advanced Nursing, 29*(1), 37-47. Retrieved from https://pdfs.semanticscholar.org/dac9/a302aae77452a7ad458e07874a77138055e5.pdf

Cazzell, M., & Anderson, M. (2016). The impact of critical-thinking on clinical judgment during simulation with senior nursing students. *Nursing Education Perspectives*, *37*(2), 83-90. Retrieved from https://www.ncbi.nlm.nih.gov/pubmed/27209866

Clarke, S. (2014). The value and contribution of qualitative research to inform nurse education and policy in response to the child's experience of hospital. *Issues in Comprehensive Pediatric Nursing, 37*(3), 153-167. doi:10.3109/01460862.2014.919366

Coffman, S. (2016). Faculty experiences teaching caring in the simulation lab. *International Journal for Human Caring, 20*(4), 197-201. doi: https://doi.org/10.20467/1091-5710-20.4.197

Cook, P. (2009). Is your extended practice safe? *Kai Tiaki Nursing New Zealand, 15*(2). Retrieved from https://www.thefreelibrary.com/Is+your+extended+practice+safe%3F+The+Nursing+Council+is+to+consult+on+...-a0196383002

Currey, J., Eustace, P., Oldland, E., Glanville, D., & Story, I. (2015). Developing professional attributes in critical care nurses using team-based learning. *Nurse Education in Practice, 15*(3), 232-238. doi:10.1016/j.nepr.2015.01.011

Dalton, L., Levett-Jones, T., Gee, & T. (2015). Using clinical reasoning and simulation-based education to 'flip' the enrolled nurse curriculum. *Australian Journal of Advanced Nursing, 33*(2), 28-34. Retrieved from http://www.ajan.com.au/Vol33/Issue2/4Dalton.pdf

Day, L., Turner, K., Anderson, R. A., Mueller, C., McConnell, E. S., & Corazzini, K. N. (2015). Teaching delegation to RN students. *Missouri State Board of Nursing, 5-8.* Retrieved from http://www.nursingald.com/uploads/publication/pdf/1142/MO2_15.pdf

DeCoux Hampton, M. (2012). Constructivism applied to psychiatric-mental health nursing: An alternative to supplement traditional clinical education. *International Journal of Mental Health Nursing, 21*(1), 60-68. doi:10.1111/j.1447-0349.2011. 00755.x

Dickman, K., Milligan, R., & Kodadek, M. (2013). Chronic care model: A framework for experiential learning during clinical rotation. *Journal of Nursing Education*, *52*(11), 663-664. doi: http://dx.doi.org/10.3928/01484834-20131022-11

Donaworth, S. L. (2017). Making the case for adult-gerontology critical care nurse practitioner fellowships. *Online Journal of Issues in Nursing, 22*(3), 1. doi:10.3912/OJIN.Vol22No03PPT54

Dowie, I., & Phillips, C. (2011). Supporting the lecturer to deliver high-fidelity simulation. *Nursing Standard, 25*(49), 35-40. Retrieved from https://journals.rcni.com/nursing-standard/supporting-the-lecturer-to-deliver-highfidelity-simulation-ns2011.08.25.49.35.c8651

Dy, S., Major-Joynes, B., Pegues, D., & Bradway, C. (2016). A nurse-driven protocol or removal of indwelling urinary catheters across a multi-hospital academic healthcare system. *Urologic Nursing*, *36*(5), 243-249. doi:10.7257/1053816X.2016.36.5.243

Eagar, S. C., Cowin, L. S., Gregory, L., & Firtko, A. (2010). Scope of practice conflict in nursing: A new war or just the same battle? *Contemporary Nurse, 36*(1-2), 86-95. doi:10.5172/conu.2010.36.1-2.086.

Eyler, J. (2009). The power of experiential education. *Liberal Education, 95*(4), 24-31. Retrieved from https://www.aacu.org/publications-research/periodicals/power-experiential-education

Facione, P. (2013). Critical-thinking: What it is and why it counts. Retrieved from https://www.nyack.edu/files/CT_What_Why_2013.pdf

Farid, F., & Ali, S., Feroz. (2012). Problem-based learning in clinical nursing education. *International Journal of Nursing Education, 4*(2), 14-16. doi:10.5539/ies.v7n7p136

Faulk, D., Parker, F., Lazenby, R., & Morris, A. (2008). Broadening the knowledge of the LPN long-term care provider: A pilot study. *Educational Gerontology*, 34, 89-100. doi:10.1080/036012701764017.

Felton, A., & Royal, J. (2015). Skills for nursing practice: Development of clinical skills in pre-registration nurse education. *Nurse Education in Practice, 15*(1), 38-43. doi: http://dx.doi.org/10.1016/j.nepr.2014.11.009

Fero, L. J., Witzberger, C. M., Wesmiller, S. W., Zullo, T. G., & Hoffman, L. A. (2008). Critical-thinking ability of new graduate and experienced nurses. *Journal of Advanced Nursing, 65*(1), 139-148. doi:10.1111/j.1365-2648.2008.04834.x

Fey, M. K. & Jenkins, L. S. (2015). Debriefing practices in nursing education programs: Results from a national study. *Nursing Education Perspectives, 36*(6), 361-366. doi:10.5480/14-1520

Flynn, F. (2016). Progressive care nurses improving patient safety by limiting interruptions during medication administration. *Critical Care Nurse, 36*(4), 19-35. Retrieved from http://ccn.aacnjournals.org/content/36/4/19.full

The Foundation for Critical Thinking. (2015). *Defining critical thinking*. Retrieved from http://www.criticalthinking.org/pages/defining-critical-thinking/766

Fourie, A. (2015). Peripheral intravenous catheter performance: Investigating peripheral intravenous catheter dwell times. *Professional Nurse Today, 19*(3), 7-11. Retrieved from http://www.pntonline.co.za/index.php/PNT/article/view/786

Frith, K. H., Anderson, E. F., Tseng, F., & Fong, E. A. (2012). Nurse staffing is an important strategy to prevent medication errors in community hospitals. *Nursing Economics, 30*(5), 288-294. Retrieved from https://www.nursingeconomics.net/necfiles/specialissue/2012/Frith_Staffing.pdf

Galloway, S. (2009). Simulation techniques to bridge the gap between novice and competent healthcare professionals. *Online Journal of Issues in Nursing, 14*(2), 1-9. Retrieved from

http://www.nursingworld.org/MainMenuCategories/ANAMarketplace/ANAPeriodicals/
OJIN/TableofContents/Vol142009/No2May09/Simulation-Techniques.html

Gantt, L. T. (2010a). Strategic planning for skills and simulation labs in colleges of nursing.
Nursing Economic$, 28(5), 308-313. Retrieved from
https://www.ncbi.nlm.nih.gov/pubmed/21158251

Gantt, L. T. (2010b). Using the Clark simulation evaluation rubric with associate degree and
baccalaureate nursing students. *Nursing Education Perspectives, 31*(2), 101-105.
Retrieved from https://www.ncbi.nlm.nih.gov/pubmed/20455367

Garbin, M. G., & Chmielewski, C. M. (2013). Job analysis and role delineation: LPN/LVNs and
hemodialysis technicians. *Nephrology Nursing Journal*, *40*(3), 225-241. Retrieved from
https://www.ncbi.nlm.nih.gov/pubmed/23923802

Gillham, B. (2005). *Research interviewing: The range of techniques*. Berkshire, GBR: McGraw-
Hill Professional Publishing.

Girden, E. R., & Kabacoff, R. I. (2011). Evaluating research articles: From start to finish.
Thousand Oaks, CA: Sage.

Gore, T., & Thomson, W. (2016). Use of simulation in undergraduate and graduate education.
AACN Advanced Critical Care, 27(1), 86-95. Retrieved from
http://dx.doi.org.library.capella.edu/10.4037/aacnacc2016329

Green, H. (2014). Use of theoretical and conceptual frameworks in qualitative research. *Nurse
Researcher*, *21*(6), 34-38. doi:10.7748/nr.21.6.34.e1252.

Haigh, C., & Hardy, P. (2010). Tell me a story: A conceptual exploration of storytelling in
healthcare education, *Nurse Education Today*, *31*(4), 408-411.
doi:10.1016/j.nedt.2010.08.001

Hamilton, J. G., & Klebba, J. M. (2011). Experiential learning: A course design process for
critical-thinking, *American Journal for Business Education, 4*(12), 1-12.
doi:10.19030/ajbe.v4i12.6608

Heller, B. R., Oros, M. T., & Durney-Crowley, J. (2013). *The future of nursing education: Ten
trends to watch. National League for Nursing*. Retrieved from
http://www.nln.org/nlnjournal/infotrends.htm

Hepp, S. L., Suter, E., Jackson, K., Deutschlander, S., Makwarimba, E., Jennings, J., &
Birmingham, L. (2015). Using an interprofessional competency framework to examine
collaborative practice. *Journal of Interprofessional Care, 29*(2), 131-137.
doi:10.3109/13561820.2014.955910

Hill, B. (2017). Research into experiential learning in nurse education. *British Journal of Nursing, 26*(16), 932-938. Retrieved from https://www.magonlinelibrary.com/doi/abs/10.12968/bjon.2017.26.16.932

Houghton, C., Casey, D., Shaw, D., & Murphy, K. (2013). Rigour in qualitative case-study research. *Nurse researcher*, *20*(4), 12-17. Retrieved from https://www.ncbi.nlm.nih.gov/pubmed/23520707

Humbles, P. L., McNeal, G. J., & Paul-Richiez, D. (2017). Interprofessional collaborative practice in nursing education. *Journal of Cultural Diversity, 24*(2), 54-59.

Ingham-Broomfield, R. (2015). A nurses' guide to qualitative research. *Australian Journal of Advanced Nursing, 32*(3), 34-40. Retrieved from http://www.ajan.com.au/Vol32/Issue3/4Broomfield.pdf

Institute of Medicine (IOM). (2010). The future of nursing: Leading change, advancing health. Retrieved from http://books.nap.edu/openbook.php?record_id=12956&page=R1

Janzen, K. J., Melrose, S., Gordon, K., & Miller, J. (2013). RN means real nurse: Perceptions of being a real nurse in a post LPN BN bridging program. *Nursing Forum*, *48*(3), 165-173. doi: http://doi.org.library.edu/10.11111/nuf.12026

Kaddoura, M. (2010). New graduate nurses' perceptions of the effects of clinical simulation on their critical-thinking, learning, and confidence. *Journal of Continuing Education in Nursing, 41*(11), 506-516. doi:10.3928/00220124-20100701-02

Kalb, K. A., O'Conner-Von, S. K., Brockway, C., Rierson, C. L., & Sendelbach, S. (2015). Evidence-based teaching practice in nursing education: Faculty perspectives and practices. *Nursing Education Perspectives, 36*(4), 212-219. doi:10.5480/14-1472

Kaufman, K. (2009). Reinvigorating a key research program: The NLN's collection of LPN/LVN educational statistics. *Nursing Education Perspectives*, *30*(6), 404-405.

Kenner, C. A. (2017). Trends in US nursing research: Links to global healthcare issues. *Journal of Korean Academy of Nursing Administration, 23*(1), 1-7. Retrieved from http://dx.doi.org.library.capella.edu/10.11111/jkana.2017.23.1.1

Kim, H. Y., Ko, E., & Lee, E. S. (2012). Effects of simulation-based education on communication skill and clinical competence in maternity nursing practice. *Korean Journal of Women Health Nursing, 18*(4), 312-320. doi:10.4069/kjwhn.2012.18.4.312

Kirkman, T. R. (2013). High fidelity simulation effectiveness in nursing students' transfer of learning. *International Journal of Nursing Education Studentship, 10*(1), 1-6. doi:10.1515/ijnes-2012-0009

Kolb, D. A. (1981). Experiential learning theory and the learning style inventory: A reply to Freedman and Stumpf. *Academy of Management Review*, *6*(2), 289-296. Retrieved from http://dx.doi.org/10.5465/AMR.1981.4287844

Kolb, D. A. (1984). *Experiential learning: Experience as the source of learning and development*. Retrieved from http://www.learningfromexperience.com/images/uploads/process-of-experiential-learning.pdf

Kratzke, C., & Bertolo, M. (2013). Enhancing students' cultural competence using cross-cultural experiential learning. *Journal of Cultural Diversity, 20*(3), 107-111. Retrieved from https://www.ncbi.nlm.nih.gov/pubmed/24279125

Lanier, J. (2017). Delegation by licensed nurses. *Ohio Nurses Review. 92*(3), 20-27

Lavoie, P., Pepin, J., & Cossette, S. (2015). Development of a post-simulation debriefing intervention to prepare nurses and nursing students to care for deteriorating patients. *Nurse Education in Practice, 15*(3), 181-191. Retrieved from http://dx.doi.org/10.1016/j.nepr.2015.01.006

Lee, G., Pickstone, N., Facultad, J., & Titchener, K. (2017). The future of community nursing: Hospital in home. *British Journal of Community Nursing, 22*(4), 174-180. doi:10.12968/bjcn.2017.22.4.174.

Lisko, S. A., & O'Dell, V. (2010). Integration of theory and practice: Experiential learning theory and nursing education. *Nursing Education Perspectives, 31*(2), 106-108. Retrieved from https://www.ncbi.nlm.nih.gov/pubmed/20455368

Lodico, M. G., Spaulding, D. T., & Voegtle, K. H. (2010). *Methods in educational research: From theory to practice*. (2nd ed.). San Francisco, CA: Jossey-Bass.

Macaden, L., Smith, A., & Croy, S. (2016). Simulation on sensory impairment in older adults: nursing education. *British Journal of Nursing, 26*(19), 1057-1064. doi:10.12968/bjon.2017.26.19.1057

Maruca, A. T., Diaz, D. A., Kuhnly, J. E., & Jeffries, P. R. (2015). Enhancing empathy in undergraduate nursing students: An experiential ostomate simulation. *Nursing Education Perspectives, 36*(6), 367-371. doi:10.5480/15-1578

Matthews, L. M. (2011). *Problem-based learning and knowledge transfer in a vocational nursing program* (Order No. 3460637). Available from ProQuest Education Journals. (878541064). Retrieved from https://search.proquest.com/openview/cb3ab91bfb5de3597fa422eb63700037/1?pq-origsite=gscholar&cbl=18750&diss=y

McClellan, R., & Hyle, A. E. (2012). Experiential learning: Dissolving classroom and research borders. *Journal of Experiential Education*, *35*(1), 238-252. Retrieved from http://journals.sagepub.com/doi/abs/10.1177/105382591203500103

McCusker, K., & Gunaydin, S. (2015). Research using qualitative, quantitative or mixed methods and choice based on the research. *Perfusion, 30*(7), 537-542. doi:10.1177/0267659114559116

McLaughlin, D. E., Freed, P. E., & Tadych, R. A. (2006). Action methods in the classroom: Creative strategies for nursing education. *International Journal of Nursing Education Studentship, 3*(1), 1-16. doi:10.2202/1548-923X.1229

McLeod, S. A. (2013). *Kolb-Learning styles*. Retrieved from www.simplypsychology.org/learning-kolb.html

McMullen, M. A., & McMullen, W. F. (2009). Examining patterns of change in the critical-thinking skills of graduate nursing students. *Journal of Nursing Education, 48*(6), 310-318. doi:10.9999/01484834-20090515-03

Melrose, S., & Wishart, P. M. (2013). Resisting, reaching out and re-imaging to independence: LPN's transitioning towards BNs and beyond. *International Journal of Nursing Education Studentship, 10*(1), 1-7. doi:10.1515/ijnes-2012-003

Merriam, S. B. & Tisdell, E.J. (2016). *Qualitative research: A guide to design and implementation* (4th ed.). San Francisco, CA: Jossey-Bass.

Merriam, S. B. A. (2002). Qualitative research in practice: Examples for discussion and analysis (1st ed.). San Francisco, CA: Jossey-Bass.

Miller, K. (2014). The effect of simulation activities on Maternal-Newborn Knowledge in a practical nursing course: Implications for practice. *International Journal of Childbirth Education, 29*(1), 41-45.

Morrell, N., & Ridgway, V. (2014). Are we preparing student nurses for final practice placement? *British Journal of Nursing, 23*(10), 518-523.

National League for Nursing. (2014). *Headlines from the NLN: NLN releases a vision for recognition of the role of the licensed practical/vocational nurses in advancing the nation's health*. Retrieved from www.nln.org/facultyprograms/pracicalnursing/visionstatement.pdf

Nelson, J. M., Cook, P. F., & Ingram, J. C. (2013). Utility of the theory of planned behavior to predict nursing staff blood pressure monitoring behaviors. *Journal of Clinical Nursing*, 23, 461-470. doi:10.1111/jocn.12183

Norman, J. (2012). Systematic review of the literature on simulation in nursing education. *ABNF Journal, 23*(2), 23-28. Retrieved from https://www.ncbi.nlm.nih.gov/pubmed/22774355

Ortlipp, M. (2008). Keeping and using reflective journals in qualitative research process. *The Qualitative Report, 13*(4), 695-705. Retrieved from http://www.nova.edu/ssss/QR/QR13-4/ortlipp.pdf

Partin, J. L., Payne, T. A., & Slemmons, M. F. (2011). Students' perceptions of their learning experiences using high-fidelity simulation to teach concepts relative to obstetrics. *Nursing Education Perspectives, 32*(3), 186-188. Retrieved from https://www.ncbi.nlm.nih.gov/pubmed/21834381

Pearson, A., Jordan, Z., Lockwood, C., & Aromataris, E. (2015). Notions of quality and standards for qualitative research reporting. *International Journal of Nursing Practice,* 21, 670–676. doi:10.1111/ijn.12331

Power, A., & Cole, M. (2017). Active blended learning for clinical skills acquisition: Innovation to meet professional expectations. *British Journal of Midwifery, 25*(10), 668-670. Retrieved from https://www.magonlinelibrary.com/doi/abs/10.12968/bjom.2017.25.10.668

Practical Nursing.org (2015). *Eight roles of the LPN*. Retrieved on March 28, 2015, from http://www.practicalnursing.org/8-roles-of-lpn

Pugsley, K. E., & Clayton, L. H. (2003). Traditional lecture or experiential learning: Changing student attitudes. *Journal of Nursing Education*, *42*(11), 520-3.

Rees, C. (2010). Evaluating and appraising evidence to underpin nursing practice. In K. Holland & C. Reed (Eds.). *Nursing: Evidence-based practice skills*. (pp. 178-181). Oxford, NY: Oxford University Press.

Rosenstein, A., Sweeney, C., & Gupta, R. (2012). Cross-disciplinary faculty perspectives on experiential learning. *Contemporary Issues in Education Research (Online), 5*(3). doi: https://doi.org/10.19030/cier.v5i3.7090

Rush, K. L., Adamack, M., Gordon, J., Janke, R., & Ghement, I. (2015). Orientation and transition programme component predictors of new graduate workplace integration. *Journal of Nursing Management*, 23, 143-155. doi: 10.1111/jonm.12106

Rutherford-Hemming, T. (2012). Simulation methodology in nursing education and adult learning theory. *Adult Learning, 23*(3), 129-137. doi:10.1177/1045159512452848

Saldana, J. (2008). *An introduction to codes and coding*. Retrieved from https://www.sagepub.com/sites/default/files/upm-binaries/24614_01_Saldana_Ch_01.pdf

Sarver, W., Cichra, N., & Kline, M. (2015). Perceived benefits, motivators, and barriers to advancing nurse education: Removing barriers to improve success. *Nursing Education Perspectives, 36*(3), 153-156. doi:10.5480/14-1407

Scientific Software Development GmbH. (2015). *ATLAS-Ti for Windows*. Retrieved June 26, 2015 from http://atlasti.com/product/features/

Sebold, L. F., Willrich-Boell, J. E., Reis-Girondi, J. B, & Guedes dos Santos, J. L. (2017). Clinical simulation: Development of relational competence and practical skills in nursing fundamentals. *Journal of Nursing, 11*(10), 4184-4190. doi:10.5205/reuol.10712-95194-3-SM.1110sup201723

Shin, H., Sok, S., Hyun, K. S., & Kim, M. J. (2015). Competency and an active learning program in undergraduate nursing education. *Journal of Advanced Nursing, 71*(3), 591–598. doi:101111/jan.12564

Sibthorp, J., Schumann, S., Gookin, J., Baynes, S., Paisley, K., & Rathunde, K. (2011). Experiential education and lifelong learning: Examining optimal engagement in college students. *Journal of Experiential Education*, *33*(4), 388-392. Retrieved from http://journals.sagepub.com/doi/abs/10.1177/105382591003300413?journalCode=jeea

Siegel, E. O., & Young, H. M. (2010). Communication between nurses and unlicensed assistive personnel in nursing homes: Explicit expectations. *Journal of Gerontological Nursing, 36*(12), 32-37. doi:10.3928/00989134-20100702-02

Pearson, J. H., Bowers, B. J., & Gaard, S. (2015). Improving the quality of long-term care. *Journal of Nursing Regulation, 6*(2), 52-56. doi: http://dx.doi.org/10.1016/S2155-8256(15)30389-6

Simones, J., Wilcox, J., Scott, K., Goeden, D., Copley, D., Doetkott, R., & Kippley, M. (2010). Collaborative simulation project to teach scope of practice. *Journal of Nursing Education, 49*(4), 190-197. doi:10.3928/01484834-20091217-01

Smith, M. K. (2010). *David A. Kolb on experiential learning*. Retrieved from http://infed.org/mobi/david-a-kolb-on-experiential-learning/

Snowden, A., & Martin, C. R. (2010). Concurrent analysis: Towards generalizable qualitative research. *Journal of Clinical Nursing, 20*, 2868-2877. doi:10.1111/j.1365-2702.2010.03513.

Stables, I. (2012). Development of clinical skills: The contribution of peer learning. *Learning Disability Practice, 15*(8), 12-17. Retrieved from https://journals.rcni.com/learning-disability-practice/development-of-clinical-skills-the-contribution-of-peer-learning-ldp2012.10.15.8.12.c9326

Stricklin, S. M. (2016). Achieving clinical competencies through community-based clinical experiences. *Journal of the American Psychiatric, 22*(4), 291-301. doi:10.1177/1078390316646855

Suva, G., Sager, S., Mina, E. S., Sinclair, N., Lloyd, M., Bajnok, I., & Xiao, S. (2015). Systematic review: Bridging the gap in RPN to RN transitions. *Journal of Nursing Studentship, 47*(4), 363-370. doi:10.1111/jnu.12147

Tagliareni, E. M., Cline, D. D., Mengel, A., McLaughlin, B., & King, E. (2012). Quality care for older adults: The NLN advancing care excellence for seniors (ACES) project. *Nursing Education Perspectives, 33*(3), 144-149. doi:10.5480/1536-5026-33.3.144

Tanner, C. A. (2010) Transforming prelicensure nursing education: Preparing the new nurse to meet emerging healthcare needs. *Nursing Education Perspectives*, *31*(6), 347-353.

Tosterud, R., Hedelin, B., & Hall-Lord, M. (2013). Nursing students' perceptions of high- and low-fidelity simulation used as learning methods. *Nurse Education in Practice, 13*(4), 262-270. doi:10.1016/j.nepr.2013.02.002

Turkel, M., Marvelous, J., Morrison, D., & Singletary, B. (2016). Describing self-reported assessments of critical-thinking among practicing medical-surgical registered nurses. *MEDSURG Nursing, 25*(4), 244-250. Retrieved from https://www.highbeam.com/doc/1G1-461945694.html

Ulrich, B. (2014). The responsibility and accountability of being a registered nurse. *Nephrology Nursing Journal*, *41*(3), 241-254. Retrieved from https://www.annanurse.org/resources/products/nephrology-nursing-journal

Unsworth, J., McKeever, M., & Kelleher, M. (2012). Recognition of physical deterioration in patients with mental health problems: The role of simulation in knowledge and skill development. *Journal of Psychiatric and Mental Health Nursing,* 19, 536-545, doi:10.1111/j.1365-2850.2011.01828.x

United States Department of Health & Human Services, Administration for Community Living. (2015). *Aging statistics*. Retrieved on March 2, 2015, from http://www.aoa.acl.gov/Aging_Statistics/index.aspx

United States Department of Labor Bureau of Labor Statistics. (2017). *Licensed practical and licensed vocational nurses*. Retrieved from https://www.bls.gov/ooh/healthcare/licensed-practical-and-licensed-vocational-nurses.htm#tab-6

Valente-Ribeiro, S., Cruz-Pontifice, P., Dourado-Marques, R. M., & Pontifice-Ribeiro, M. (2017). Geriatric care: Ways and means of providing comfort. *Revista Brasileira de Enfermagem, 70*(4), 830-837. doi:http://dx.doi.org/10.1590/0034-7167-2016-0636.

Wain, A. (2017). Learning through reflection. *British Journal of Midwifery, 25*(10), 662-666. Retrieved from https://www.magonlinelibrary.com/doi/abs/10.12968/bjom.2017.25.10.662

Walker, A., Olson, R., & Tytler, S. (2013). Collaborative nursing practice: RNs and LPNs working together. *Canadian-Nurse, 109*(6), 24-28. Retrieved from https://www.canadian-nurse.com/en/articles/issues/2013/june-2013/collaborative-nursing-practice-rns-and-lpns-working-together

Whittingham, K. (2012). Assistant practitioners: Lessons learned from licensed practical nurses. *British Journal of Nurses*, *21*(19), 1160-1167. Retrieved from https://www.magonlinelibrary.com/doi/abs/10.12968/bjon.2012.21.19.1160

Wilkes, L., Cowin, L., Johnson, M., & Zheng, X. (2014) A montage of the qualities of the registered nurse. *International Nursing Review*, 61, 555–562. Retrieved from http://onlinelibrary.wiley.com/doi/10.1111/inr.12134/abstract

Wood, C. (2017). Ensuring good nutrition for older patients in the community. *Journal of Community Nursing, 31*(3), 49-51.

Yates, J., & Leggett, T. (2016). Qualitative research: An introduction. *Radiologic Technology*, *88*(2), 225-231. Retrieved from http://www.radiologictechnology.org/content/88/2/225.extract

Young, L. (2016). Scope of practice laws updated to reflect current practice. *Dakota Nurse Connection. 14*(3), 26-29

STATEMENT OF ORIGINAL WORK
Academic Honesty Policy

Capella University's Academic Honesty Policy (3.01.01) holds learners accountable for the integrity of work they submit, which includes but is not limited to discussion postings, assignments, comprehensive exams, and the dissertation or capstone project.

Established in the Policy are the expectations for original work, rationale for the policy, definition of terms that pertain to academic honesty and original work, and disciplinary consequences of academic dishonesty. Also stated in the Policy is the expectation that learners will follow APA rules for citing another person's ideas or works.

The following standards for original work and definition of *plagiarism* are discussed in the Policy:

> Learners are expected to be the sole authors of their work and to acknowledge the authorship of others' work through proper citation and reference. Use of another person's ideas, including another learner's, without proper reference or citation, constitutes plagiarism and academic dishonesty and is prohibited conduct. (p. 1)

> Plagiarism is one example of academic dishonesty. Plagiarism is presenting someone else's ideas or work as your own. Plagiarism also includes copying verbatim or rephrasing ideas without properly acknowledging the source by author, date, and publication medium. (p. 2)

Capella University's Research Misconduct Policy (3.03.06) holds learners accountable for research integrity. What constitutes research misconduct is discussed in the Policy:

> Research misconduct includes but is not limited to falsification, fabrication, plagiarism, misappropriation, or other practices that seriously deviate from those that are commonly accepted within the academic community for proposing, conducting, or reviewing research, or in reporting research results. (p. 1)

Learners failing to abide by these policies are subject to consequences, including but not limited to dismissal or revocation of the degree.

Statement of Original Work and Signature

I have read, understood, and abided by Capella University's Academic Honesty Policy (3.01.01) and Research Misconduct Policy (3.03.06), including Policy Statements, Rationale, and Definitions.

I attest that this dissertation or capstone project is my own work. Where I have used the ideas or words of others, I have paraphrased, summarized, or used direct quotes following the guidelines set forth in the APA *Publication Manual*.

Learner name
and date   Keondra Rustan November 29, 2017