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Teresa Pohle

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Walden University
2015

Abstract

Use of Traditional 3-Hour Lectures in Preparing Students for the Childbearing Clinical Setting

by

Teresa Pohle

MSN, Ramapo University, 2009

BSN, Rutgers University, 1987

Doctoral Study Submitted in Partial Fulfillment

of the Requirements for the Degree of

Doctor of Education

Walden University

August 2015

Abstract

Following completion of a 4-year nursing program, some graduates have difficulty applying theories learned in the classroom to the clinical environment. This difficulty results in healthcare employers providing additional in-house training to ensure graduates' ability to safely care for their patients. The purpose of this research was to explore how traditional lecture methods have prepared students for the clinical environment. Based on a constructivist theoretical framework, a case study design was used to examine students' learning of theories delivered by traditional lecture methods. The research questions focused on student activities in the classroom and clinical setting, teaching strategies, critical thinking skills, and transfer of theory. Interview and observational data were collected from 10 randomly chosen students, their instructor, and 2 preceptors. Data were analyzed through a manual coding process, one that sought to identify emergent themes. Observational data revealed that nursing students were disengaged during the 3-hour lectures. Interview data revealed that students preferred that nursing skills be demonstrated prior to implementation. Both sources of data revealed that the 3-hour lectures should be divided into segments, that simulation and hands-on demonstration be incorporated in the curriculum, and that repetition should be allowed during instruction to accommodate different learning styles and increase students' confidence. These findings have implications for positive social change by improving the transfer of theory from the classroom to the clinical setting through use of a newly developed 9-week participative curriculum project for nursing students in the childbearing class. Improved preparation of graduates will increase safe care of patients in the community.

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Dedication

This project study is dedicated to my loving family, including Michael, Nicki, and Sean, who have stood by me over countless hours while I worked on my research. To my husband, Michael, I owe a special thank you for continuing to believe in and support me through the entire process. Without his support, it would have been more difficult than it was. To all my friends and family, I say thank you for all your support, patience, and understanding.

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Sincere thanks to Dr. Sydney Parent for her endless support and direction as I worked on my doctoral study. Even when I thought I could no longer continue, she helped me find the determination to persevere. She always managed to make all the big things seem so small. Her knowledge in the research process and her guidance provided me the opportunity to become aware of how important a committee chair's role is to the student. I would also like to deeply thank my collaborator for agreeing to provide onsite support for my research during a time in her life that was very challenging for her.

Table of Contents

List of Tables

Section 1: The Problem

Introduction

Traditional lectures are the most frequently used teaching methodology in higher education, according to Wood, Joyce, Petocz, and Rodd (2007). Students absorb the material through rote memorization and then remember it for a sufficient time to allow for responding to a required assignment or test question but with lack of retention for recall at a future time. In 1984, Kolb addressed this form of passive education by providing educators with the theory of experiential learning, beginning with "concrete experiences, which are followed by reflective observation and abstract conceptualization, leading to active experimentation" (Merriam, Caffarella, & Baumgartner, 2007). This process becomes a cyclic event that promotes learning.

According to the assistant dean of nursing at the study site, "there appears to be a disconnect between lecture and the students' ability to apply this knowledge in a clinical setting" (personal communication, August 14, 2012). The assistant dean stated that students are not being adequately prepared, as demonstrated on their learning outcomes reports. New teaching methodology and technology are gradually being incorporated into this particular university to address these concerns, but the assistant dean felt it would take time to achieve the desired results. Noone (2009) noted that in a comparative study, the Carnegie Foundation indicated a disconnection between theory and clinical practice in nursing education. Wolff, Regan, Pesut, and Black (2010) conducted an exploratory study that showed a need for a shift in current practice environments. New

and effective collaboration between education and practice has to be further explored to better prepare new graduate nurses for the workforce. The Board of Nursing 2013 NCLEX-RN Report documented student pass rates for the nursing graduates of this university in 2009 to have been 85.83%, followed by a reduction in 2010 to 80.74%, and then increasing to 86.32% in 2011. Clinical instructors for the maternity nursing students at this university have voiced concerns that the students appear to have difficulty applying theory learned in lectures to actual situations in the clinical setting of the hospital and may also have difficulty in answering application-based questions on examinations. I have heard some of these same students complaining that lecture classes were too long and that students were having difficulty retaining all the material.

After nurses have graduated from nursing school, employers have incurred the increased financial burden of providing additional time for new graduate nurses to follow a preceptor, or seasoned nurse, to learn how to provide safe patient care. According to the vice president of human resources for a leading teaching hospital, the acuity of patients being admitted into hospitals has increased in the past 15 years, meaning they are becoming "sicker," and these new nursing graduates are less prepared to provide appropriate patient care (personal communication, July 13, 2011). Whether nursing students are ready to practice following their graduation has been debated by authors such as Berkow, Virkstis, Stewart, and Conway (2009); Hickey (2009); and Regan, Thorne, and Mildon (2009). The debate has focused on the best way to prepare nursing students to care for patients in the healthcare workplace after graduation.

Benner, Sutphen, Leonard, and Day (2009) requested the revision of nursing education because they believed that new graduate nurses lacked the preparation to take care of the complex acute patient in today's environment.

Hanson and Carpenter (2011) described the current millennial generation of nursing students as optimistic, assertive, friendly, and tending to gravitate toward group activities. These nursing students have been influenced by technology their entire educational program. Working as team members, students utilize these technological tools for actively explaining, discussing, and sharing their experiences using cooperative learning. If these new millennial nursing students are to be prepared for the workforce, we as educators must be able to use their abilities as a foundation to educate them in the theories and practices they will need to be successful. Three-hour lectures which do not involve student participation may not keep students engaged in their learning process, which can affect the retention of information presented during the lecture.

The study setting was a university with multiple campuses separated by distance and time which deliver the same undergraduate nursing courses taught by the same instructor. One of the two campuses considered for the study was located within an urban setting whereas the second campus was located on the outskirts of a city. Classes at both campuses enrolled between 40 and 46 students who varied by culture, age, gender, religious beliefs, and learning styles. The childbearing class was taught over a 3-hour period. The campus chosen for the study was the one on the outskirts of the city and the one where I did not teach the clinical experience.

In this educational setting, where I have been a part-time lecturer (PTL) for a 4-year undergraduate nursing program, 3-hour lectures are the typical instructional method. By observing the theoretically based course, I was better able to understand how nursing students learned nursing theory with its set of concepts, propositions, and definitions used to explain the nursing environment. Observing students' participation within both the classroom and clinical setting allowed me to experience their introduction to nursing theory and then the application of this theory in the clinical setting. Sousa (2006) explained that after 20–30 minutes, the brain capacity is overloaded and students lose focus as the brain processes the information already obtained in order to be placed in long-term memory or to be removed as unnecessary. In the program under study, students' had 3 hours' worth of information that needed to be processed or it was discarded.

Problem Statement

Nursing educators attempt to balance theory taught in the lecture with clinical experience in the hospital setting. Exploration of students' ability to apply information they learned in lectures in a hospital setting where they cared for their assigned mothers and their babies was the purpose of this case study. Preceptors' perspectives on new graduate clinical skills were also explored to provide depth to the study. Using a constructivist framework, I related literature findings with current teaching styles experienced by third-year nursing students and explored how traditional lectures influenced the transfer of learning. Koohang, Riley, Smith, and Schreurs (2009)

developed a model where students construct new meaning from old knowledge. This model uses collaboration, cooperation, different perspectives, self-reflection, real-life examples, and social discussions to motivate students to learn. Although these authors were interested in computer instruction, the same concept may hold true for face-to-face learning.

With the increased acuity of patients and the changes in the healthcare setting, the increases in content within nursing education have been leading to course content saturation (Kantor, 2010). This approach to teaching forces students to memorize content and then regurgitate that information (Giddens & Brady, 2007). Vacek (2009) suggested that this teacher-centered approach does not address critical thinking and decision-making skills. Critical thinking is imperative in clinical decision making and is constantly evolving as the clinical situation changes (Benner et al., 2010). J. Mann (2012) wrote that students are actually not taught how to utilize critical thinking in making clinical judgments, which leads to students struggling to apply their learning to new situations. This doctoral study explored the gap between the practice of educating students using 3-hour lectures and students' ability to apply this knowledge in the clinical setting.

Schwartz and Fischer (2006) proposed that having students actively involved in their learning using methods such as hands-on activities will maximize the retention of information. Problem-solving skills, an essential element of nursing care, can be developed through the use of discussion and role playing, which leads to improved

critical thinking (Koohang et al., 2009). Hickey (2009) proposed the use of nurse preceptors to assist new nurses in the first few months of hire during their transition period into the work environment. If these new nurses require additional training and preceptor support beyond what has been allocated to ensure that patient care is not compromised, this training puts additional financial strain on the organizations employing these new graduates, according to the vice president of human resources of a local leading teaching hospital (personal communication, July 13, 2011). The vice president of human resources is in charge of hiring well educated and trained nursing students who are skilled in the safe care of their patients.

Rationale

In the current healthcare system, patients are more culturally diverse, in worse health, and living significantly longer than they did 10–15 years ago, requiring skilled nurses who can think critically. The American Association of Colleges of Nursing (AACN, 2010) acknowledged that health regulations require nurses to be prepared to care for their patients safely. These regulations called for nursing education reform to enhance teaching of critical thinking to meet these requirements. Benner, Hughes, and Sutphen (2008) affirmed that the nurse's ability to solve problems, make decisions, and use appropriate clinical judgment in an array of patient care settings is what critical thinking is about. Critical thinking begins with strategic processing where information is acquired, organized, and then transformed into various patient scenarios (Braten & Olaussen, 2007). Additionally, concern for maintaining student engagement within the

classroom setting has been identified regarding different academic subjects (Wlodkowski, 2008). In response to hospitals' increased financial burden in preparing new nursing graduates to care safely for the increased acuity of admitted patients, I explored in this doctoral study how traditional lecture methods, from the students', instructor's, and preceptors' perspectives, have prepared students for the clinical environment.

Nursing students, when they first enter a nursing program, often view knowledge as right or wrong (Rowles & Russo, 2009). This view can interfere with students' ability to learn nursing theory and then link that theory to practice in a clinical setting (Scheckel, 2009). Some of today's nursing students have demonstrated the inability to apply theory they learn in lecture classes to situations they encounter in clinical rotations. They may have trouble applying theory to answer application questions correctly on exams, and according to a vice president of human resources of the neighboring hospital (personal communication, July 13, 2011), may require additional training to provide safe care to patients.

Definitions

Active learning: Active learning keeps students engaged in their learning through activities such as discussion, role-playing, brainstorming, debating, student presentations, and problem solving (Billings & Halstead, 2005).

Application: The interaction of attained knowledge or theory and practice in clinicalsettings is called *application* (Billings & Halstead, 2005).

Clinical experience: A teaching tool commonly used for nursing students called the *clinical experience* provides an opportunity for hands-on learning as students apply theory and skills learned in the classroom to the care of their patients in a community or hospital setting (Novotny & Griffin, 2006).

Constructivist paradigm: A constructivist paradigm involves students who construct their own meaning and develop understanding by being a part of the teaching (Merriam, Caffarella, & Baumgartner, 2007).

*Critical thinking***:** Critical thinking consists of three segments: (a) thinking ahead, as in anticipating, (b) thinking in action, as responding to the situation, and (c) thinking back, as reflecting after the fact (Alfaro-LeFevre, 2008).

Lecture: An educator's presentation of content to students, orally or visually, is called a lecture (Billings & Halstead, 2005).

National Council Licensure Examination – Registered Nurse (NCLEX): The NCLEX performance instrument is used to evaluate critical thinking skills, abilities, and content information obtained after graduation from an educational nursing program (Romeo, 2010).

Nursing theory: Nursing theory is a set of views, proposals, and explanations which describe nursing and its events (Donohue-Porter, Forbes, & White, 2011).

Preceptor: An expert who gives practical experience and training to a student is referred to as a *preceptor* (Billings & Halstead, 2005).

Transfer of learning: Transfer of learning occurs when a person takes what he or she has learned from an educational setting and applies it to the workplace or to personal life (Wlodkowski, 2008).

Significance

Nursing educators must begin to focus on the students' ability to apply nursing knowledge as they learn to incorporate critical thinking skills and not concentrate on content alone (National League for Nursing Accrediting Commission, 2008). The use of the traditional lecture method for educating nursing students at higher learning institutions should be only one of a combined group of teaching methodologies used. The acuity of today's patients requires that nurses be able to think critically as they provide nursing care in an ever-evolving healthcare situation (Simpson & Courtney, 2002). The nursing student who is considered clinically competent has the ability to make effective decisions that lead to a positive outcome for his or her patients (Walsh, Bailey, & Koren, 2009).

Within various domains of learning is the cognitive domain, which consists of data or facts, forming an understanding of those data, being able to use data appropriately, examine the data, understand how and why they were created, and then be able to assess the results of their use (Bloom, Engelhart, Furst, Hill, & Krathwohl, 1956). The lowest level of learning is knowledge, in which facts, concepts, and principles are acquired through lectures and recalled at a later time (Billings & Halstead, 2005). Students who understand the information they are given in class and are able to

relate it to the care they provide to their patients are using a higher level of learning. When information is segmented into individual parts, the process of analysis occurs. Students are able to put information back together to create something new, which is referred to as synthesis. Finally, evaluation consists of judgments and ideas about this new information (Billings & Halstead, 2005).

Theory-based courses provide concepts to students as well as an understanding of how those concepts are used in the clinical setting to assist them in the care of their patients. Exploring the nursing student's perspective of the use of a 3-hour lecture to provide nursing theory content and the student's ability to apply this theory to the clinical setting may help to address problems with application and transfer. Exploring the problem of teaching undergraduate nursing students using traditional lecture methods alone may lead to identifying possible opportunities for improvements in students' educational processes. Today, nursing education has evolved from the behaviorist paradigm of teacher-centered education to the constructivist perspective in which teachers and students interact, adding to students' existing information and helping them form new knowledge (Legg, Adelman, & Levitt, 2009). Subsequently, the constructivist perspective could lead to improvement in application and transfer of theory learned in the lecture class to the care of patients in the clinical setting following graduation.

Guiding Research Question

Frankel (2009) discussed nursing learning styles as a component of integrating theory and practice. The learning style models that Dunn et al. (1984) wrote about involved students learning through the use of their senses. Some students learn through the use of images, charts, illustrations, or diagrams where they use their visual senses. Others respond well to audio, acoustic, and aural teaching tools. Kinesthetic learners are often known as do-ers who learn through touch and actually performing the act. Students' ability to learn theory taught in lecture and then apply this learning to the care of their patients will result in safe clinical care (Frankel, 2009). Exploring the students' perspectives on the traditional lecture style they encounter in the childbearing family class contributed to the understanding of the local problem of how students learn and apply that learning in actual practice (Dalsgaard & Godsk, 2007).

This study was conducted at a university where a 4-year nursing program is offered in which third-year nursing students attend 3-hour lecture classes on Thursdays along with 6 hours of clinical experience on Tuesdays or Wednesdays. In the clinical setting, students are assigned patients to care for, providing them opportunities to apply theory they learned in lecture class.

The research questions for this study involved exploring how traditional lecture formats, according to the students', instructor's, and preceptors' perspectives, may or may not prepare students to apply theoretical learning in the hospital clinical setting. The research questions were answered through interviews and observations.

The guiding question was: What are student, faculty, and preceptor perceptions of nursing students' ability to transfer classroom theory to the actual clinical setting? The first three subquestions were answered through observations of students and the lecturer. The second three subquestions were answered through interviews of 10 students, their lecturer, and two preceptors.

1. What activities do nursing students participate in during 3-hour lectures?

2. What teaching strategies does the instructor use during the 3-hour lecture to engage the students in participating in their learning?

3. What critical thinking skills do students exhibit in the clinical setting when faced with decision-making and problem-solving tasks involving the care of patients?

4. What are the students' perspectives on using 3-hour lectures to prepare for the clinical setting?

5. What are the faculty's perspectives regarding using lectures to provide theory to prepare students for the clinical setting?

6. What are the preceptors' perspectives on how students are able to apply theory to the clinical setting?

Observations were performed in the classroom setting to understand how students responded to 3-hour lectures. That information was immediately transcribed into the observational protocol. Students were also observed in the clinical setting as they demonstrated application of theory to the care of patients.

Gathering student perspectives on the effectiveness of 3-hour lectures involved interviewing current students within both the classroom setting and the clinical environment. Interview questions were used to obtain more in-depth information on students' learning when they shared their individual perspectives on their ability to transfer the theory learned in a 3-hour lecture to the clinical setting. Feedback was also obtained using face to face interviews from the childbearing class lecturer and two clinical preceptors concerning their perceptions of students' ability to transfer knowledge learned in 3-hour lectures to the clinical setting.

The traditional lecture format can be a passive way of delivering information to students rather than teaching them to think critically (Tiwari, Lai, So, & Yuen, 2006). Students need to assimilate new information with their existing knowledge and then be able to apply this new knowledge to the care of their patients. To address this practice–education gap, the Carnegie Foundation for the Advancement of Teaching National Nursing Education Research (2010) suggested a revamping of nursing education to meet the growing healthcare demands and the ever changing technology. The report indicated that nurses today are undereducated in meeting practice demands. Greater emphasis on clinical reasoning, quality improvement in care, and patient safety needs to be addressed in lectures and demonstrated within clinical settings (Klein-Collins, 2011).

Review of the Literature

To search for literature relevant to the topic of interest, EBSCOhost, Eric, Teacher Reference Center, the Education Research Center, and CINAHL databases were

utilized. Search terms were selected that included the words *education* and *lecture** and *learn**, *teach** or *method**, and *college** and/or *universities*,* *nurse** and *outcomes of education* and *lecture**, or *didactic* and *academic performance* and *students*, *nursing* and *SO Journal of Nursing Education*, or *critical thinking* and *nursing students*. These search words were combined using Boolean operators *or* as well as *and* to identify documents of interest and then entered. The use of an asterisk after a word is called key word truncation. It allows a search engine to identify the word and various word endings.

Conceptual Framework

The constructivist learning theory incorporates active learning methods and experiences into the teaching process, improving students' ability to apply learned information more consistently by providing them with the skills to transition this information into real-life situations. One of the goals of nursing theory is providing the students an understanding of the types of care individual patients may need. Experiential learning, a contributor to the constructivist learning theory, was postulated by Kolb (1984) to be a cycle of taking action, understanding that action by reflecting on it, and then being able to apply the action in various situations. The combination of experiences and active learning helps students do more than just listen. They problem-solve, create, discuss, analyze, and begin to learn and understand the information. This framework, based on the constructivist theory, proposes that learning is active rather than passive,

and that experiences help students construct meaning from doing and then reflecting on these events (Koohang et al., 2009).

Constructivism consists of creating new knowledge from what one already understands and then adding new information to build onto or change that understanding. A student's prior knowledge and experience interact with new information from additional experiences, often creating cognitive conflict. When students encounter discrepancies in their previous knowledge, they need to actively identify ways to resolve these issues, leading to actively constructing knowledge (D'Angelo et al., 2006).

According to McGarr (2009) and Straits (2007), the traditional lecture format has continued to be the dominant method of teaching used in higher education. Passive forms of teaching such as the traditional lecture provide students information with the premise that the student will understand it and know how to use at a later time (Covill, 2011). In this form of teaching, students are not encouraged to be involved or participate in their own learning. They may find it difficult to relate the information to different experiences and problems they may encounter. In this method, teachers fail to provide opportunities for students to internalize the information they learn through practice and to address students' different learning styles, therefore making teaching more difficult (V. Smith, 2011). The literature presents the importance of students participating in their learning and addressing their different learning styles to promote the desire to learn

(Willis, 2006). Kowalski and Taylor (2009) argued the importance of continuing to explore the outcome that the traditional lecture has on student learning.

Renshaw (1995) examined two extremes of teaching by lecture. The first is called the transmission paradigm where students are provided knowledge and skills through the traditional lecture. The second extreme is called the constructivist paradigm where students create their own meaning by becoming a part of the teaching and learning process to promote better understanding of the information being provided. The transmission paradigm, in which the traditional lecture format is used, provides information through telling, explaining, and demonstrating, which addresses lower level cognitive skills. Using the constructivist paradigm allows students to be engaged in teaching and learning through active participation and problem solving, leading to higher order cognitive skills (Crowe, Dirks, & Wenderoth, 2008). Greater understanding and longer knowledge retention are promoted by higher order cognitive skills (Gabriel, 2008).

Nursing Lectures

Lectures are used in higher education for nursing students to learn the theory behind patient care. Providing concurrent clinical experiences following classroom didactics allows students to connect theory with practice and becomes the teaching tool for knowledge to be transferred and used immediately (Billings & Halstead, 2005).

The opportunity to apply theory and to have one's skills validated is the principal goal of using a clinical setting (Novotny & Griffin, 2006). Novotny and Griffin (2006)

went on to state that the clinical setting allows students to practice their psychomotor skills as their critical thinking continues to develop. Nursing and medical knowledge is rapidly being updated with information being obtained through research. Nursing students must understand how the latest theories learned in lectures can be applied to their patients' care.

Giger and Davidhizar (2008) discussed the need to teach cultural competence to nursing students, including the patient's cultural heritage, beliefs, and value system, for them to be able to give safe nursing care. Giger and Davidhizar also believed that nursing students need to learn about cultural differences to refine their cognitive and psychomotor skills and to reassess their attitudes and own personal beliefs.

The use of evidence-based practice, according to Newhouse, Dearholt, Poe, and White (2008), is a valuable way of teaching nursing students how to care for their patients (Penz & Bassendowski, 2006). In this model, the student identifies an evidence-based practice question, locates information needed to answer the question, and then translates that evidence into nursing care. These steps facilitate students' thinking critically and beginning to make decisions about their patients' care. Evidence-based practice supports the development of critical thinking skills that nursing students need to assess their patient and decide on the appropriate care to be provided. Providing competent and highly skilled nurses means that they are able to relate what they learned in class to the healthcare needs of their patients. Nurses interact with, and process, information through a variety of learning styles—visual, auditory, or kinesthetic—that is

specific to each individual. Effective training programs need to incorporate these different learning styles to help develop highly educated, safe nurses (Frankel, 2009).

Active Learning

Barthwal et al. (2011), Goldberg and Ingram (2011), and Skylar (2009) wrote about the need to keep students actively involved in their learning. Discussion, role playing, and the use of debates are examples of the active learning methods that can be incorporated into the teaching process to facilitate student learning. Barrett (2010) explored how students rely on each other's experiences for problem solving when addressing problem-based learning. Students would create knowledge from these shared experiences by using them in problem-solving discussions with other group members. At an economic level and with the push for globalization, educators must develop students' creativity for personal, economic, and societal reasons. Students need to be able to influence changes in healthcare to address social and environmental issues (Caridad Garcia-Cepero, 2008). Oros (2007) looked at the use of structured classroom debates involving student participation and critical thinking in groups. After the students conducted research individually, they would collaborate with their groups to address a specific problem. These, as well as other types of activities, help keep students engaged and interacting with each other and with the instructor.

Research has brought experiential learning to the forefront of education. The use of experiential learning and active learning address the importance of how students learn new information. Kolb (1984) proposed the use of concrete experiences that lead to

student observation and reflection. Theories emerge from the data obtained from observations and reflections and then can be put into practice through active experimentation. This process then leads to another concrete experience on which to observe and reflect. Kolb's experiential learning is a circular process that enables students to learn new information and to develop additional information on the study topic.

Revell and Wainwright (2009) explored the traditional lecture and proposed that active involvement of students was necessary to ensure that higher cognitive functions were being acquired. Incorporating mini-lectures with class activities, according to Goldberg and Ingram (2011) as well as Zhang and Olfman (2010), promoted student engagement as evidenced in the student survey results in their respective studies. Larkin (2010) and Lents and Cifuentes (2009) explored online lectures versus face-to-face instruction for student learning. The studies demonstrated that students preferred face-to-face lectures due to their ability to interact with the lecturer and to obtain answers to their questions.

Researchers such as Smith and Cardaciotto (2011) continued to explore traditional lecture methods of teaching that incorporate active learning measures. Results of these studies demonstrated that active learning is a more effective teaching method than lectures alone. These researchers discovered that student involvement in the learning process kept them both engaged and learning.

Covill (2011) examined students' perceptions of the lecture approach to learning and discovered that many students felt they learned from lectures and active forms of learning required additional effort and time. From the data collected, Covill found a perception among students that they would be required to assume more responsibility with active learning than they would need to in a lecture; therefore, they viewed active learning more negatively.

The constructivist viewpoint is used as the cornerstone for promoting active learning. Being more involved in their learning by using tools such as simulators, case studies, and having hands-on opportunities to use medical equipment encourages students to work as a team to solve problems as they start to connect what they have learned to care they provide to their patients. The traditional lecture format provides passive information given by the lecturer, which the students memorize.

The students are not made to feel they are a part in the decision making about their learning (Machemer & Crawford, 2007). According to Struyven, Dochy, and Janssens (2008), the students' view of their instructor determines if they participate in their learning. Furthermore, Wesp and Miele (2008) discovered that students' opinion of the instructor's helpfulness can be opposite to the actual utility of the teaching tools used. If the students view the teaching method in a positive manner they become more involved in their learning (Struyven, Dochy, & Janssens, 2008). Struyven, Dochy, Janssens, and Gielen (2008) also discovered that students' perception of a lecture was that the lecturer provided them with what they needed to know. Students felt that the use

of peer assessments and portfolios required greater time investment on their part and rated these negatively in helping them learn. The authors summarized the information obtained in the study by advocating that students be slowly weaned from the traditional lecture format, allowing them to become more familiar with the active learning style.

The acceptance of teaching using active learning methods will produce a positive perception of the student's educational setting, leading to learning. Gregorius (2011) reported from student outcome assessments that allowing students to formulate their own understanding rather than being told what to learn encourages concept learning and the use of applied knowledge.

At times, teachers focus on the theory and not whether students understand the information being provided (Smyth, 2009). Smyth (2009) noted that when students are taking part in their learning, critical thinking skills start to develop. Critical thinking involves openness of mind, the ability to argue conceptually, and the ability to communicate with other cultures while acknowledging one's own beliefs and value systems. It is an interactive learning process in which students think about not only what they are learning but also how they are learning (Smyth, 2009). Botezatu, Hult, Tessma, and Fors (2010) proposed that critical thinking skills start to develop when using simulators in an environment that is considered safe. The environment is safe because the patient is not real but does provide an example of a real life event. The student learned to connect theory to the simulated care. According to Huang, Reynolds, and Chandler (2007), students who learn using virtual simulators use critical thinking skills

more often in making decisions about their patients. Steadman et al. (2006) also found that use of simulators enhanced the students' ability to think critically.

The use of passive learning to educate students prevents them from having opportunities to practice any strategies and skills, therefore minimizing the potential for information to be internalized (V. Smith & Cardaciotto, 2011). The traditional lecture format lacks opportunities for student feedback, different learning styles are not addressed, and the development of both active and independent learning does not occur (Di Leonardi, 2007). Combining active forms of learning with traditional lectures encourages students to participate in their learning. Unlike passive learning, where the lecturer provides all the information, active learning incorporates student participation. Students take part by reflecting on their past learning, evaluation of what they have learned, analysis of the new learned information in action, synthesis of the information into their own personal learning library, and communicating this information to others. Cherney (2008) noted that with active learning, there was improved memory of information, and Yoder and Hochevar (2005) identified an improvement in students' exam grades with the use of active learning. W. Berry (2008) agreed that active learning is a pedagogical approach in which the learning environment is enhanced by combining lectures with effective student interaction. Berry went on to say that this form of teaching encourages critical thinking and places the responsibility of learning on the learner.

Engagement

The interest level of students is an important factor of their learning, and Tin (2009a) explored how interest is created. Tin found that interest is formed when a student is able to become part of the learning situation they are encountering. Tin postulated that interest is generated when one of two factors are present. The first of these is situational environmental factors, such as people and social issues. The second is the individual factor and is related to the significance the event has for the student's desire to learn more about the event. Tin argued that a student's interest must be captured for maximum learning to occur. Hidi and Renninger (2006) divided interest into four phases. The first phase, situated interest, is triggered by a particular subject. The second phase occurs if the first phase of interest is sustained and the student becomes involved. The third phase shifts from maintaining situated interest to developing individual interest as seen in an individual's questions, curiosity, and identification with content. By the fourth phase, the student can fully identify with the content and has developed an individual interest.

The engagement of students is central to active learning as demonstrated by different teaching modalities. Authors such as M. Clark, Nguyen, Bray, and Levine (2008); Dyson (2008); and Exeter et al. (2010) have explored the use of smaller class teaching techniques used in a larger class setting to keep students engaged. Techniques they proposed are small group discussions, motivating techniques, being systematic and organized, and using stimulating assessment tasks. This research illustrated that active

learning methods engage students in their learning processes. Krause (2007) identified three different environments that engage students to learn: (a) within the classroom, (b) participation in out-of-class activities, and (c) within the work environment. Krause surmised that engaged students are those who seek to further develop their knowledge by reflecting on facts presented in lecture and then combine those with their own personal experiences. Student-centered teaching, with appropriate assessments and feedback, increases student engagement through their discussions and questions (Dyson, 2008; Krause, 2007; Leese, 2009). According to Vondracek (2009), the use of multiple teaching methods to engage students in lectures also addresses the multiple learning styles of students. Developing teaching methods that involve various learning styles promotes improved cognitive development over one's lifetime.

Learning Styles

Learning styles assist students in linking new learned information to real-world experiences. T. Berry and Settle (2011) discussed various learning styles and how people process and maintain information in long term memory for later use. Traditional lectures may not accommodate students' learning styles, which can often make learning more difficult. To address the various learning styles a mixture of teaching tools need to be used. Suggested approaches involved adding problem solving case studies and class, or group, discussions to involve students in their learning. Real world examples allow students to relate the problem and solutions to their actual lives, which attracts sensory learners. Charts, pictures, and graphs aid visual learners and remind global learners how

the information fits into a broader field. Barber (2007) suggested educating teachers in the experiential field of learning to bring focus to different learning styles. Dewey (1938), Kolb, (1984), and Lewin (1951) were all contributors to experiential learning in which concrete experiences lead to observations and reflections, which then leads to formation of abstract concepts, and finally to experimentation. The traditional lecture format is no longer the ideal means for teaching new students due to their variety of learning styles. According to Earle and Myrick (2009) there needs to be additional research into how teaching tools can be used successfully to address these learning styles.

Knewstubb and Bond (2009) investigated relationships between teaching and learning. These researchers found that students who concentrate on the meaning of a subject maintain information longer and have a better understanding of the information as compared to students who attempt to memorize what they have been taught. This conclusion suggests that teachers need to focus on how they communicate the information to students because they learn from how they perceive information is being provided. Communication is very important when teaching a diverse group of students. Various cultures place different value on forms of communication and can develop different meanings in place of the intended significance of information provided.

Billett (2010) discussed the importance of lifelong learning occurring as students are engaged in activities and interactions in class and in everyday experiences. For the aging population, Cherem (2010) discovered that learning motives of the elderly vary. A

large proportion of her participants continued to learn for cognitive interest, while some continued for intellectual and social stimulation. Many of the participants were exposed to reading at an early age and found continuing to learn an important part of their lives.

A good lecture should be challenging and thought provoking. It should engage students and encourage them to start thinking for themselves. According to Wilson and Korn (2007), students who are involved in classroom activities are more attentive and focused for longer periods of time.

The National League for Nursing Accrediting Commission (2008) anticipated that baccalaureate nursing students, based on 4 years of higher education, will be able to provide proficient and effective healthcare to their patients. Many of these students, however, require additional hands-on supervision by their employer until they become sufficiently competent to provide the care they are expected to deliver. Additionally, some students lack the ability to apply concepts they learned to the care of their patients. A critical contributor to this growing issue can be linked to the instructional approach used to educate these students, which is based on the traditional lecture. McDaniel (2010); Shevlin, Banyard, Davies, and Griffiths (2000); and Wood et al. (2007) have noted that the lecturer has to be an effective, dynamic individual who maintains eye contact. Unfortunately, many teachers lack one or more of those qualities. Wilson and Korn (2007) researched the lack of attention during lectures as observed through students' doodling and yawning. These researchers discovered that this was actually students' attempts to maintain attention so they could stay focused on the material being

presented. A study performed by S. Mann and Robinson (2009) linked boredom in lecture classes to low grades, dissatisfaction with school, and truancy.

Methodologies of Learning

To rectify the problem associated with the exclusive use of a traditional lecture format to educate students, Michel, Cater, and Varela (2009); Revell and Wainwright, (2009); and Schwartz and Fischer (2006) advocated the use of active learning which incorporates discussion, role-playing, hands-on activities, and problem solving. Additionally, Heitzmann (2010) discussed the use of cooperative learning, where students interact with other students of various learning styles in the classroom to promote learning, while the teacher acts as a facilitator. Peer evaluations researched by Pare and Joordens (2008) identified a way for students to learn from their peers as they evaluate each other's work. Duff (2011) summarized the use of these different teaching tools by postulating that nursing students will learn to connect abstract nursing theory to concrete nursing knowledge through their observations and practice.

Memory

Students must remember the theory they learn so that it can be applied later in different patient care settings. McKeachie (1990) stated that lectured information is kept in short-term memory as noted by the ability of students to pass tests but was not found in long-term memory for students to retrieve at a later date. Garner (2006) showed how humor lowers the pulse rate, improves respiration, increases oxygen being delivered by the blood, decreases anxiety, relieves stress, and improves mental capabilities leading to

content retention and improved memory if used in the classroom. Problem-based learning helps students to construct their own knowledge when they are given issues that they must find answers to (Dalsgaard & Godsk, 2007). The teaching of cultural awareness, according to Brinson, Brew, and Denby (2008), can be successfully accomplished by using real- life scenarios that students can relate to. Some research has suggested that lecture methods that use active learning promote retention of concepts in long-term memory over time (W. Berry, 2008; Cherney, 2008).

Critical Thinking

Critical thinking has multiple definitions; however, there are a number of similarities as well. A critical thinker could be defined as being open-minded; someone who uses reasoning; someone who acquires knowledge; someone who uses deductions, interpretations, and evaluations. One specific example of critical thinking occurs when classroom debates are held with the objective of facilitating students' thinking on a particular position. This approach can also be used with nursing students, such as defending a particular care plan for a patient under a specific set of circumstances versus another care plan (Oros, 2007). What is most important about debate is that the students learn from different views expressed by other students. According to Alfaro-Lefevre (2008), critical thinking has to do with not accepting information at face value without carefully evaluating it. The process of formulating a plan to care for a specific patient and understanding how that plan can be successful is a use of critical thinking skills.

Alfaro-Lefevre (2008) also discussed critical thinking as a method of decision-making and solving problems by evaluating various ideas to form a conclusion. In a study performed by J. Mann (2012) on critical thinking, she discovered that students found it beneficial to be asked questions by their instructor about their patient when they had to formulate an answer and then were able to hear what other students added to the same question.

Transformational Learning

Mezirow (2000) was one of the early researchers in developing and understanding the theory of transformational learning. He postulated that people use their experiences in life to develop interpretations through critical reflection to develop new meanings. Mezirow felt that a person's beliefs, attitudes, and emotional stance are used in developing new meanings. A study conducted by Buchan (2011) discussed using technology to help students learn information from a global perspective. That study demonstrated how changing the way a university teaches through the use of technology provides students new ways to learn different opinions and to better understand familiar topics of study. Buchan discussed an improved state of learning which occurred because students had access to different ideas and thoughts from different cultural populations that they could incorporate into the development of new meaning for themselves.

One criticism of Mezirow's learning theory was that it was not culturally sensitive (Ntseane, 2011). Mezirow (2000) dealt with individuals making meaning and did not consider cultures where traditionally the group collectively makes meaning that

will benefit everyone, not just an individual. Ntseane believed that transformational learning not only occurs individually but also can occur collectively as seen in Botswanan culture.

Reflective Practice

In 1983, Schon theorized that one reflects on experiences and prior knowledge to make judgments and decisions about a situation. From this study two basic processes of relative practice emerged: reflection on action and reflection in action. Thinking about the event process after it has happened and then making changes is referred to as reflection *on action*. Reflection *in action* is the making of changes during the development of the event (Schon, 1983). Minott (2011) wrote about teachers who used reflective practices in the classroom, which lead to a number of different creative ways to teach students. The use of reflective practices leads teachers to a better understanding of themselves and to self-improvement.

Teachers who use reflective practices engage in critical thinking and collaborate better with others to help effect change (Minott, 2011). Many students learn through passive ways of teaching in which information they receive from the instructor can answer all questions and they rely on straightforward memorization. Teaching students to critically examine information they receive further advances their learning and encourages them not to take information for granted (Linvill & Mazer, 2011). Tsang (2011) postulated that Generation Y students of today prefer collaborative learning styles because of their ability to socially network and digitally connect with everyone.

Tsang feared, however, that educators were not taking advantage of this new technology to teach students to critically reflect on their learning by critiquing, analyzing, and evaluating it.

The literature indicated that students learn how to construct meaning from the information they receive. Combining lecture with discussion, debate, role-playing, simulation, and the sharing of individual experiences are but a few ways to involve students in their learning given their different learning styles. Nursing programs can benefit from the data gathered during this exploration of the traditional lecture format approach for educating undergraduate nursing students.

Implications

The use of traditional lecture methods for teaching may not be the optimal way to educate nursing students, and this study indicated which alternatives should be explored. This study showed that students feel they are not able to apply learning from 3-hour traditional lecture formats to the clinical setting, therefore I proposed and developed an alternative instructional method. This method consists of dividing the traditional 3-hour lecture period into 30-minute segments, allowing for a variety of teaching methodologies to be utilized.

The first 30 minutes involve delivery of information via lecture. This is followed by class discussion of this information or involving some other interactive approach. The third segment again involves a lecture format to deliver information followed by 30 minutes of visual aids and group discussion. The next 30 minutes are used for presenting

the last element of new information, and then the final 30 minutes are used to summarize the day and answer questions.

Summary

In Section 1, the problem was presented that junior nursing students are not able to transfer information they are presented within a traditional 3-hour lecture to the care of their patients in the clinical setting. These students are often unable to understand how the theories apply to their patients' care; such application is the rationale for this study. Some of the terms found in the literature that were defined include *active learning*, *constructivist paradigm*, *transmission paradigm*, and *pedagogy*.

The significance of this study is that traditional lecture methods of teaching may not be the best way to prepare students to perform effectively in a clinical setting. Exploring how students apply knowledge learned when taught by traditional lecture methods resulted in opportunities for improvement in how information is delivered. The research question focused on determining how traditional lecture methods prepare students to apply learned theory in a clinical setting.

In Section 1, the literature review showed that students need to be actively involved in their learning to achieve positive results. The traditional lecture format by itself is not able to address different learning styles. Using the constructivist learning approach as a conceptual framework allowed for exploration of theory taught in the traditional lecture setting and students' ability to transfer that knowledge to the care of their patients. Active learning methods and experiences can be used to educate students

and to facilitate learning improvements. Active learning is a form of instruction involving discussion, problem solving, student presentations, group work, interacting with technology, brainstorming, role-playing, and debates to keep students involved in their learning. Breaking up traditional lectures and including activities such as discussions, problem solving, and interacting with technology are examples of approaches to assist students in understanding concepts and enhancing their higher-order thinking. Experiential learning is when the instructor can relate new information to students' lives and personal experiences, which keeps students curious and engaged and promotes retention of information.

Students remain engaged if their interest is maintained and they interact with the learning situation. Traditional lecture methods may not accommodate different learning styles. Providing a variety of teaching methods within a lecture can effectively engage students whose distinctive manner of learning involves sensory, visual, and active participation. For example, students are better able to learn when traditional lecture teaching methods are combined with active learning, cooperative learning, and peer evaluations. Helping students to retain and transition this new learning into long-term memory by utilizing different teaching methods will assure the ability to retrieve the information at a future time.

Section 2 involves the methodology utilized in this case study approach. Information collected from observation of students and instructors in two 3-hour lecture classes and two clinical settings were used to gain a better understanding of student

learning. An observational protocol was used for transcription and coding. Data were obtained from 10 individual student participants, one instructor, and two preceptors using open-ended questions during 30-minute interviews. Interviews were tape recorded, transcribed, categorized, and coded. The multiple forms of data gathered were used to explore students', instructors', and preceptors' perceptions of the use of traditional lectures in helping students learn. The gathered data were read repeatedly to uncover emerging patterns or themes. Analysis of the data gathered provided understanding of the question: can students apply theory in the clinical setting by being taught via the traditional lecture format?

In Section 3, I developed a new 9-week curriculum plan as the genre for my project. This plan organized the lecture period into 30 minute segments that incorporated various teaching methodologies to maintain student engagement. By utilizing a formative evaluation plan my peers were able to recommend necessary changes prior to finalizing the new curriculum. Prior to implementation, the curriculum plan would be presented to the university's curriculum planning committe and the dean of nursing for approval. Once achieved, approval would then be required from the university's finance committee because additional resources would be required to compenate faculty for additional training days. The final group to present the new curriculum to would be the faculty lecturers. The objective of these session would be to introduce the new curriculum, respond to any questions or concerns, and discuss training.

Section 3 also contains a second literature review to identify best practices concerning the transfer of learning. This review was based on research published within the last five years in peer reviewed articles, and explored the use of experience and active learning in the educational process.

Section 4 includes a reflection on the study and its results. Additional discussion is provided on how the work can be used in teaching, and suggestions for research in the future. I discuss strengths and limitations of the project along with recommendations to address any problems encountered during the research. Additionally, I submitted an examination of myself as a practitioner in the field of education and how I will teach using notes from my reflective journal.

The culmination of this study was the creation of a project involving a new curriculum plan where the traditional 3-hour lecture approach was replaced with one that increases student engagement. Details of that project are in Appendix A.

Section 2: Methodology

Introduction

Employers have incurred an increased financial burden of providing additional time for new graduate nurses to shadow a preceptor, or seasoned nurse, to learn how to provide safe patient care. This undesirable situation for employers may be related to how information is being communicated to nursing students during their undergraduate education. The use of the traditional 3-hour lectures for teaching undergraduate nursing students could result in information not being sufficiently retained by new graduates entering the workforce. The problem explored was the effect that a traditional 3-hour lecture approach has on nursing students' ability to provide their patients with knowledgeable care.

Qualitative Design and Approach

A qualitative case study design was chosen to explore students' inability to apply theory learned in the classroom into actual clinical practice, which was previously identified as being a concern by the assistant dean of nursing at the university where the study was held. This bounded system consisted of junior nursing students at a 4-year college where I teach who were enrolled in a 3-hour childbearing family lecture course. To better understand the problem, an instrumental case study approach was chosen, allowing for observation and interviewing students that provided in-depth information on their individual perspectives on the effectiveness of a 3-hour lecture (Hancock & Algozzine, 2006). The study was supported by constructivist theories of experiential

learning, transformational learning, situated learning, and reflective practice as explained in Section 1 of the review of literature.

The assumption of this study was that nursing students find 3-hour lectures difficult when it comes to retaining new information students learn about childbearing. This inability to store data into long-term memory hinders the critical thinking ability that students need to assess and diagnose patients' needs. As noted earlier by Wood et al. (2007), the use of rote memorization by students prevents retention of newly learned material and storing it in long-term memory for future use. Achieving higher cognitive learning outcomes cannot occur without students being engaged in the learning process (Goldberg & Ingram, 2011).

A qualitative design was chosen for the research because the problem of students' inability to apply theory in actual practice was already identified as a concern with the assistant dean of the university where the study was conducted. This design allowed me to address the phenomenon of using traditional lecture processes to teach junior nursing students in their own learning environment. This junior class was bounded in space and time.

Having previous experience in the childbearing lecture class provided me knowledge of the theory taught in the curriculum. Understanding the theory taught provided me information on what I should be observing the students doing in the clinical setting as they transform theory into patient care. Data obtained included whether the students could accurately perform a skill and be able to explain its purpose to their

clinical instructor. Additionally, the students demonstrated their ability to make appropriate decisions about their patients' care, as heard through the discussions they had with their clinical instructor. Before providing patient care or addressing patient problems the students would inform the clinical instructor of the issues and what type of care they needed to provide. The clinical instructor was then able to provide feedback to the students to help guide the choices of care the patients needed.

Interviewing students individually provided me with their perspectives on applying theory in the clinical setting. By interviewing two nursing preceptors from the hospital where the university's clinical setting was located, and who had previously precepted graduate nurses, I obtained their thoughts on nursing students' abilities to apply theory they had learned in lecture to the care of their patients. One day after a lecture class had finished I was able to obtain the lecturer's perceptions of the students' ability to apply theories taught in the classroom to the clinical setting. Clinical instructors are in contact with the faculty lecturer about the progress of students through weekly text messages or meetings as well as the use of midterm and final semester evaluations. The types of student evaluations used by instructors are formative and summative evaluations. The formative and summative evaluations presently used are a generic form that is not specific to any of the clinical settings. The evaluation utilized half way through the clinical experience is called the formative evaluation. At the end of the clinical experience the evaluation is called the summative evaluation. The purpose of the formative evaluation is for both students and instructors to assess what areas of

learning the students are doing well in and what areas of learning need more work. The summative evaluation at the end of the semester is utilized by both the instructor and the student to assess whether the student has improved in the areas of learning since the formative evaluation was conducted.

In a grounded theory design, constant comparision of data components occurs to discover similarities and differences. Although grounded theory is a qualitative design based on a constructivist perspective, I, as the researcher, chose not to use a constant comparison approach (Lodico, Spaulding, & Voegtle, 2010). Instead, I elected to follow a case study design to explore the participants' perspectives on traditional lecture methods and how they influence students' learning.

Using a quantitative design approach for my research would have required the comparison of various teaching methods with a starting theory to research. At this time, I explored lectures being used as the only teaching method to teach junior nursing students. I was not comparing lecture with other teaching methods. I believe that, initially, the research required data to be gathered from students concerning their thoughts on the form of teaching being used. This input was necessary before any theory could be developed concerning which form of teaching was more beneficial to their learning.

Participants

Criteria

The scope of this study involved exploring the use of traditional lecture methodology to teach third-year nursing students at a specific 4-year baccalaureate program. The campus used is separate from its counterpart located 45 minutes away in a different city. The childbearing classes at both campuses are taught by the same instructor with approximately the same number of students in each. This research was conducted at the campus where I had no involvement as a part-time lecturer, nor did I have any interaction with the students.

For the research, I identified three categories of participants: students in their childbearing class and their clinical setting, the faculty instructor, and two preceptors at the hospital that was affiliated with the university and where the clinical settings were held where the students might be hired following graduation. The two preceptors who were interviewed at this hospital had evaluated nursing graduates from this university research site for over 10 years. Although the clinical instructors were with students in the clinical setting, they were not interviewed for their perceptions of students' ability to apply theory because they had not been involved in the classroom lecture.

The maternity class used for this research was held at a 4-year university and consisted of 46 students. Students varied by culture, age, gender, religious beliefs and had various learning styles. The class was taught over a 3-hour period using PowerPoint presentations and lecture as the primary tools for delivering information. A simple

random sample was taken from a junior level childbearing class that consisted of 46 students ranging from 20-26 years of age.

Ten individual students were randomly selected from the class and interviewed about their perception of 3-hour lecture classes and their ability to transfer what they learned in the lecture class to the care of their patient. The students to be interviewed were selected by choosing every third signed contract out of a total of 40 which had been returned to me. In addition, the lecture class instructor and two preceptors from the university's affiliated teaching hospital, where these new student graduates could be hired, were also interviewed about their perspectives on new graduates' ability to transfer theory learned into practice.

Observations of the students during two 3-hour lecture classes and two clinical environments were conducted to gather additional information concerning students' ability to incorporate the information they learned in lecture into the care of their patient. Observations of students in two of their 6-hour clinicals where they provided patient care were conducted. I was also able to listen as they discussed their plan of care with their instructor. Observation of the instructor in two 3-hour lectures provided information on strategies used to engage the students during class. Student participation during two 3 hour lecture classes allowed me to observe and take notes using my observational protocol. See Appendix D.

Gaining Access to Participants

The institutional gatekeepers where the research took place were approached for support in gaining access to students. They included the assistant dean and the faculty lecturer of the childbearing class for the undergraduate program in nursing. These gatekeepers were provided with a research plan requesting permission to observe and interview junior nursing students and their instructor in the childbearing course lectures and clinical settings. This research plan consisted of focused observation of students in two 3-hour lecture classes and two clinical sessions, and two 3-hour lectures where the focus was on the instructor. Thirty-minute interviews were conducted in a private area with 10 randomly chosen students from the childbearing class at a time convenient for them. This was accomplished by placing all of the approved consent forms in the order received and assigning each a sequential number. Every third consent form was selected up to the number 30, which provided my 10 student participants. The childbearing lecturer was also interviewed for 30 minutes at a time that was mutually convenient for the lecturer and me. Finally, two preceptors from the affiliated hospital that employs new nursing graduates were interviewed. Gatekeepers were provided a copy of the consent forms for approval along with a timeframe for conducting the research with assurance of minimal disruption to the classes (Glesne, 2011).

Participant Working Relationship

As the researcher, I became a member of the class as an observer and interviewer so that I could develop a relationship with the students to establish trust and confidence.

To establish a working relationship, I assured participants that their input was valuable in answering the research question concerning their perception of the ability to transfer information delivered in 3-hour lectures to actual clinical practice. Additionally, the confidentiality of their participation was assured by using codes as identification. An environment of respect and a nonjudgmental attitude were provided to each and every participant. Each participant was also allowed sufficient time to provide information in a private and safe environment and was assured that he or she could cease participating in the study at any time he or she wished.

To maintain confidentiality, code identifiers were used for individual participants, and all information was maintained in a file cabinet, which was locked on a personal password-protected computer. Informed consent forms specific to the students, the instructor, and the preceptors informing them their participation was completely voluntary were provided to each participant. These consent forms specified any potential issues and benefits associated with participation in the research, and stated that volunteers could stop at any time. The consent forms identified the study and discussed the use of observations of the lecture class and the clinical setting along with participant interviews following the lecture class and their clinical rotations. The consent form also disclosed the use of audiotaping to maintain accuracy of information. Participants were provided with assurances that their identity would be kept confidential (Glesne, 2011). The consent forms were provided to the students of the childbearing class during the second week of the fall 2013 semester. A brief 10-minute explanation of the study

during class time was provided. Consent forms for preceptors were delivered 2 weeks prior to the start of class at the affiliated hospital where graduate nurses are hired. All students in the class, the class instructor, and the preceptors were provided with a self-addressed, postage-paid envelope to return to me signed consent forms agreeing to participate in the study. Forty student consents, one faculty lecturer consent, and three preceptor consents were returned over a 6-week period.

Protection of Participants

The Institutional Review Board (IRB) of the institution sponsoring the 4-year nursing program was approached for approval of the study. This body was provided a copy of the proposal, consent forms, and interview protocols with assurances that confidentiality would be maintained for all participants. Once IRB approval was obtained from the research site institution, which included the hospital used for the clinical setting, the IRB at Walden University was then provided the same information for approval. Approval from these two oversight bodies occurred prior to gaining access to the participants. The study site approval number was 13-766Mx. The Walden approval number was 04-08-13-0171187.

Data Collection

One element of the data collection process for this study involved observation of students during two 3-hour lecture classes and two clinical settings. Prior to the start of any research, informed consent documents were obtained from each participant protecting them from mental, physical, and emotional harm while at the same time

preserving their right to confidentiality (Hancock & Algozzine, 2006). With prior permission, all participants were tape-recorded and that data input was then transcribed verbatim to prevent any biased interpretation by the researcher or possible distortion of the information obtained through interviews (Merriam, 2009). The transcribed data were then placed on a password-protected personal computer, and all written information contained in research logs was placed in a lockbox.

In the lecture class, students were observed for interaction with their instructor or other students. Students were then observed in the clinical setting to identify whether they applied theory learned in the classroom to the care of their patients. The faculty participant was observed in two 3-hour childbearing lecture classes from which data were gathered on teaching methodologies employed to engage the students.

Interviews of individual students and the faculty course instructor were conducted to further explore their perspectives concerning students' ability to transfer theory into a clinical setting. Two preceptors were interviewed concerning the preparedness of new graduates to work in the hospital affiliated with the university. Gatekeepers for the university where the study was conducted were informed that the particular site chosen for this study was the same one where I had previously served as a student teacher. The gatekeepers were assured that conclusions derived from the collected data would be delivered to them at the conclusion of the study.

Observations

Observations were conducted in the classroom setting during two 3-hour lecture periods and two clinical sessions as established in observational protocol guidelines. These respective guidelines are shown in Appendix B, Observational Protocol Guideline—Lecture, and Appendix C, Observational Protocol Guideline—Clinical. Data were recorded using Appendix D, Observational Protocol Data. An observational protocol checklist consisting of the location, date, environment, time of day, spacing of desks, lighting, and the students' ability to hear the lecture was noted. Observation within the clinical setting focused on the knowledge and skills the students used to care for a laboring patient, a newborn, and a postpartum mother and included their discussions with their clinical instructor on the individual plan of care. Together the observation of the patient's care and the ability to discuss the plan of care provided me information on the students' ability to understand why a particular type of care is needed and given. Participation of students during lecture as well as other activities students were engaged in during that same time were observed and documented. This provided additional objective information related to the research topic.

Utilizing the observational protocol checklist facilitated maintaining organization of the information and provides credibility to the collected data because all participants were observed for the same information. Student activities during lecture were observed and recorded as they related to student participation during the lecture. Any disruptive events that occurred during the lecture were included in the

documentation. An observational protocol was used to obtain data on student and instructor activities during lecture as well as students' activities at the clinical setting. The information includes dates, times, and codes for each participant (Glesne, 2011).

To gain access to the participants' classroom setting during the observational period, information concerning how, why, and for who the study was being conducted was provided to the faculty and students. Trust was obtained and maintained with all participants in the study through assurances that privacy and confidentiality of all data gathered and participants' identities would not be compromised.

I recognized and addressed any personal biases within the study that were identified through peer review and/or the collaborator to ensure impartiality of the conclusions. Member checking was utilized through five randomly selected participants to assure that data gathered were interpreted appropriately. All five participants agreed that information gathered from their interviews was accurate. An external auditor, the research site collaborator, was consulted to evaluate research findings and to provide insight concerning the gathered data.

Interviews

The second form of data collection involved conducting individual interviews of ten students, one faculty member, and two preceptors. Interviews were audiotaped and immediately transcribed onto a password-protected personal computer database. Ten individual student participants, the childbearing class lecturer, and two preceptors from the affiliated hospital were scheduled for 30-minute interviews during times which were

convenient for them after class had concluded. Individual student interviews allowed for obtaining specific perspectives on their learning from a 3-hour lecture (Glesne, 2011). The faculty lecturer of the childbearing class which the student participants attended provided their perspective on educating students using a 3-hour lecture format and their thoughts on the students' ability to apply this new information in practice. The interviews involving the two preceptors perceptions involved in the study provided data relative to the ability of new graduate nurses they oversaw that were hired at the affiliated hospital to provide knowledgeable care to their patients. These two preceptors were not connected to the faculty or the lecture the students participated in, but were connected to the graduate nurses that were hired from the university where the research was held. The use of a semistructured interview approach based on open-ended questions allowed the students, faculty, and preceptors to provide their own perspectives on learning through traditional lecture methods. All interviews were recorded to maintain accuracy of information. Interviews were conducted in a private, quiet, and comfortable setting that was agreed upon by the participant and the interviewer. Participants were made aware that they were free to halt the interview or refuse to answer any question they felt uncomfortable with.

Data collection involved conducting individual interviews with 10 students, and these lists of questions can be found in Appendix E. Preceptor interview questions can be found in Appendix F. Faculty interview questions can be found in Appendix G. Sample questions were provided to my peers prior to commencing the research for

feedback to ensure the questions were appropriate and would provide the data necessary to answer my research question. A semistructured interview using open-ended questions was initiated to obtain the participants' view of their learning. The objective of these interviews was to explore how the traditional 3-hour lecture methods used to teach nursing students prepared them for providing patient care in a clinical setting.

As previously stated in section 1 of this doctoral study the research question involved exploring how a traditional lecture format prepares students to transfer theory to the clinical setting. The guiding question was what are student, faculty, and preceptor perceptions of nursing students' ability to transfer classroom theory to the actual clinical setting? Further questioning was used to provide more in-depth information on students' learning as they shared their individual perspectives on their preparation to care for patients.

Data Recording

I observed the students and collected data relative to participants' activities during the 3-hour lecture using the observational protocol. The protocol, shown in Appendix D, consisted of three sections: (a) a section for demographic information (date, time, space, participant's code identification, and consent form); (b) a section for descriptive notes from observations of students; and (c) a section for my reflective notes and additional field notes. Columns were color coded for easy visualization to help prevent errors due to incorrect placement of information when it was recorded (Creswell, 2009).

I conducted interviews of 10 individual students in the class participating in the study along with the childbearing class lecturer and three preceptors. Once permission was received from each participant, interviews were audiotaped and then immediately transcribed into a password-protected personal computer database to assure accuracy of the information obtained. An interview protocol was used to which demographic information (date, time, space, participant code ID, and consent form) was added. See Appendices E, F, and G. Icebreakers were used and mixed in with the questions and subquestions asked of participants. Space was made available to document student answers and any elaborations or notations of students who provided in-depth information on traditional lectures and their ability to apply the information in the practice setting. Audiotaping of interviews helped to maintain accuracy of information. A note contained within my logbook reminded me to thank all participants for their time and to request the opportunity to reconnect with them later (Creswell, 2009).

A reflective journal was used to collect any additional observations or environmental conditions, similar to a logbook (Creswell, 2009). The journal included canceled appointments made with participants and the rescheduled meeting dates. Information was categorized according to emerging themes and recorded on a system created using Microsoft Excel.

Gaining Access

To gain access to the site for the research, the assistant dean of the nursing program was provided a copy of my proposal and consent forms. This gatekeeper was

informed that I chose this particular site because this was where I had conducted my student teaching and observed student reactions during 3-hour lectures. This site was also where I had hoped to find in-depth information about my research topic. Subsequently, I believe that this exploration into students' perceptions involving the use of 3-hour traditional lectures provided valuable information to assist in answering the research questions. Observation of both the instructor and the students' reactions and interactions during a period that covered four 3-hour childbearing lectures provided in-depth information about student learning. During two of these lectures, the observation focused on the instructor only. For the remaining two lectures, the students were strictly observed. Additionally, interviews were conducted with 10 individual students, the class lecturer, and three preceptors. Interviews were audiotaped and then transcribed immediately onto my password-protected personal computer. Data collected for the study were compiled during the fall 2013 semester.

Results were reviewed with five randomly chosen participants, a process referred to as *member checking*. This allowed a selection of participants to review the final report for accuracy. Peer debriefing was employed when questions were raised about the qualitative study, enhancing the accuracy of the account. An external auditor, or *collaborator*, was used to ensure validity and prevent researcher bias by offering an objective assessment (Creswell, 2009). Participants' rights and confidentiality were protected by utilizing code names and securing data in a lockbox. Digital data were stored on a password- protected personal computer. Study results would provide

gatekeepers with information to support the need for implementing appropriate changes within the maternity nursing curriculum to enhance student learning. After gatekeepers had the opportunity to review the proposal, any further questions relative to the study were addressed prior to commencing data collection.

Role of the Researcher and Bias Prevention

As the researcher in this study, my role was to identify my own personal biases relative to the study and to articulate them within the writings. I believe that the traditional lecture method of teaching is not the optimal approach to student learning. My experience as a student teacher at this college included casual observation of student activities within the 3-hour lectures for one entire semester of the maternity nursing class. I observed students using Facebook, sending text messages, and sleeping, and they were not participating in the lectures. Being aware of my personal beliefs prevented them from influencing my interpretation of the field notes. Additionally, allowing participant members to check data interpretations for accuracy minimized researcher biases from emerging (Lodico et al., 2010). I constantly reflected on and mitigated any aspects of my research that could have been deceptive. An external auditor assisted in examining data collected to determine whether it was grounded, whether interpretations were supported, and whether no researcher biases were present (Lodico et al., 2010). Both research participants and the gatekeepers were made aware that I was an adjunct professor teaching the clinical portion of maternal nursing to a group of students from the adjoining campus and that they would not be involved in this research. As the

researcher, I interacted with students on the campus where the research took place, and by explaining the how and why of the research study while assuring participant confidentiality I built relationships based on trust.

As the researcher, my role involved observing individual student behaviors, activities, and interactions with other students as well as their lecturer in the classroom setting. My role as a PTL at the university where the study was being conducted did not interfere because my classes were held on a separate campus where I had no interaction with the students. The students were not aware of my role other than as a researcher for this study. Being in the lecture class with students each week allowed trust to develop between myself and the participants of the study. This trust made it easier to observe and interview them because they treated me as part of the student population. This was accomplished by maintaining a professional demeanor and assuring privacy and participant confidentiality throughout the study. Participants were informed of how the study would provide important data that could lead to positive changes in teaching methods for the future of the next generation of nursing students.

Data Analysis

Introduction

Employing a qualitative approach, I was the primary person collecting and analyzing the data, requiring a prolonged period in the environment being studied. Data collection and analysis were done simultaneously in this research project (Merriam, 2009). Using a case study design, I explored emerging themes or patterns based on data

gathered from the observations and interviews that were recorded. The data were coded by color and assigned letters. Then I was able to see how the data collected from the observations began to connect with the interviews because I began to see patterns in the observations emerging in the interviews as one supported the other. Reviewing the data repeatedly during the analysis helped me develop a comprehensive view of whether the students were able to understand how to provide patient care and the reasoning for that care. All participants of the study provided permission slips and agreed to be observed, interviewed, and audiotaped as previously indicated.

Six steps were used for the analysis of this research data. Step 1 consisted of two parts, typing my observations and typing the interviews. Step 2 involved developing an understanding of what the data meant. Step 3 consisted of coding the data. Step 4 involved creating a detailed description of the research settings, participants, and events. Step 5 involved an analysis of findings. Finally, Step 6 involved interpreting the outcome of the data.

Observations

Step 1 of the data analysis process involved two separate actions. Although two of the data sets were in the same class they were observed at different times. I observed the students in two of their 3 hour lecture classes. On two different days I observed the lecturer separately while she taught the 3-hour Childbearing Family class. The first step required creating observational field notes of only the students' activity during two of their Childbearing lectures. Observations of the faculty member were also conducted

and documented during two additional, and separate, childbearing class days. These observational notes also included two clinical settings where students' discussed their care plans with their clinical instructors and provided actual patient care. The initial observations during the lecture class involved interaction of student participants with the childbearing class lecturer as well as each other. These observations occurred during class, which was conducted every Thursday from 1:45 p.m. to 4:45 p.m. As previously stated, the data collection and analysis occurred in parallel. Following my classroom observations, I typed the notes I had written into an organized format. As themes emerged, I identified and categorized them using Microsoft Excel. Each note had the date, time, and location where the lecture was held.

The hospital clinical observations consisted of observing student participants caring for their patients in maternity units. Data were collected using the observational protocol guideline specific to the clinical setting, providing consistency of information. Following each clinical observation, data were typed into Microsoft Excel and categorized for evaluation of similar or emerging themes. In some cases, the students were unable to perform a specific task or explain why they were doing a particular activity when discussing the plan of care with their clinical coordinator.

Observation of the faculty lecturer during the Childbearing class focused on teaching methods and tools that were used for student engagement. Additional information provided from these observations included details such as observation dates, times, and locations. The faculty observation was done on two separate days from the

observations made of the students during the Childbearing lecturer class. Participant codes were used to maintain confidentiality at all times. At the conclusion of each lecture, the notes from the faculty lecturer observational protocols were transcribed and placed in the Microsoft Excel program to identify matching themes or new merging themes.

Interviews

The second action of Step 1 involved the verbatim transcription of audiotaped interviews into a password-protected personal computer database. For reference, all signed consent contracts were available during each participant's interview. Participants to be interviewed were chosen by selecting every third contract received. One of the students became ill prior to being interviewed, resulting in her withdrawal from the research study. Subsequently, another signed consent contract was chosen by selecting the next third contact in the organized lineup. Students often had to change dates or times for interviews for various reasons, increasing the time necessary to complete the interview process. A nonjudgmental attitude was maintained throughout each interview. Any questions raised during the interview were explained to the participant's satisfaction. At times, an interview can indicate an individual's personal bias based on perception; however, interviews can also provide useful information on students', faculty members', and preceptors' perceptions of current educational practices. The use of traditional lectures and the ability of students to transfer theory learned to the care of their patients was the topic being explored.

Following the student observations in the classroom and clinical settings, students were interviewed using Appendix E, Student-Focused Interview Questions. Preceptors were interviewed using Appendix F, Preceptor-Focused Interview Questions. The faculty lecturer was interviewed using Appendix G, Faculty-Focused Interview Questions. Interview times, dates, and locations were included (Creswell, 2009). The university provided a secluded office to be used for conducting the student participant interviews. Only the participant and interviewer were present. The interviews lasted 30 minutes or less and occurred the day following the childbearing lecture class at a mutually agreed upon time. The faculty lecturer was interviewed on a day following her childbearing class. The interview, completed in 30 minutes, was conducted in the lecturer's office on a date and time agreed upon. Preceptors were interviewed for 30 minutes in a private office at the hospital where they worked during an agreed upon day and time. Following the completion of the interviews five of the interviewees were selected to review their input for accuracy. The five were chosen by selecting every second consent form from the 13 obtained for the study. This practice is referred to as *member checking* (Merriam, 2009).

The interview audiotapes were transcribed and typed into Microsoft Word. Similar and emerging themes were categorized in response to student, faculty, and preceptor perceptions. Themes were color coded for ease of identification, and transcribed data were reviewed multiple times for accuracy. Eleven themes appeared to emerge initially from the data reviewed; however, this was reduced to a total of five

following consultation with my research collaborator. Again, all participants' information was coded and stored on my personal password-protected computer. Questions answered were the following:

1. What were the students' perspectives relating to the use of 3-hour lectures in preparation for the clinical setting? Data were obtained through student interviews. See Appendix E.

2. What are the faculty's perspectives relative to using 3-hour lectures to provide theory to prepare students for the clinical setting? Data were obtained through faculty lecture interviews. See Appendix G.

3. What are the preceptors' perspectives on how students were able to apply theory to the clinical setting? Data were obtained through preceptor interviews. See Appendix F.

Step 2 involved developing an understanding of what the data meant, which were documented in the margins of the logbook (Creswell, 2009). The collaborator reviewed the research data, the basis for additional themes and the presence of bias. Meetings were held with the collaborator to discuss differences and similarities. The data were repeatedly reviewed for additional emerging themes.

Step 3 involved the process of coding the data gathered into organized categories of information including observation of the faculty and students in the lecture class and then the students functioning in the clinical setting. The participants were first coded as a letter and number and placed in Appendix H, Qualitative Code Book. The observations

made of the faculty lecturer and the students were color coded, green for faculty lecturer, pink for students in lecture and aqua blue for students in the clinical setting. The interview data obtained from the students, faculty, and preceptor participants were provided a color code corresponding to the participants' ID. Emerging themes from the interviews and observations were then identified from the colors coded and reassigned a T (theme) and a number 1-5, loaded into categories using Microsoft Excel along with a category for information that was dissimilar (Creswell 2009). A combination of predetermined and emerging codes was used. A qualitative code book was created with the coded names in one column, their definitions in a second column and specific information such as location of code in a third column. This code book was beneficial in placing information in the computer spreadsheets. Patterns or themes that emerged from the retrieved information were categorized, alphabetized, and placed in a logbook. This log contains the names of the various codes and their definitions, followed by the location of the code within the data (Creswell, 2009). Meeting with the research site collaborator helped to consolidate the eleven themes initially developed down to five.

In Step 4, a detailed description of the setting, participants, and events that occurred were analyzed and coded for theme connection (Creswell, 2009). All student observations in the clinical setting were conducted on the mother–baby units of a large teaching hospital and commenced on week 5 of students' rotation schedule to allow time for confidence and skill building. Students were observed while assessing pregnant women in labor as well as after the delivery (postpartum). Many of the students did not

understand the stages of labor and how birth proceeds. In the nursery, students were observed assessing newborns and giving them medications. The students' demonstrated difficulty in obtaining the temperature, heart rate, and respirations of a newborn, referred to as the infant vitals. When one student was asked why vitamin K injections are given to a newborn, she was unsure of her answer.

The classroom lecture hall was constructed to accommodate 150 students in a stadium seating arrangement. The seats were semi-cushioned and swiveled under a table for room and leg movement. The classroom used appropriate lighting, and the temperature was kept between 68 and 70 degrees Fahrenheit. The walls were soundproof, and the screens for the PowerPoint were large and intact. The acoustics were appropriate, and the lecturer wore a microphone so as to be heard throughout the room.

In Step 5, the analysis of findings was provided using a narrative process. The findings include the order of events as they occurred, different participant perspectives, and discussions of themes or patterns that emerged. When interviewing the students, I discovered they preferred the 3-hour lecture class because they did not want to come two separate days because it would conflict with their schedules (S04). The students felt that it was hard to stay focused on the lecture after about 1 to 1.5 hours (S15). Most thought it would help to break up the 3-hour lecture somehow (S09).

Step 6 of the data analysis involved interpreting the meaning of the data. Information provided here included my own personal interpretation as well as a

comparison of findings from the literature. The data that were collected and the themes that emerged showed that the students needed the instructor to use additional teaching methodologies to assist them in understanding the information they were receiving in lecture. My personal belief is that experiential education provides students with different learning styles and a variety of ways to learn information and to see how it works.

Goldberg and Ingram (2011) proposed the use of other class activities to be used along with lectures to promote student engagement. Ensuring higher cognitive function requires active involvement of students (Revell & Wainwright, 2009). New questions could emerge from the research that may be relevant to the question to be answered according to Creswell (2009). To maintain credibility, Glesne (2011) provided a few suggestions that were used in the study. Data were analyzed using triangulation or crystallization, in which more than one form of collected data obtained through observations and interviews, was used to support findings, which made the study more convincing. The students of the childbearing class, the faculty, and three preceptors of the affiliated hospital were all interviewed separately and privately. The students were observed both in two lecture classes and two clinical settings. The faculty instructor was also observed in two lectures that were provided to the childbearing students. Data were coded at the same time they were obtained and then repeatedly reviewed for emerging themes. Member checking was used, allowing participants to review data that had been collected to determine whether there were any misconceptions or researcher biases. Two of my colleagues were asked to review the findings and make comments to uncover any

discrepancies, a process referred to as *peer debriefing*. Researcher biases were addressed by the use of reflection, peer debriefing, and member checking (Creswell, 2009).

Maintaining a reflective journal (logbook) allowed me to continually review and reflect on my work and monitor my own subjectivity to prevent bias. Allowing checking of gathered data from participants, known as *member checking*, assisted in maintaining accuracy of information. An external auditor (collaborator) examined the research through auditing of data collection and methods.

Discrepancies found within the gathered data were discussed in the study report to allow for varying students' perspectives concerning how students learn and how they were being taught. Emerging themes that appeared contradictory were incorporated into the discussion to account for varying perspectives. To minimize the potential for introducing personal bias when interpreting these themes, a reflective journal (logbook) was utilized to capture data and was revisited frequently.

Findings

Observation of both the student participants and the faculty enhanced the exploration of how students were learning in the classroom. The interviews with students, faculty, and preceptors provided data on each participant's perception of how students learn material and then transfer that learning to the clinical setting. Examples of transcribed notes for both a lecture class observation and an interview are included as Appendices I and J for viewing. Using three different groups to interview and two groups for observing allowed me to be able to triangulate the data, providing a richer

source of information and enhanced credibility of the findings. Having a selected group of participants review their information and its interpretation, referred to as *member checking*, improved validity and prevents researcher bias.

Observations

The faculty lecturer was observed for two days when presenting to the Childbearing class. On two different dates, students were also observed during the three hour lecture. Two additional observation sessions were conducted of students participating in their six hour clinical activities.

Students in the lecture class would often arrive with their lunches and begin to eat before opening their laptops. Some of the students opened their laptops to the lecture material then would switch to another website. After approximately one and a half hours, the students were no longer engaged with the lecturer and became restless, moving about, viewing other websites or Facebook. Some students were talking with other students in small groups or closing their eyes to rest. McGarr (2009) and Straits (2007) noted that traditional lectures are a passive form of teaching which promotes memorization. Students are not able to internalize the information they learn through lecture and their individual learning styles are not being addressed making teaching more difficult according to Smith (2011). When the students were divided up to teach a topic during lecture, the majority of the remaining students did not participate or ask any questions. Over one third of students took multiple breaks to leave the classroom to go to the bathroom or to get something to drink. Most would return; however, some closed

their laptops and placed them in their backpacks for a break or did not return to class. Perkins (1999) and Sandberg (2012) proposed that students need to be able to transfer their learning from lecture to the clinical setting which requires an attractive learning environment where various teaching methods are used to keep participants actively involved. Table 1 provides additional data of classroom observations that specifically relate to the first research question.

Table 1

RQ 1: Activities of Nursing Students During Lecture: Classroom Observations

Participant	Setting	Observations
S30	Childbearing Lecture	Not involved in class lecture, using laptop for other websites, left class early.
S24	Childbearing Lecture	Studying another website, periodically looking up at lecturer.
S09	Childbearing Lecture	Restless in seat, talking to other students S18 and S06 during lecture.
S18	Childbearing Lecture	Talking to other students. Leaves for frequent bathroom breaks. Does not ask any questions.
S12	Childbearing Lecture	Taking part in the discussion with a student who was teaching a topic chosen from chapter being presented.

(Table continues)

Participant	Setting	Observations
S06	Childbearing Lecture	Talking with other students and viewing Facebook.
S06	Childbearing Lecture	Talking with other students and viewing Facebook.
S21	Childbearing Lecture	Sleeping half way through lecture class.
S15	Childbearing Lecture	Teaching a lecture topic assigned to a group of 10 students.
S27	Childbearing Lecture	Talking with student next to them during lecture. Left class at break.
S03	Childbearing Lecture	Sitting in front row paying attention to lecturer as material was being presented.

The faculty lecturer was observed to be very well versed in the subject. The lecturer used PowerPoint to assist in her teaching and provided the PowerPoint slide deck to each student. Personal experiences were shared on occasion to help students better understand the information being provided. After each topic, the lecturer always asked whether there were any questions and received few responses. Some students were observed talking with their neighbors when questions were directed to them, which they were not able to answer.

On occasion, the class of 46 students was divided into groups of approximately 10 by the instructor to present a portion of the topics being covered that day in efforts to promote student engagement and participation. At the start of class the faculty instructor would give students 15 minutes to get their groups together to discuss the part of the lecture material they would be presenting. Each group is tasked with highlighting important information about the topic they were assigned, new things that they learned as a group, and questions they want answered by the instructor. This form of teaching was being used to engage students in their learning.

The student groups presenting were not able to maintain the attention of over half the class. Many students talked among themselves or left the lecture room frequently during the students' presentation. The instructor would ask questions of the entire class to help get them involved. Barthwal et al. (2011), Goldberg and Ingram (2011), and Skylar (2009) wrote about keeping students actively involved by using discussions, role playing, and the use of debates. Table 2 provides additional data relative to faculty observations in order to answer Research Question 2.

Table 2

RQ 2: Teaching Strategies Faculty uses During Lecture: Classroom Observations

Participant	Setting	Observations
F01	Childbearing Lecture	The lecturer used a PowerPoint that each student has access to on their computer. Students are asked for questions after each topic is finished. Students are divided up in groups to teach a topic from the chapters that are being covered in class. The lecturer uses personal experience to help students' understand the material, and is well versed in the maternity topics. The lecturer teaches from a podium and does not walk around the room to see what the students are actually doing at their desk. Students other than those teaching part of the lecture with their group are not engaged in the class.

In addition to Table 2, see Appendix I for an example of observations noted during class lectures.

Observation of the students in their clinical setting showed that many were unsure of how to care for a newborn as well as the infant's mother. Table 3 provides data of clinical observations specifically related to the third research question.

Table 3

RQ 3: Critical Thinking Skills Students Exhibit in Clinical Setting: Clinical Observations

Participant	Setting	Observations
S30	Clinical Setting	Nurse from labor\delivery asks if students would like to learn about a fetal monitor strip. Student tells nurse that their instructor told them that a fetal monitor strip was not important to know.
S24	Clinical Setting	Student agrees to listen to information about fetal monitor strip
S09	Clinical Setting	Student unable to assess a fundus until demonstrated by the instructor, nor could they explain the importance of it being firm after a delivery.
S18	Clinical Setting	After demonstration by a clinical instructor on how to assess a postpartum fundus the student repeats the demonstration without explaining to patient what they were doing or introducing themselves.
S12	Clinical Setting	Student assist the first student in evaluating a postpartum patient but does not ask the patient any questions about her pain level or if she needs any education in care of herself after delivery of a baby.

(Table continues)

Participant	Setting	Observations
S06	Clinical Setting	Student was involved participating in the discharge instructions being given to her patient by her primary nurse.
S21	Clinical Setting	Student was in the newborn nursery and unable to do a fetal heart rate. Nurse demonstrates, and then student repeats the demonstration.
S15	Clinical Setting	Student introduces themselves to the patient explaining what they were going to do and ask if the patient has any concerns before they start the assessment.
S27	Clinical Setting	Student in the newborn nursery observing clinical instructor giving a bath. Next newborn that was admitted this student along with a second student repeated the bath demonstration.
S03	Clinical Setting	Student involved in assessing a newborn along with the babies nurse asking questions about the assessment.

Two students were asked by their clinical instructor how to assess the fundus of a mother who recently delivered and neither one knew what to do. Subsequently, the clinical instructor demonstrated the assessment steps to the two students and then they were able to repeat the assessment of the patient's fundus as the instructor stood by.

Sandberg (2012) proposed that students could create new knowledge when they reflect on experiences they encounter. Later in the clinical experience three students were asked to measure patient vital signs on a group of postpartum mothers. The three students stated they were not sure what the normal levels should be and needed additional help from their clinical instructor. Their clinical instructor then started to discuss normal vital sign ranges for a postpartum woman and referred back to the text book readings for additional help. Two additional students were shown how to assess a newborn in the nursery and obtain the infant's vital signs. Participant S03 stated, "I found that once the nurse or professor demonstrated the assessment on the baby first, even though I was nervous, by the second baby, I was able to do it much better." When these same two students were asked to repeat the assessment on the next newborn, they felt uncomfortable and were able to get only a partial heart rate. When the nurse assisted them in the assessment, she showed them what to do and how to get the baby's vitals including a proper heart rate. Murphy and Sharma (2010) discussed maintaining student involvement by using a combination of teaching methods, discussion, demonstration, and feedback.

During an observation on postpartum I overheard a clinical instructor ask two students' (S15+S27) about information that needed to be obtained when assessing a normal spontaneous vaginal delivery. The two students looked confused, so the instructor referred them to the Bubbleheab form. Bubbleheab refers to an outline given to students to provide guidance when doing a physical head to toe assessment of

delivered mothers. The instructor began to ask the two students' questions about information on the form and how to assess a patient before they went to this newly delivered mother. Both students were having trouble answering the instructor's questions.

After the instructor demonstrated the assessment of a postpartum mother the two students were able to repeat the procedure accurately. One of the two students informed their clinical instructor that her plan for the patient was to get her up to walk. The instructor asked her what the benefits were for the patient to get up to walk. The student replied that it would make her feel better. The clinical instructor informed the students that having the patient ambulate after a caesarian section helps them to break up the gas that accumulates from lying in a bed for an extended period of time. Releasing this gas helps to decrease the patient's pain level.

During one of the clinical class days the instructor went with S03 plus another student to give meds. First, the instructor demonstrated the process of giving an intramuscular injection. The first student S03 who was to give meds was very nervous with the injection and additionally had difficulty discussing the patient’s seven rights concerning giving medication to a patient. The clinical instructor coached the student through the rights and then the injection, which helped the student to finally complete the skill. The clinical observation was supported by the information obtained from the student. Theory and practice must be consistent to ensure safe patient care in the clinical setting (Maginnis & Croxon, 2010).

Table 4 provides a summary of observations of students during lecture and clinical, as well as the faculty during lecture, over the course of this research.

Table 4

Summary of Observations from Lecture and Clinical Settings

Participant	Setting	Observations
Faculty	Lecture Hall 2, 3 hour lectures	1. Provided PowerPoint 2. Shared personal experiences 3. Answered student questions 4. Students presented topics 5. Faculty utilized traditional lecture
Students	Lecture Hall 2, 3 hour lectures	1. Attention span decreased after first hour 2. Students distracted (search web & talk) 3. Students leave lecture early 4. Students ignoring fellow student presentations
Students	Clinical Setting 2, 6 hour clinical settings	1. 7 of 10 students unable to demonstrate skills 2. 9 of 10 students not actively seeking experience 3. 8 of 10 students not asking questions of staff 4. 5 of 10 students unable to provide patient's plan of care 5. 3 of 10 students excited about observing vaginal delivery and Cesarean section

(Table continues)

Participant	Setting	Observations
		6. 2 of 10 students show interest in fetal monitoring 7. 2 of 10 students asked questions regarding situation they were experiencing

Interviews

The student responses to interview questions on their perceptions of 3-hour lectures and their ability to apply the learned theories in the clinical setting revealed some interesting information. I was able to correlate both students clinical and lecture observation with the interviews. Students felt that they needed more experiences with the information taught in lecture class. The following are examples of student input.

Student S03 stated, "It is hard to just sit for 3 hours, but when I am in an experience and I can see it actually happening, I get the connection, and I get a much richer experience by seeing it done."

Student 18 stated:

> I think 3-hour lectures are long and boring, but I don't want them to be broken up because I only want to come once a week. If they get boring, I just study for my pharmacology class that follows this one.

I was sitting in the back row of the lecture hall, which had stadium seating where I could view all the students. In the last row, two of the nine students had other websites

open and were interacting with them, not paying attention to the lecture at the start of the class. Some students were listening to what the instructor was talking about.

Student S12 stated:

> For me, 3-hour lectures work because I am used to them. That way, I have the rest of the week to review for the class before I have to come back. I do wish, though, they could be broken up somehow to keep them interesting.

Finally, student S15 stated, "The lecturer has put us in groups to do part of their teaching. We do not like it. You cannot hear what the other students are saying up front, so I just read it from the PowerPoint."

Revell and Wainwright (2009) proposed that active student involvement was necessary to ensure that higher cognitive functions were being acquired. Surprisingly, I found that eight out of ten participants did not want to break up the 3-hour lecture class into two 1.5-hour classes throughout the week. However, what they did want was to somehow make the 3-hour passive lecture class more interactive so it would maintain students' interest. Table 5 provides data of students' perspectives specifically related to the fourth research question.

Table 5

RQ 4: Students' Perspectives on 3-Hour Lectures and Their Preparation for the Clinical Setting

Participant	Setting	Perspectives
S30	Interview Private Classroom	"You can tell me how to do something, but if you demonstrated it first I understand better and then can repeat it back to you. In three hour lecture class I can just study another class after I lose interest."
S24	Interview Private Classroom	"Three hour lectures are so long I start to lose focus. I would be better prepared for the clinical setting if I had more simulation experiences not just sitting in a room listening to someone tell me what to do."
S09	Interview Private Classroom	"I think if we broke up the lecture with role playing or simulation then we would have the opportunity to practice what they were telling us in lecture."
S18	Interview Private Classroom	"I am a visual learner and like watching someone else do the task first. I cannot just learn from the lecture I have to do it. Three hour lectures are long and I get bored, but, I know there is a lot of material we need to know."

(Table continues)

Participant	Setting	Perspectives
S12	Interview Private Classroom	"I think 3 hour lectures work for my schedule I would not like to come twice a week. I know that without labs and hands on experiences I could not do it with lecture alone."
S06	Interview Private Classroom	"I lose track in three hour lectures after the first hour or so, but I do not want to come to 2 classes if it gets broken up, but if we could do something different in class to learn that would help."
S21	Interview Private Classroom	"I love doing simulation because if I make a mistake no one is hurt and I can learn from it. Just listening to lecture is not enough."
S15	Interview Private Classroom	"I think the use of more simulation and hands on experiences helps me to learn best."
S27	Interview Private Classroom	"I do not like three hour lectures, but, we get the class done for the week. If we could have some discussions about the topics we could get other people's views that would be more interesting."
S03	Interview Private Classroom	"I really like simulation so we can learn to care for a patient without hurting them. First we watch the instructor do it then we can."

The faculty interview revealed how they felt about their students' ability to understand what is taught to them in lecture and then provide the appropriate care to their patients. Faculty member F01 stated:

> I feel that the students don't possess the maturity to even speak to a patient, let alone assess them. They are so focused on skill learning that they cannot attach meaning to what they are doing. I think they learn better when they see it done in a clinical setting and they can think the process through. I would like to have two 1.5-hour classes twice a week because I know I lose them in 3-hour lectures. Today's students want to be spoon fed, but, we need to teach them to be responsible for their own learning.

Smyth (2009) noted that interactive learning is a process where students think about both what they are learning and how they are learning to help create knowledge. During the interview, the lecturer also spoke about a teaching method she was using to try to get the students involved:

> I have divided my class up into groups of 10 or so and have them teach a part of the topic we are going over for the day where they have to be the lecturer. There are so many ways to get a student involved, but that would take a major curriculum change along with money and time. The faculty recognizes a need for curriculum change and the incorporation of different teaching methodologies to get our students engaged in their learning process.

The Institute of Medicine (2010) emphasized linking knowledge, practice, and clinical reasoning skills together to promote team building and collaboration among nursing students being taught. Table 6 provides data of faculty's perspectives specifically related to the fifth research question.

Table 6

RQ 5: Faculty's Perspectives Regarding 3-hour Lectures and Student Preparedness for the Clinical Setting

Participant	Setting	Perspectives
F01	Private Office	"I don't think students are prepared to take care of patients in the clinical setting because they are immature and don't even know how to communicate with a patient. I don't think they think through what they are doing because their focus is on the skill, not the patient. I would like to add case studies in class to promote discussions. I also know I don't keep their attention during three hours of lecture but I'm trying a new process where the students teach a portion of the material to get them involved. I provide the lecture to the students but I know then they do not have to pay attention. I would like to add more simulation and videos in class but my budget will not allow for it."

Preceptor interviews varied little in that both agreed that the students needed more experiences to learn from. Both preceptors found that they had to provide ample

experiences for the new graduate nurse to be a part of to help them better understand the nursing care they were providing.

Participant P03 stated that: "This new generation of graduate nurses is well qualified to handle the technology they will encounter but are having a lot of trouble talking to a patient, doctor, and other nurses." They found that it was a priority to encourage the new graduate nurse to learn to communicate with their patients, and their patient's primary care giver, as well as the patient's families.

Participant P02 stated that: "When performing a skill or task, they demonstrate difficulty in understanding why it was needed." Oftentimes, new graduate nurses are heard discussing something abnormal but are unable to relate it to the problem. The transfer of learning involves combining teaching methodologies with lecture to assure students are learning what is taught (Mandernach, 2009).

Participant P03 stated:

> After hiring a new nursing grad, we team them up with one of us, a preceptor, and we give them every experience they might come into contact with because when they deal with an experience, they will remember what to do each time they encounter that situation.

Hall and Hord (2011) reported that both the professional and public arenas are voicing their concerns about improving teaching methods in areas of higher education to assist in student success as they create new knowledge. Table 7 provides data of the preceptors' perspectives specifically related to the sixth research question.

Table 7

RQ 6: Preceptors Perspectives on Student Graduates' Ability to Apply Theory in the Clinical Setting

Participant	Setting	Perspectives
P02	Private Office	"I feel when I get a new graduate nurse they are afraid to touch the patient. So before we do anything I go over what we are going to do and why. That way, when they go to care for a patient, they have been shown how and are able to provide the right care. I feel they do not have a lot of experiences so I make sure they get opportunities to care for patients while I'm available to support them. If I taught, I would go over a topic then show the students how to do it."
P03	Private Office	"I feel that the students come to work after they graduate and are unable to understand the reasoning behind why someone is sick and why they need specific care. When they start here, I give them as many experiences with different patient scenarios as I can. That helps them to remember what to do and why it is being done. Lectures are good but you need more than a lecture, you need experiences."

The findings showed that students had difficulty maintaining their engagement in a 3-hour lecture after about 1 1\2 hours. The students were observed doing other activities that took their attention away from the lecturer. They used their laptops to send e-mails or get on other websites. They displayed difficulty in applying what was learned

during lecture to the clinical setting. For example, when two students were asked to assess a mother who had recently given birth, they were able to neither perform the skill nor explain their plan of care to the clinical instructor. Appendix J provides an additional example of a portion of preceptor interview feedback.

Themes

Keeping the fundamental question involving students' ability to transfer theory learned in 3-hour class lectures to the clinical setting at the forefront of my study maintained my focus on the information I was obtaining and interpreting. After reviewing the study data I saw how the observations and interviews came together resulting in five recurring themes, which were useful in constructing a possible answer to the research questions. These five themes were:

1. Faculty and students verbalized that additional hands-on and simulation experiences were needed to assist in student learning.

2. Students stated that demonstration and repetition were needed to better help them understand how to perform a nursing skill.

3. Students verbalized the need to break up three hour lectures so that they could remain engaged in the information they need to learn.

4. Combining both the interviews and observation data it became apparent that students learning styles were not attended to.

5. The faculty and students verbalized that the students needed to feel confident in their decision making about patient care.

As the student, faculty lecturer, and preceptor participants were interviewed and observed, the five themes listed above kept reappearing. Table 8 shows the number of times these themes were mentioned by the subjects during their interviews.

The need for additional hands-on and simulation experiences were noted the most, followed closely by segmentation during the lecture process to keep students engaged. Preceptors agreed with the students that more experiences were needed to give the students understanding of patient care and help to build their confidence, which would help promote the use of critical thinking skills. Students have various learning styles, and different teaching methodologies need to be used to reach each student, not just using the traditional lecture format. Covill (2011) stated that students have no opportunities to relate to various experiences or internalize the information they have learned by practicing when a traditional lecture format is used to teach them. Keeping the students engaged encourages them to take part in their own learning (V. Smith & Cardaciotto, 2011).

Table 8

Frequency of Themes Mentioned During Interviews

Subject	Theme 1	Theme 2	Theme 3	Theme 4	Theme 5
P02	16	5	1	1	0
P03	11	3	0	1	6
F01	4	0	5	0	0
S30	4	4	1	1	1
S24	2	1	4	1	1
S09	2	1	6	1	2
S18	0	1	3	2	0
S12	0	4	3	2	0
S06	2	3	4	1	1
S21	1	1	2	1	1
S15	4	1	4	0	1
S27	1	1	5	2	1
S03	2	1	4	1	1
Total	49	26	44	14	15

Note: Theme 1 is the use of additional hands-on and simulation experiences were needed to assist student learning. Theme 2 is the use of demonstration and repetition were needed to assist student learning. Theme 3 is students' preferred 3-hour lectures; however, they need to be segmented and incorporate other teaching methodologies to keep them engaged. Theme 4 is recognizing that students have different learning styles is important when teaching. Theme 5 is promoting student confidence to develop decision making skills.

Summary of Findings

The students' perspectives on the use of 3-hour lectures to prepare students for the clinical setting were eye opening. A majority of those interviewed felt that because the lecturer had provided the PowerPoint presentation to them, they did not need to stay focused on the lecture for the entire 3 hours. Observing the students in the clinical setting and then speaking to them one on one as I interviewed them helped me to better understand how their learning and ability to provide patient care connected.

Research Question 1dealt with what the students' perspectives were relating to the use of 3-hour lectures in preparation for the clinical setting. During their interviews, students talked about their inability to listen to a lecture for 3 hours continuously. During lecture I observed them interfacing with other websites or engaging in activities with neighboring students. The students also reiterated that often they found it difficult to perform the care their patients' needed because they did not know how to. I was able to see a gap between the lecture data being provided and the transfer of that information to the care of patients as the findings from the interviews and observations started to combine. The lecturer provided the theory on nursing practice but not how to perform the skill. The students verbalized their concerns of not knowing how to apply care and I was able to observe this in their clinical setting. Along with not being able to provide care, the students could not explain the purpose of the care to their clinical instructor. Most of the students noted that it was easier to perform a skill if it was demonstrated to them first by a clinical instructor. During the interview the faculty lecturer noted that

feedback received from clinical instructors indicated that students preferred to have a skill demonstrated to them by the instructor before they would feel comfortable attempting it on their own. During preceptor interviews they also mentioned that new nursing graduate hires were better able to perform a skill after they were shown how to do it first.

Research Question 2 applied to the faculty lecturer. More specifically, what was the faculty member's perspective relative to using 3-hour lectures to provide theory to prepare students for the clinical setting? The faculty participant stated she did not feel that students were prepared to care for a patient in the clinical setting. The lecturer also stated:

> The students' focus was on learning a skill and administering medications rather than understanding its purpose. That would take a major curriculum change where we can take them into a place where they can just practice some of these changes.

The lecturer verbalized she understood that it was difficult for students to sit through a traditional 3 hour lecture format but that she had a large amount of information to provide to them and only had one semester to get it completed.

Research Question 3 focused on the preceptors' perspectives on whether students were able to apply theory learned in lecture to the care of their patients in the clinical setting. Participant preceptor P02 stated, "I think the graduate student nurse comes to a

new job with nursing theory on board but are afraid to touch the patients, so hands-on experience is what I feel they are lacking in."

Preceptor participant P03 stated that:

> It is important to get as many experiences as you can because when you come across it again, it jogs your memory and you know what to do. Unless they go directly from lecture to the clinical setting and provide care to their patients, it is hard to remember what to do and why it is being done. They need to be able to connect that theory to the actual care that they are providing. As preceptors we provide hands on experiences to the new graduate nurses hired to get them up to a comfort level where they can safely perform the skills on their own.

Research Question 4 asked what activities nursing students participate in during 3-hour lectures. During lecture, some students were observed connecting to websites on their laptops, talking to other students, and leaving class early. Their interview answers appeared to verify my observations. For example, participant S06 stated "After the first hour and a half, I get sidetracked and just can't listen anymore, so I study for my pharmacology class that follows this lecture. I just review the PowerPoint before the exam." Participant S21's perspective on 3-hour lectures was that there is so much information being given to the students that they just have to memorize as much as they can for the test. "I wish they could break the lecture up and use other ways to teach us." Terms that students used when verbalizing their concerns for the amount of information they were given was that they had to memorize it, not learn it. The concerns of the

students helped me to connect why they did not know how to perform a task for patient care or to be able to explain why the care was necessary was because they were just trying to memorize the information for an exam not why or how it is used.

Research Question 5 asked what critical thinking skills do students exhibit in the clinical setting when faced with decision-making and problem-solving tasks associated with the care of their patients? During the clinical observation of the students they often were unable to perform an assessment of their patients following a delivery, which was taught during an earlier lecture class. During the observation at the clinical site some of the students did not know how to assess the delivered patient's fundus nor could they explain what their findings indicated once they did the assessment. The students would request that the clinical instructor show them first before they attempted to assess a woman post delivery. The students' anxiety decreased somewhat when the nurse they were following or the clinical instructor demonstrated the assessment of freshly delivered patient before they were required to demonstrate that same assessment on a patient by themselves. This decrease in their anxiety provided them assurance that they could feel confident in assessing their own patients.

Three of the nursing students being observed in the nursery were unable to obtain vital signs of a newborn infant without being shown how to perform the task first. Once the task was demonstrated by the nurse or instructor, the students were then able to perform the task themselves with fewer than one or two cues. For example, one student determined the heart rate of a newborn infant to be 120 beats per minute; however, upon

reassessment by the infant's nurse, the heart rate was actually determined to be 158 beats per minute, a large discrepancy with different medical implications. When the students were asked what the heart rate of a newborn after birth should be, they did not know. These same students had previously been shown in the school clinic how to obtain a temperature, heart rate, and respirations of a newborn baby and the normal vital levels but were unable to transfer this information to the actual clinical setting. Once the clinical instructor explained regularity of the fetal heart rate to the students and demonstrated how to listen for the heartbeat, students verbalized that they felt more comfortable with listening to and assessing an infant's heart rate. The students oftentimes were unable to answer questions that pertained to the care of their patient demonstrating an inability to utilize what they had learned in their lecture class and apply that information to the clinical setting. What was discovered was that students needed to observe skills being demonstrated in addition to receiving an explanation of why they are needed for better understanding and duplication.

Research Question 6 asked what teaching strategies the instructor uses during the 3-hour lecture to engage students to participate in their learning. The lecturer passively provided information concerning childbearing over the course of the 3-hour class, utilizing PowerPoint slides and incorporating personal life experiences. Personal life experiences were used by the lecturer to help students remember information for future use so they could relate to it. Questions were asked after each topic was finished to ascertain student understanding. Groups of 10 students were organized to teach specific

portions of the lecture material to promote involvement in their learning. During interviews following my observations of this group approach some students stated that they could not hear what their fellow classmates were saying as they presented material in the front of the lecture hall. When the groups presenting asked whether there were any questions, no one responded.

Observing both the students and faculty during the lectures as well as the observations in the clinical setting assisted me in understanding if the students were participating in their learning or not, and if, or how, they carried that information over to the clinical setting as they provided patient care. Listening to the explanation of the patient care plan that the students provided to their clinical instructor allowed me to gather data about their understanding of the patient care they were providing. Using the observations of faculty and students during lecture and clinical settings and then combining it with faculty, student, and preceptor interviews allowed me to triangulate the data, providing for a richer source of information. During my observations, students did not remain engaged in the 3-hour lecture, and this transferred into the clinical setting where they were unable to perform assessments and tasks necessary for adequate patient care. Students need to understand the theory being taught in the lecture hall so they can transfer that information over to the clinical setting as they provide patient care.

The participants reviewed their typed interviews for accuracy, a step called *member checking*. Five participants were randomly selected by pulling every even number of the 13 subjects interviewed to check for accuracy. The five participants

agreed that their interviews were as transcribed and that no changes were required. The taped interview sessions were coded and transcribed verbatim onto a personal password-protected computer.

Project Proposal

The use of traditional lectures as the sole method for educating nursing students may not be the optimal approach, and this study indicates that alternative teaching methodologies should be explored. The research data gathered indicated that students perceived they were not consistently able to apply learning from traditional 3-hour lecture formats to the clinical setting successfully. Subsequently, I proposed development of an alternative instructional method. This would consist of dividing the 3-hour lecture period into 30-minute segments in which a variety of teaching techniques would be employed.

The initial 30 minutes would involve delivery of theory via lecture and PowerPoint presentation. This would be followed by a 30-minute interactive activity involving class or group discussion. The third 30-minute segment would again involve a lecture format and PowerPoint to continue to deliver important information, followed by a 10-minute recess. In the fourth 30- minute segment, visual aids and hands-on equipment would be available for students to see, touch, and interact with. The fifth 30-minute segment would consist of presenting the last elements of new information. Finally, the remaining 30 minutes would involve discussion to summarize what had occurred in class that day and to answer questions.

Using a variety of instructional methods would maintain student engagement by encouraging students to participate in their learning (Barrett, 2010; Goldberg & Ingram, 2011). According to Vondracek (2009) using multiple teaching methods helps to engage students during lectures as it is able to address various learning styles. Providing students with the PowerPoint slides assures that information is accessible to them, and stating that they are responsible for reading book chapters to be covered in class ahead of time encourages them to become responsible for their learning (Gregorius, 2011).

During the last 30 minutes of class, students would electronically answer questions with handheld clickers to provide the instructor with information about material possibly not understood by all present in the lecture (Masikunis, Panayiotidis, & Burke, 2009). This would allow the instructor sufficient time to review and discuss misunderstood information in more depth. The use of simulators to teach students to perform nursing measurements by responding to different patient-care scenarios would promote students' critical thinking skills (Botezatu, Hult, Tessma, & Fors, 2010). Debriefing discussions following each scenario will also help enhance student learning by helping students reflect on what they did right or what might need to be changed. Smyth (2009) felt that when students take part in their learning then critical thinking starts to develop. This process helps students to think critically about the care their patients require.

Conclusion

Use of an explanatory case study design allowed for a rich descriptive analysis of a system consisting of junior nursing students in a childbearing family lecture class which was bounded by space and time. The 40 students in this study were in the same class at the same time on the same campus with the same instructor. A descriptive analysis approach was used to explore developing themes that emerged as data were coded and categorized (Merriam, 2009). Code numbers were used to maintain participants' confidentiality. Ultimately, the intended social change resulting from this research study would be recognition by nursing school deans that the education of student nurses using traditional lecture methods must change for their graduates to effectively provide acceptable patient care within an ever-changing healthcare environment. Changes in teaching methodologies for educating nursing students could lead to reduced training requirements by employers for knowledge that should already exist with these new graduate nurses. Reducing the need to provide extensive additional educational support to new graduate nurses will improve the financial vitality of patient care provider organizations that employ these graduates.

Section 3: The Project

Introduction

Traditional lectures, according to Wood et al. (2007), are the most common form of passive teaching in higher education. Nursing educators attempt to balance theory taught in lectures with their clinical experiences in the hospital setting. The study's purpose was to explore whether students were able to understand theory learned in lecture and use it in the care of their assigned mothers and infants in the hospital setting. The development of a new curriculum design was chosen to assist students in applying the theory they learn in lecture to the clinical setting. Introducing different teaching methodologies within the lecture, while maintaining the same text and covering the same learning material will help ease the transition from the original curriculum to the new curriculum.

Description and Goals

The project consisted of the development of a new curriculum plan called the Participative Curriculum, which involves a 9-week childbearing course that incorporates a variety of teaching methodologies along with the traditional lecture format. The class will be held one day each week for nine weeks. Appendix A provides details of the plan such as time durations and teaching tools to be used throughout the class to keep students engaged and participating in their learning. In addition, Appendix A provides the various tools to be utilized such as a PowerPoint presentation on Childbearing, a

clicker quiz, different quizzes to be given throughout the 9 week period, and a case study.

To evaluate student progress, a summative and formative plan has been developed to determine the need for further changes in the plan to improve student outcomes. The formative assessment can be used effectively in the clinical setting where students can be observed caring for their patients. The summative assessment will be developed from the grades students achieve from their quizzes, which account for knowledge acquired by the end of the semester.

The goals of the project are to provide different teaching methodologies during a 3-hour lecture to keep students engaged in their learning and to improve cognitive development (Vondracek, 2009). Providing opportunities for students to participate during the lecture through group discussion of the topic allows them to obtain different perspectives of an issue through the sharing of various cultural beliefs and ideas from their classmates. Providing students simulation through the use of manikins provides the feel of a real-life experience in which they can practice nursing in a safe environment. Using case studies involving different patient healthcare scenarios encourages students to start thinking critically and use their problem-solving skills. Providing different teaching tools to instructors allows them to accommodate students with a variety of learning styles, which will help improve understanding of the information being provided in the classroom so that it can be stored in long-term memory. Information

stored in memory for long term use can then be called upon at a later time when the student is caring for a real patient (Sousa, 2006).

Scholarly Rationale

Students' ability to understand nursing theory and how it relates to the care they provide to their patients is the primary goal of a theory-based course. Exploring the students' perspectives on 3-hour lectures to provide nursing theory content and their ability to apply this theory to the clinical setting may help address problems with application and the transfer of knowledge. Nursing education today has evolved from the behaviorist paradigm of teacher-centered education to the constructivist perspective in which the teacher and students interact, adding to students' existing information to assist in the formation of new knowledge (Legg et al., 2009). Exploring the perspectives of students, their lecturer, and new graduate nurse preceptors could provide data that leads to an improvement in nursing education that would assist students to better understand the theory and how it relates to patient care.

Data were obtained through interviews with 10 randomly chosen student participants and their lecturer in a maternal child health class to obtain their perspectives on theory learned and the application of this theory to the care of their patients in a clinical setting. Two preceptors from the hospital affiliated with the school where this research was conducted were also interviewed for their perspectives on new graduate nurses' ability to understand theories they were taught and how it related to the care of their patient. Open-ended interview questions were used to obtain in-depth information.

Project Genre

Developing a new curriculum plan (called the Participative Curriculum) was the chosen genre for my project because introducing a variety of teaching methods into the traditional lecture outline would require direction and guidance to help support the lecturer with the proposed changes. The research data gathered helped me to understand the importance of student engagement and the need to interact to understand the information being provided in lecture. Isman, Caglar, Dabaj, and Ersozlu (2005) developed a curriculum design called "A New Model" based on the constructivism framework that took students' learning styles into account when developing a curriculum. With the development of this curriculum, I utilized both Isman et al.'s new constructivist model as a guideline as well as the understanding by design model developed by McTighe and Wiggins (1998). In both curriculum designs student involvement with their learning was addressed. The literature review discussed a variety of ways to teach nursing students so that they can learn whether it is by hands on, the use of simulators, debates, case studies, PowerPoints, or even role playing along with the lecture. Each teaching methodology can be used to accommodate individual student learning styles to improve understanding of information and application in a real world setting.

The new model curriculum design is composed of four elements. The first is *input*, in which the unit is planned, objectives are written, and the teaching methodology is chosen. This came to be known as the *backwards design model*, in which curriculum

development starts with learning outcomes and objectives and then the instructor works backwards to develop assessment, daily lessons, and faculty instructions. This backwards process in curriculum development is aimed at helping students achieve desired results through learning experiences and activities provided by the instructors (McTighe & Wiggins, 1998). Using a variety of teaching methodologies will help address students learning styles and keep them engaged.

The second step is *process*, in which pre-assessment of students' unit knowledge is conducted to help determine their own readiness. McMillan (2011), Popham (2011), and Shermis and Di Vesta (2011) felt that with pre-assessment, teachers could discover student weaknesses and redesign units if needed. Using hand held response systems to answer question on a screen in the front of the class will provide feedback to the lecturer on what information is not understood so that it can be covered in a different manner.

The third step, called *output*, is when teachers use formative assessment to monitor students' progress. Monitoring students throughout the semester using a quiz format, according to Spinelli (2012), provides teachers with valuable data for modifying instruction as needed. Formative assessment is ongoing and includes feedback that leads to increased student learning as teachers are able to determine what their students understand about the unit information (Stiggins & Chappius, 2012). The quizzes, just like the hand held response system, provide information to the lecturer about what the students may need covered again.

The fourth step of the new model, known as *feedback*, is when the teacher receives student feedback about their understanding of the unit information that was provided. Teacher feedback is essential for student improvement (Russell & Airasian, 2012). Student feedback helps the teacher better plan a learning session while teacher feedback helps students know if they understand a subject or need more information.

The development of a new curriculum plan provides a road map that details the goals, time needed, and teaching methodologies to engage students in their learning (Roberts, 2012). Providing a new curriculum plan before the semester begins allows time for the planning group to evaluate and add additional changes as needed, while also allowing time for educators to preview and be trained in use of this new plan. Educators will then be able to ask me questions about the curriculum so that modifications can be implemented to improve students' learning. Additionally, educators can incorporate some of their own individual teaching styles to facilitate the transition from the traditional curriculum to the new curriculum a little more smoothly. Teacher training classes can be set up in between semesters before the new curriculum is used.

Addressing the Problem

Students' inability to understand theory taught in lecture and the relationship it had to the care of patients in the clinical setting was a focus of this study. The transfer of the knowledge learned from a traditional lecture to the clinical setting was addressed by incorporating a variety of teaching methodologies in order to address individual learning styles and to better engage students into their learning. Actively involving students in

their learning encourages them to make meaning out of what is not understood (Bishop, O'Sullivan, & Berryman, 2010; Perkins, 1999). Students who discuss issues together and collectively develop a plan of care for their patients is an example of collaboration. This collaboration through discussion technique helps students to develop new meaning of old information that can be placed into long-term memory and easily recalled when needed (Johnson, Wisniewski, Kuhlemeyer, Isaacs, & Krzykowski, 2012). Executing the plan of care students collaboratively developed on a manikin provides them the experience of working with a patient in which mistakes can be made safely and learned from before dealing with a real human being (Harder, 2010).

Review of the Literature

Students are better able to learn when they are involved and can relate their learning to real-world experiences, according to McTighe and Wiggins (1998). The ability to transfer new learned knowledge occurs when students take part in a myriad of situations that require them to use higher-order thinking to apply the theory learned to what they are encountering. Johnson, Wisniewski, Kuhlemeyer, Isaacs, and Krzykowski, (2012) asserted that students have developed an understanding of a topic if they can explain, interpret, apply, and demonstrate the use of the data provided them. Creating a curriculum plan, which involves a mixture of teaching methods to address individual learning styles whether they are visual, auditory, or tactile, will help students to create meaning from the information provided to them. According to Wang (2010) blended learning improves higher-order thinking. Once students understand the material being

taught and reflect on that information they can apply it to similar situations they encounter.

The Carnegie Foundation for the Advancement of Teaching (2007) examined best practices in professional education, and one of those areas they looked into was nursing. From that study, Noone (2009) saw that three areas of nursing were taught separately, and she suggested that combining academic knowledge with skill development and ethical responsibilities of the profession would enhance student learning. Noone contended that in today's nursing education practices, there are no opportunities to integrate these three areas to improve student learning.

With the development of a curriculum that integrates theory with skills students will be able to understand how the care they provide to their patients relates to the theories they are learning. These students will also learn the responsibilities they will have as medical professionals in the communities where they work and live.

In continuing to search for literature relevant to the topic of interest, the search terms chosen included the words *curriculum* and *education* and *lecture* and *theory, transfer* or *learning* and *theories,* and *transfer* and *learning* and *college* and/or *universities*, and *nurs* and *education and outcome* and *lectur* or *didactic* and *nursing* and *SO Journal of Nursing Education* or *critical thinking* and *nursing students*. These search words were combined using Boolean operators *or* as well as *and* to identify documents of interest. Databases used were EBSCOhost, Eric, Teacher Reference Center, CINAHL and Medline together, and the Education Research Center.

Further review of the literature indicated that transfer of knowledge from the learning arena (i.e., from the university setting to the workplace) needed to be considered. Numerous studies proposed that improved teaching and learning requires an attractive learning environment where various teaching methods are used to keep participants active (Perkins, 1999; Sandberg, 2012). These studies discussed a need to increase student motivation by providing opportunities to put theories learned into practice while addressing various learning styles (Kolb, 1984). What follows is a brief discussion of some of these studies and how learning can be connected to the ways a student is taught.

Transfer of Knowledge

Perkins' (1999) research showed that when students take part in their learning they are able to maintain, understand, and apply their new learned knowledge to a variety of situations. Traditional educational practices might require less time to implement than do constructivist techniques, but the benefits of helping students learn better outweigh the cost. The goal of education is to have students actively engaging in problem solving with knowledge they can connect to the real world. Students who are able to think critically and problem solve are being taught for understanding. Perkins (1999) referred to the learner's creation of new knowledge as *generative knowledge*. Generative knowledge focuses on information being understood and retained by students with the ability to use that knowledge in various situations. The students acquire the knowledge and skills by obtaining information, reflecting on and practicing with the

information, and then receiving feedback from the educator or other students about the information.

The students in the study verbalized their concerns about their ability to transfer information they had learned in the lecture to the clinical setting. They felt that they first needed to somehow try out the new information concerning patient care before they performed it on a real person or observe someone provide the patient care before they did it. Many of the students interviewed felt that seeing the care provided helped them to understand better how to perform it themselves.

Habermas (1987) postulated that the prior learning experiences of a student could be used through communication and reflection to assist in the understanding of new learning. Kolb (1984) wrote about learning as a process that always involves re-learning. He believed that one gains new knowledge through resolution of conflicts and differences that one experiences in one's lifetime. Sandberg (2012) proposed that new learning develops from prior learning experiences. He felt that students could create new knowledge by reflecting on previous experiences. Students might use prior knowledge and practices from experiences to address an identical or similar situation. Students might choose to use past knowledge and practices for the situation or decide to create new knowledge and practices to address the situation (Robertson, Taczak, & Yancey, 2012).

Royer, Mestre, and Dufresne (2005) postulated that information learned at one time period influences how someone responds to information received at another point

in time. This was identified as transfer, of which there are two types. Near transfer involves information that comes from situations that have some level of commonality. The second type is termed Far Transfer, involving information that comes from situations that are quite different. According to Lloyd (2007, 2010), students who use reflective practices when engaged in informative learning activities will gain new knowledge. Students need to have had past learning experiences and have gained knowledge to be able to use this information to create new knowledge. Having a deep understanding of the experience allows the student to recreate meaning and not simply reproduce it (Engle, 2006). Bishop, O'Sullivan, and Berryman (2010) and Lee (2009) stated that teaching is intended to be culturally responsive, meaning incorporating students' values and resources into the classroom.

The transfer of learning theory proposes that learning from what a student experiences in one situation can be used in another situation at a later time (Ruth, 1992). The transfer of learning is made up of both prior and recent learning. When students automatically apply their learning in different situations, it is referred to as the *low road* according to Ruth (1992). The *high road* is when learning transfer occurs with high levels of cognitive effort when the situation is more involved and theoretical. This transfer of learning may require teachers to switch from traditional lecture methods to the use of combined teaching methodologies to assure students are learning what is being taught (Mandernach, 2009). Utilizing the transfer of learning theory will require the creation of development programs in which faculty will be encouraged to

incorporate a mixture of teaching methodologies into their own styles to aid student learning (Johnson et al., 2012). Active learning techniques such as experiential or active learning, reflection, and feedback could be helpful in promoting the transfer of learning because they help to maintain student attention more than the passive forms of instruction (Hutchins & Burke, 2007). Sibthorp, Furman, Paisley, Gookin, and Schumann (2011) compared outdoor education with in-class programs and stated that both need supervisor and peer support that includes active learning, practice, and feedback to foster transferable learning practices.

Professional and public cries for improved teaching methods to meet the learning needs of students who learn at a higher level begin with the promotion of quality teaching practices that assist in the success of students creating new knowledge (Hall & Hord, 2011). Shifting from a passive traditional lecture approach to a student-centered approach, which incorporates both active and reflective teaching, will help students develop new meaning from existing meanings (Smart, Witt, & Scott, 2012). Higher education today requires the combination of theory, research, and skill development to help promote learning (Carter, Coyle, & Leslie, 2011). Educators are encouraged to use a mixture of instructional methods to ensure successful learning from the diverse student population.

Experiential Learning

Several authors have proposed additional methods to increase student involvement during lectures. Serkan (2011) and Tin (2009b) proposed discussions in

combination with pictures, diagrams, and verbal analogies to assist students in relating information and concepts to their everyday lives. This process further promotes retention of information in long-term memory. Relating new information to students' lives keeps them curious and engaged. Arntzen and Hoium (2009) proposed that interteaching used with traditional lecture was more effective in providing students with knowledge. The interteaching method requires students to read the subject text and to write down questions they have before class. During class the instructor covers questions the students have about their readings. Narjaikaew, Emarat, and Cowie (2009) researched the use of guided notes to promote active involvement of students. These guided notes had pictures, diagrams, and problems along with spaces provided for students to take notes. The process-oriented guided inquiry learning (POGIL) approach engages students in learning by having them work collectively using critical readings and the processing of the information as it helps guide their understanding (Murphy, Picione, & Holme, 2010). Maginnis and Croxon (2010) proposed that theory and practice must be consistent to ensure safe patient care in the clinical setting.

Teaching Methods

Traditional lectures blended with other teaching methods such as online video lectures used as supplemental resources provide time in the class for active learning through use of problem solving and discussion (Bassili, 2008; Foley, 2010; Joordens, Le, Grinnell, & Chrysostomou, 2009). The use of PowerPoint with lectures, according to authors such as Clark (2008), Coleman (2009), and Lumkes (2009) encourages active

learning and promotes problem solving through discussion. Isseks (2011) felt that PowerPoint alone does not prompt students to investigate, inquire, or engage in critical thinking. He felt that the students are not provided the tools to understand concepts that are obtained through higher-order thinking. The use of content-based questions (CBQ) along with PowerPoint during lectures to enhance student learning was explored by Gier and Kreiner (2009). Wang, Mattick, and Dunne (2010) investigated students' perceptions of live lectures provided by video streaming versus the traditional lecture format. Surveys showed a higher percentage of students preferring live lectures because of the ability to interact with the lecturer. Providing additional material online to help promote student learning was not helpful to many students because they either did not download the material or downloaded it at the last minute (Bond, Holland, & Wells, 2007).

The use of personal hand held response systems during the lecture kept students involved and interacting with the topic being taught. Masikunis, Panayiotidis, and Burke (2009) discussed the use of personal response systems that assist the student in constructing personal meaning and an understanding of lecture material. The response system allows students to test their own ideas with their peers and to learn from experiences and activities that occur during class time. Gupta (2010) observed students not participating in class due to peer pressure or fear of what the lecturer might think of them. Using a student response system allows students to participate anonymously without fear of or concern for peer pressure. The use of the students' personal response system gives teachers a better understanding of what the students understand or need

additional teaching on. Incorporating additional teaching tools into the traditional lectures will facilitate interaction between students and the lecturer. McAlpine, Oviedo, and Emrick (2008), along with Cooper, Hanmer, and Cerbin (2006), reported on the importance of creativity, student motivation, use of group problem solving, development of assessment skills, and summative and formative feedback to assist students in learning. Students can become engaged in their learning process through discussion of the concept or idea being taught. They can then relate this new learned material to their own life experiences, allowing students' to translate the information into terms they will understand (Tormey & Henchy, 2008). Murphy and Sharma (2010) developed the idea of the educator, using an interactive lecturing approach, taking on the role of a facilitator. The facilitator is able to maintain student involvement by using a combination of teaching methods such as role-playing, simulation, use of a handheld response system, discussion groups, and debates and by always providing feedback to the students. This pedagogical form of teaching promotes student thinking and allows for higher levels of cognitive learning.

Different forms of teaching using active learning can be incorporated into the lecture format to keep students engaged. Dhaliwal and Sharpe (2009) suggested that using clinical problem solving in the medical student population engages both the students and lecturer in real-life issues. This style of teaching helps students relate to topics they have encountered. A concern was that nursing lecturers teach medical knowledge but fail to promote clinical reasoning by the students. Sarja and Janhonen

(2009) explored the use of dialogue to share knowledge and the use of critical reflection to create knowledge through social interactions. A study performed by Elliot, Rice, Trafimow, Madson, & Hipshur (2010) demonstrated that students learn more from experiments they conduct versus the lecture they attend. Recording of lectures does not engage students as discovered by Stolzenberg and Pforte (2007). Students were found to be learning through the use of rote memorization.

Learning

Students engage with theory through construction of a model, role-playing, and/or a dramatic performance. This form of teaching, as proposed by Suter and West (2011), gives students the ownership of putting theories into their own words and interpretation to produce a deeper understanding for later use. When students become involved with a concept, they are motivated to learn how it works or can be used, resulting in higher levels of thinking (Kohn, 1993).

Social, historical, and cultural factors encompass what Vygotsky (1978) refers to as social constructivism. In a communications class involving social constructivism, the instructor provided each student with an object to respond to. The students used past and present knowledge to develop their responses to the object provided to them (Keaton & Bodie, 2011).

Learning is a process where there is an understanding of the connections that exist between newly learned and old information that is stored in a student's memory, referred to as the quantum perspective of learning (Bohm, 1971, 1973). Human beings

learn when a connection is discovered. Netzer and Mangano Rowe (2010) proclaimed that there are multiple ways of knowing; therefore, according to Janzen, Edwards, and Perry (2011), there must be multiple ways of learning.

Habermas (1987) and Moran and Murphy (2012) referred to students as *stakeholders* in education and recognized the importance of their voice in the planning and decision making of the curriculum. Both Deuchar (2009) and Sellman (2009) felt that students will not know how to handle this new responsibility and that the lack of power and control will diminish the importance of their voice in the learning process. Standish (2012) wrote about Wittgenstein's (1958) transparency of education statement whereby outcomes could be measured by teachers who inform students of exactly what they will be learning ahead of time and not making changes to that plan. Standish felt that Wittgenstein's statement prevented the use of accumulated experiences and practices because they are difficult to measure objectively.

Creating a rich learning environment in which students' attention is held by answering students' questions and providing feedback, as proposed by Bennion (2008), through the use of class interactions and activities would help students become more competent and self-confident. Students' use of theories learned in practice would motivate students to retain the knowledge for a longer period.

Garraway (2010) pointed out that bringing together the contextual knowledge of the work world with the abstract language and guiding principles of academia would make the transition into the workforce smoother for new graduates. Students' inability to

use the knowledge gained in higher education is a major problem for universities to address (Hossein, Hormozi, Shaghaghi, & Kaveh, 2012). Concerns about graduate nursing students not being able to provide knowledgeable and safe care to their patients are being voiced by concerned community members. Universities need to develop classes that deal with real work activities so students can relate what they learn to the real world they live in.

Classes should be developed by educators that support collaborative construction of knowledge, including reflection and the sharing of ideas (Oriol, Tumulty, & Snyder, 2010; Wenger, 2008); promoting assessment by focusing on understanding and problem solving (Morrison, Ross, & Kemp, 2007); and improving learning by using collaborative problem-based learning methods that take into consideration different perspectives (Wijnia, Loyens, & Derous, 2010). Different teaching styles are needed to address different learning styles (Smith & Laurd, 2010).

Blended learning improves the use of critical thinking, reflection, and collaboration and motivates students (Wang, 2010). Sharing of real life experiences helps students relate to the situation and begin to think critically about how to rectify the issue being presented. This process supports understanding of new learned information and how to apply it. Using real world experiences to educate nursing students provides them an opportunity to connect theory they are learning with the care they will provide to their patients (Unal & Inan, 2010).

Methodology

The use of the traditional lecture methodology is still the most widely used teaching approach in higher education. Short and Martin (2011) found that due to large class sizes traditional lecture methods are comfortable for teachers and are cost effective for universities. Short and Martin conducted an experimental study which compared presentation lectures with performance lectures. In the presentation lecture, the teacher presented information, which the students internalized and then regurgitated at a later point (Mann & Robinson, 2009). The performance lecture involved the use of visual aids, audience interaction, personal links, humor, and controversy to maintain students' engagement and enhance students' learning. The results of Short and Martin's study showed that students preferred interacting during the lecture and liked the active learning tools that were incorporated. The performance lecture demonstrated that the students had better retention and higher test scores.

Educators must become familiar with the new interactive strategies that can be used to ensure students are assimilating the information being taught. Technology and the field of healthcare are constantly evolving, and technology provides available information instantaneously. Students are very comfortable with technology but need guidance in obtaining and using the information appropriately. Nurses in the healthcare field are serving an aging population with varying health needs and a longer life span. Nursing students' need to be taught how to manage, assess, and meet these new demands (Institute of Medicine, 2010). The Institute of Medicine (IOM) has emphasized linking

knowledge, practice, and clinical reasoning skills. The promotion of team skills and collaboration emphasized by the IOM must also be taught to nursing students.

Critical thinking skills and safe practices occur with simulation experiences (Fero et al., 2010; Kaddoura, 2010). Manikin simulators help students learn safe practices as well as build confidence, critical thinking skills, and development of effective teamwork in nursing students (Kaddoura, 2010). This teamwork promotes trust building and collaboration (Reising, Carr, Shea, & King, 2011).

Combining the use of virtual simulators with the traditional lecture format allows learners to practice skills while reducing student errors. The application of theoretical knowledge on the simulator allows the students to practice skill development on the manikin (Harder, 2010). Debriefing after the simulation experience allows the student to verify incorrect information, which adds to his or her knowledge base (Kaddoura, 2010).

Active Learning

In lecture halls, students are encouraged to memorize information to answer exam questions, but they are often unable to apply what they have learned later on (Cherney, 2008). Engaging students in a learning process which requires them to reflect, evaluate, analyze, synthesize, and communicate as they work with others leads to information retention. Active learning used within a lecture allows students to create their own knowledge and meaning, which they can better remember for future use (Slamenka & Graf, 1978). Information processing theory proposes that the deeper the processing, the more enhanced the recall. Deeper processing occurs with learned

information when selecting, organizing, and integrating knowledge into life experiences are part of the learning process (V. Smith & Cardaciotto, 2011).

In 1978, Vygotsky proposed that knowledge construction would occur through shared note-taking by students and that cognitive conflict could take place, as the notes would contain students' interpretations and misunderstandings along with their personal opinions. This cognitive conflict is where new meanings could be created. In social constructivism, knowledge is constructed through a social process by which a collection of student perceptions are gathered and analyzed to create new meaning (Shay, 2008). Engaging students to improve their learning at the cognitive and affective levels is what Young, Robinson, and Alberts (2010) presumed the social constructivism theory entails.

Instead of the traditional teacher-centered approach in which students are fed information, using the constructivist approach students construct their own meaning from the information they are given. Teachers act as facilitators to help students create new meanings from past and shared experiences (Smart et al., 2012). New knowledge is created through the facilitators' assessment of students' beliefs, by clarifying and answering questions and encouraging the sharing of new ideas, and working collaboratively.

Murphy and Sharma (2010) advocated for student involvement in their learning. They proposed the use of interactive voting systems, where questions are provided to the audience, who then answer or debate the questions. They also promoted the use of

clinical cases and real-life experiences to help students develop a deeper understanding of information.

Using different teaching tools helps the educator address various learning styles as well as address what students do and do not know. Encouraging students to work together allows them to understand different perspectives on the same topic. Then, by working collaboratively, the students can develop a consensus to address the problem or question being asked.

To facilitate the traditional lecture process, Jakee (2011) suggested handing out lecture notes and downloading PowerPoint slides for students to use for discussion and problem solving. Jakee felt that this would promote higher-order thinking. This higher order thinking would help the students develop skills to analyze a situation and be able to evaluate its outcome for further change. He also realized that educators must demand active student participation for this teaching methodology to be successful. Williams, Weil, and Porter (2012) conducted a study on providing guided notes to students to help them learn. The results showed higher quiz scores but not whether students participated or paid attention in lecture classes more. Welsh (2012) conducted a study using various teaching methods to engage students in their learning. Her data showed that 30% of participants felt that these new teaching tools were not effective, did not influence academic performance, were a waste of time, and incurred an additional financial cost. This same group of participants felt that the new teaching methods did not encourage students to participate and often got them off track from the subject matter. One question

not addressed was, were the teachers adequately instructed in how to use these new teaching tools?

Kennedy and Kennedy (2011) felt that new knowledge could be constructed by having students collaborate and deliberate with each other. They proposed allowing students to read the concepts and facts from the text and then discuss them with other class members to help create this new knowledge. Memorization is a poor learning strategy, and in the White, Syncox, Heppelston, Isaac, and Alters (2012) study, it was showed that discussion, collaboration, and active involvement in class promoted constructive learning. Providing interactive engagement and class discussion, according to Mazur (2009) and Smith and Laurd (2010), will lead to higher learning gains. Sharing of information between students in a class enhances a connection with the theories being taught (Nodulman, 2011). The use of new technologies (e.g., podcasts, Facebook, wikis, and blogs) can enhance lectures by allowing instructors to communicate with students through familiar forms of technology. Technology keeps students independent, flexible, and motivated while improving learner cognition (Foley, 2010). Through peer observation, students work with each other to apply new learned information to a situation (Hendry & Oliver, 2012). Students learn self-confidence as they perform a procedure themselves rather than being told how to do so.

Communication is the start of the creation of meaning. Within communication, there is an agreement and the sharing of information (Bernstein, 1966). Listening is an essential part of communication (Keaton & Bodie, 2011) because it involves receiving,

interpreting, and then responding to a message. Interactive listeners are engaged in the topic, assign meaning to the message, and then place it in working memory.

Implementation

Potential Resources and Existing Support

Resources needed for the project to be successful will include but need not be limited to the university offering the funding for the time, space, and education needed to provide teacher development that includes information on different experiential learning teaching methodologies. The cost of additional teaching equipment to be used, such as handheld response devices will also have to be funded. White boards would be helpful when group discussions are held in the lecture classroom along with a room that is easily accessible and large enough to allow simulation demonstrations. These resources can be effective only if faculty members who lecture agree to the needed curriculum change to help foster student learning. Clinical instructors must also be part of this change to ensure the continuity of teaching experiences in the hospital setting to relate to what is being taught in the classroom.

Support for this project came from the assistant dean of nursing, who believes that there is a need for change in nursing education to meet the increasing needs of patients who are critically ill and for those living longer lives. The university education staff wants to make a difference in their students' learning. Hospitals that hire these new graduate nurses cannot afford to spend large sums of money on additional training following their graduation. New graduate nurses must be prepared with the knowledge

and skills to care for the acuity of patients that they will encounter as soon as they enter the healthcare work place. The communities where they serve insist on quality healthcare for themselves and their families.

Potential Barriers

Barriers may develop within the teaching staff that will be required to attend teacher development education classes to prepare them for the implementation of the new curriculum approach. This will necessitate time being made available from their heavy workloads and will require a commitment on their part. Additionally, the university may be hesitant to invest in additional teacher development classes and to provide the faculty with sufficient time to attend. Installing new educational hardware in the lecture halls will also have to be funded by the university; however, the financial impact on the university should be only short term. The longer-term benefit will be the development of nursing graduates who require minimal training, if any, when entering the workplace, which will reduce costs to community healthcare employers. This will demonstrate to these stakeholders that nursing graduates from the university utilizing these new teaching methods are their optimal source for hiring skilled nursing talent.

Proposal for Implementation and Timetable

Implementation would begin with faculty education being conducted over a 14-week semester. Once completed, this new teaching approach would be introduced with the following semester's childbearing class. One week prior to the start of a new class, a faculty review session could be held to address any concerns and review information

associated with the various teaching methodologies. The semester would begin with this new curriculum method being taught on one of the two university campuses where the same nursing program is offered, assuring staff and students that both the traditional and new curriculum methods would provide the same informational content. Following the semester, formative and summative evaluations by students and their instructors could be conducted on these two different approaches.

Roles and Responsibilities of Students and Others

The faculty who teach the childbearing class would attend the educational classes provided by the university to become familiar with the new teaching methodologies and equipment. As the researcher, my role would be to facilitate this new learning process through promotion and demonstration while always being accessible to answer questions that the faculty might have. I would also look for champions who support the project to assist in initiating this change. The role of the assistant dean would be to promote the growth and introduction of the different teaching methodologies and to encourage the promotion of higher student learning. Finally, the role of the student would be to come to class prepared to learn in a different way from what he or she is familiar with.

Project Evaluation

The type of evaluation plan I have chosen for my project is a formative design. Formative evaluation, according to Scriven (1967), is a way to judge a curriculum as it is being developed. Utilizing this evaluation plan will allow for improvements to be implemented before instruction begins. The scope of the formative evaluation will

include construction of the curriculum, proposed teaching tools, and student learning. Each topic will be evaluated for building on previous learning and aligned with future topics. The curriculum plan will be tested before it is used by the university where the study is taking place.

William (2006) stated that the focus of formative evaluations is on improving student learning. The curriculum plan formative evaluation will determine if the goals set for the students are achievable and whether the teaching tools are effective. Will the classroom be prepared with ample seating for students, proper lighting, and equipment needed to deliver the instruction? Will a second classroom be available for hands-on activities? The various methodologies that are used will keep the students interested and motivated to learn. Providing frequent and timely feedback will also keep the students involved in their learning process.

The overall goal is for my curriculum plan to be evaluated by faculty from the university where the study was conducted along with two of my peers who are also part-time lecturers. I will provide four questions to assist them with their review. First, does the curriculum outline address the goals established? Second, is there sufficient time allowed to use the various teaching tools that were chosen? Third, does the curriculum provide teaching methodologies that allow the students to become involved in their learning? Fourth, what suggestions do you have to improve the curriculum? The overall goal is to provide a curriculum that focuses on the student learning styles to help improve their understanding of childbearing information. Students who understand the

material being taught can then apply that theory in the clinical setting as they care for their patients.

The use of a formative evaluation plan allows faculty, who are key stakeholders in the students' education, to be part of the curriculum change to assist the smooth transition to a new curriculum plan. The formative design also provides faculty feedback that can be utilized to initiate needed changes in the curriculum. The main purpose of a new curriculum through the use of a formative evaluation is to ensure that students continue to be taught the important areas of maternity care.

Key stakeholders who will benefit from this project are students, faculty, the university where the study is being done, hospitals that hire these graduate nurses, and the community. Students will benefit by being provided with a variety of ways to learn a subject considering their particular learning styles. This will facilitate an improved understanding of information presented in the classroom. Faculty may discover that their students are more engaged and willing to take part in their learning because they are being provided a variety of ways to help them better understand the theory being taught. The university may maintain a high ranking nationally and internationally for graduating well-prepared graduate nurses. Hospitals will no longer have to spend additional funds to provide ongoing training to new graduate nurses to assure they are providing safe patient care. The community will feel safe and confident that their healthcare is being provided by well-trained registered nurses.

Implications Including Social Change

The development of the participative curriculum includes a variety of teaching methodologies incorporated into the lecture. This improves student learning and retention of information that can be utilized in the patient care setting. The new project includes use of lecture along with group discussion so students can make meaning out of the topic and be able to share that meaning with other class members. Providing hands-on experience with the actual equipment to be used in the clinical setting builds confidence and understanding of how the equipment is used. Providing opportunities to work with simulators allows students to learn in a safe environment before interacting with an actual human patient. Role-playing teaches students to think critically as they experience different scenarios and develop appropriate care plans. Utilizing case studies within small groups provides opportunities for students to use their critical thinking skills and collaboratively develop a plan of care with other group members. Using a variety of teaching methodologies can assist individual students with different learning styles in translating classroom theory to practice in the clinical setting. A gap exists between the theory students learn and their ability to transfer that knowledge to the clinical setting. Using a variety of teaching methodologies will help students learn to address this gap as they improve their understanding of nursing practice.

Far Reaching

The implications for social change will occur from the use of a new curriculum developed for program developers, educators, and deans of nursing education programs who are searching for direction to improve nursing education. Implementing additional teaching methodologies along with lectures to meet the needs of various learning styles can help keep students engaged and participating in their learning. Experiential learning incorporates various teaching tools to improve material learning and then transfer that information to different settings later in their professional lives. A mixture of teaching tools focuses on learning styles that help improve student understanding of information so that they can participate in their learning.

Students need to understand that world health issues are forever evolving and patients are coming into hospital settings more acutely ill, with many different cultural values and beliefs. These values play a major role in how patients will become healthy again. University student populations are so diverse that allowing students to share different cultural norms is a great way to help them learn rather than hearing it passively from a lecturer. Using different teaching methodologies will allow students to better retain information that they can later transfer to a clinical setting. Hospitals will then spend less money training new nursing graduates on how to provide safe care for their patients. The community will receive safe & reliable care from graduate nurses who are better prepared.

Local Community

University stakeholders include the assistant dean of nursing and the faculty who lecture for the childbearing class along with the students themselves. Disseminating the data from this research will show that, along with the lecture, providing hands-on experiences, demonstrating skills, providing simulations, and using discussion groups on the topics will help promote student learning and improve the retention of information in long-term memory. Incorporating different styles of teaching will keep students interested and engaged and will help them understand health concepts and theories and how they relate to practice. Using different teaching methodologies during lecture will help students to form connections between theory and practice. Hospital stakeholders will see new graduate nurses who require only standard orientation times, helping to decrease their financial responsibilities. The community in which the healthcare system exists will have better prepared nurses who will be able to care for the increased acuteness of illnesses they will be encountering. The university can maintain and/or improve its university ranking by graduating well-prepared nursing students.

Section 4: Reflections and Conclusions

Introduction

Development of the Participative Curriculum allowed me to address the issue of students not being able to transfer material learned by the traditional lecture format to the clinical setting. The new curriculum plan provides guidance on teaching tools that can be incorporated into the lecture format that address the different learning styles of the students. The use of different teaching methodologies during lecture will keep students interested in their learning that will help retention of data in long-term memory for future use. The new curriculum plan has both strengths and limitations.

Project Strengths and Limitations

Often when initiating change, there are hurdles one must overcome. The development of a new curriculum to educate nursing students required time, patience, and support.

Strengths

Addressing the problem of 3-hour lectures and students' ability to transfer information learned in the classroom to a clinical setting is an issue which has been researched in various educational fields (Cherney, 2008; Robertson, Taczak, & Yancey, 2012). The strength of my project addresses the different learning styles students possess. Incorporating different teaching methodologies into the traditional lecture format promotes improved student understanding of theories or concepts. The use of case scenarios helps students to relate to problems they have encountered with their

patients in the clinical setting (Ferreira & Trudel, 2012). According to Parkes and Kajder (2010), reflective practice is a tool students should develop to promote understanding. Nursing students who use this method can look back at the patient care they have provided and determine whether changes are needed to improve their patients' outcomes. Textbooks tend to provide a black-and-white view of nursing healthcare when in fact there are a number of gray areas. Students need to understand that healthcare is not an assembly line but rather is fluid and requires flexibility and understanding of how different aspects of illness and care are interconnected. Providing students with hands-on learning experiences in the classroom followed by discussion allows students to collaborate with each other and to integrate those experiences into the care they provide to their patients (White et al., 2012). Once students are in the clinical setting, they will be able to relate what they practiced in the classroom setting to the actual care they will provide to their patients. Keeping students engaged and participating in the classroom setting will help them to remember information, and they will be able to relate it to other experiences they will encounter when they are in the hospital setting (Kennedy & Kennedy, 2011). The use of this new curriculum methodology can promote student engagement and growth in the field of nursing.

Limitations

This new curriculum change is not without limitations. First and foremost is the increased demand placed on the lecturer. Using a mixture of teaching methods to keep students actively involved in their learning and engaged will require the lecturer to learn

how each methodology works and how it affects the students' understanding of information (Wang, 2010). This additional learning period requires time and commitment, adding to many teachers' heavy workload. Having to reconstruct their curriculum may cause faculty lecturers stress because it is out of their familiar comfort zone, and they may not want to do it.

Second, lack of administrative support could also hinder success of the new curriculum (Wang, 2010). If the university board does not provide the financial support required to accommodate the time and teaching tools needed to learn the new curriculum, there is no incentive for the lecturer to learn the new plan.

Lack of student motivation can also impact the success of a new curriculum plan. Students may be familiar with only one way to learn because they may have become comfortable with the traditional lecture approach. According to Kohn (1993), unless students are involved with a concept, there is no motivation to learn. They need to become involved with the new curriculum change. Approaching them with a new way to learn could be met with resistance as students may feel it requires extra time on their part and therefore extra work.

Recommendations for Remediation of Limitations

One of the limitations of using the new participative curriculum plan is related to the amount of time faculty will need to use to learn the new teaching process. Faculty will be given ample time to review, learn, and make needed changes to the plan before introducing it to the students. The new curriculum may seem very time consuming and

frustrating to faculty who are familiar and comfortable with the traditional lecture format; however, in time this new approach will be accepted as an improvement to the way we teach our nursing students. The additional funds needed to supply extra teaching space and equipment will balance out when a higher percentage of students are graduating well prepared to care for their patients. The college also will receive stronger rankings among universities that graduate nursing students.

A curriculum plan was chosen as my project genre to provide faculty with a starting point for needed educational change. The curriculum plan provides objectives, a selection of teaching methods, materials, time frame, and evaluation of the learning process. The curriculum guidelines promote the constructivist theory and student engagement. Starting with a curriculum plan can then lead to an evaluation plan and then to professional development.

The evaluation report genre was not chosen because it involved monitoring and evaluating a new program or process. I felt that the development of a new curriculum should come first to demonstrate how to incorporate different teaching methods into the traditional lecture format to promote student learning. Once the new curriculum was initiated, an evaluation of the *what*, *how*, and *why* questions concerning the new teaching plan could be visited, according to Patton (2010). The *what* questions pertain to the purpose and the intended outcome of the new teaching plan. The *how* questions pertain to the process of implementing the new teaching plan. The *why* question pertains to the

rationale for the new curriculum and the difference it would make on student learning. The evaluation would provide stakeholders information on sustainability.

Even though I did not choose professional development and training as my project genre I understand that it deals with what we teach, how we teach, and who we teach, but I felt the creation of the curriculum should come first. Professional development focuses on teaching skills, subject matter, and student learning (Loucks-Horsley & Matsumoto, 1999; Richardson, 1999). Again, I felt that I should develop a new curriculum first and test it before commencing with training teachers on how to use the new process.

First, I will need to discuss with the board of the university the need for nursing educational change to strengthen the nursing program. Following that discussion I would provide the board the new participative curriculum plan as an alternative way to teach the nursing students and get them involved in their learning. Universities are concerned with ensuring the quality of their education to maintain their competitiveness with other competing universities nationally and internationally (*Times Higher Education*, 2012). Public accountability also places additional pressure on university boards for graduation of well-prepared students. To address the challenge of changing the teaching methodology to be used for lectures, I propose that the first step must be to conduct a series of meetings with key university leaders to explain this new approach and the benefits to students, faculty, the university, and community stakeholders. Providing the university board with literature reviews of the required teaching material will support the

case for additional teaching tools. Additional investments required from university stakeholders involve upgrades to lecture halls to convert them to smart rooms with technologically advanced teaching equipment that will be used to promote student learning, i.e., manikins, handheld response systems, and whiteboards.

Communicating to the board that the success of the new curriculum change can occur only with their essential financial and educational support is important. This includes providing teacher training to faculty so that they can learn how to use the new curriculum effectively. Providing time for teachers to be trained is a very important part of this process because it shows that the university is supporting both the new curriculum as well as its educators.

Once support from the board has been achieved, I will present the proposed changes to the faculty and identify a champion who supports the idea. This can also include the curriculum director of the university. This faculty champion will assist me in the change process. Educational classes will be offered that prepare faculty members for implementation of these new curriculum methods at the beginning of the next academic semester. An open door policy will exist for review of concerns that faculty might have to demonstrate commitment to this team approach and that their input is welcome and valued.

Addressing the comfort of the faculty lecturers will require allowing them to input some of themselves into the lecture. Allowing the faculty lecturers the opportunity to provide constructive criticism and then discussing their concerns over the new

proposed curriculum will open a pathway for trust and allow them to feel they are part of the construction of the new teaching plan. Assisting the faculty to look past obstacles and see how students can better understand material taught will assist in getting them to accept the new curriculum. When introducing the new curriculum, it would also be beneficial to observe who appears very interested and use them as champions to continue to promote this change. I as the developer of the new curriculum will remain a mentor and offer guidance as needed. Meetings will be held once a month for those who are using the new curriculum, which allows time for concerns to be addressed and group decisions to be made if additional changes are required.

Preparing students for the change requires explaining that they learn in different ways. Some may use their auditory or visual senses while some may learn best by the tactile sense, or touch. The new curriculum can provide different teaching tools that will address the various learning styles. Teaching students the theory and how it applies to various healthcare situations will improve their understanding of the reason they are developing a particular skill. It is important that educational content be interesting and that students be engaged in their learning (Keller, 2010). When students are engaged, they feel that the material they are learning has relevance to them.

Scholarship

Boyer (1990) and Stull and Lanz (2005) defined the elements of scholarship best when they incorporated the concepts of discovery, integration, application, and teaching. Through my research of the use of traditional lectures and students' ability to apply

classroom theories learned to the clinical setting, I discovered that students need to be a part of their learning. With this information, I refined the traditional lecture curriculum and developed an improved methodology that increases students' involvement in their learning by engaging them in the learning process. In addition, building on the existing knowledge base of students by using a new teaching format helps to integrate the new data into their long-term memory. When it comes time for the students to apply this new learned information to solve problems or critically think about patient care they will be able to relate to a lesson taught in the lecture class.

Creating a safe, nonjudgmental learning environment where students can develop their skills by testing the instructional material before they care for a real human being helps to build their confidence and nursing knowledge base. Within my study, I challenged the use of traditional lecture to educate nursing students, offered an alternative to this way of teaching, and predicted improved learning outcomes for future nursing students. I plan on having my study published in a peer-reviewed educational and or nursing journal and will serve as a mentor to the future nurses who may consider conducting doctoral research in the education field.

Project Development and Evaluation

The development of my curriculum plan was very time consuming in that each topic taught had to be matched with the best teaching methodology to maximize students' understanding of the material. The time allowed for each teaching

methodology was of significant importance to keep the students engaged and participating while assuring that the goals set for the childbearing class were being met.

Using Isman et al.'s (2005) "new model" along with McTighe and Wiggins's (1998) "understanding by design", I started planning what student outcomes should be first. My goal for the students revolves around care for a pregnant woman before labor (antepartal), during labor (intrapartum), and after labor (postpartum). The students also need to be able to assess and care for an infant in the antepartal, intrapartum, and postpartum period.

Second, I need to be able to determine if students have achieved the desired outcome. The quizzes created will be used as a formative evaluation to provide information on what students understand relative to the topics presented so that curriculum design changes can be made if necessary. The creation of a case study promotes the use of critical thinking to be used by the students to determine their patients' problems and their appropriate care.

The third stage of my project development involved the planning of my instructions and the use of various teaching methodologies to assist students to achieve the desired outcome. The PowerPoint which was developed created a visual account of important facts that the nursing students need to remember. Using simulators, the students will be able to practice care on a medical manikin in a safe environment. The use of discussion groups and role-playing will add to the students' experiences helping them to remember the information so they can recall it when in the clinical setting.

In the fourth stage, I added a formative assessment plan to be given to the students' mid-semester so they are made aware of how they are progressing and what areas they may need to focus on for better understanding. It includes both faculty and student input. The end-of-semester report, referred to as a *summative report*, will provide both student and faculty information on students' achieved outcomes as well as areas that need improvement.

I discovered that creation of a new curriculum is time consuming and often tedious. It requires much research and work on proper use of teaching tools that will best benefit students. Newly developed curricula are ongoing in that changes can be initiated as they are being developed to help improve student learning. Allowing peers and other faculty members to review the curriculum as it is being created is referred to as *formative evaluation*. Even though developing a new curriculum was time consuming, if it helps students learn better, then it is all worth it.

Evaluation

Formative evaluation was first brought to light by Scriven (1967) when he discussed the importance of evaluating curriculum construction, teaching, and learning. This process involved collecting data before instruction occurs. William (2006) went on to propose that a formative evaluation is about identifying student needs and then creating a plan for how to instruct them. Providing the newly developed curriculum to two of my peers who work with me can help provide information in areas that I may have overlooked. Their additional input could help make changes to the curriculum

before it is used to instruct. The use of various teaching methodologies and the time frame for their use will require additional focus during the evaluation process.

Leadership and Change

During this research, I discovered some important aspects about me which I needed to investigate further in order to make a difference in nursing education. I have always known that communication is important to ensure success in any endeavor. So to help promote the integration of my new developed curriculum, I am going to assure that the explanation of its development and use is clearly stated and concise. I will remain confident and honest with all explanations and answers to questions. These two factors are important to maintain morale and to handle any problems that may arise with this change in faculty teaching. I will use delegation to get faculty involved with the new lecture style as they learn the different teaching methods. Delegation also takes some of my responsibility away as faculty members begin to learn how to integrate the new teaching tools themselves and then share this new knowledge with other faculty members. Faculty who support the educational teaching change will be asked to act as champions to help get other faculty on board. Change is difficult, but as a nursing education leader I need to promote change to better prepare future generations of nursing students.

Analysis of Self as Scholar

Being a scholar in the field of nursing education taught me that there is a need for further research in new ways to help students to understand the information being

taught about patient care. I found that students learn in individual ways. The best method for teaching in this situation is when students are involved in some form of activity to enhance their learning, which builds confidence and knowledge on the use of critical thinking (Kaddoura, 2010). Providing students with simulation and hands-on experiences as part of the curriculum change will improve their ability to connect classroom theory with actual practice as they care for their patients. Being able to perform a skill on one's own enhances confidence as well as learning. Replication is often needed and desired by students, as they see improvement in their own skill levels. Simulation provides students an environment in which it is safe to learn and where mistakes can be made and corrected without any risk of patient harm. Working with real patients provides students the experience of what a real-life hospital setting is like, which also develops their communication skills.

Students respond well to being part of their own education as observed in role-playing and discussion groups. One surprise I encountered in the study was that eight out of ten students who were interviewed were extremely protective of their time and preferred to attend a single 3-hour lecture class as opposed to multiple classes. This was true even though they became bored or were not able to retain all the information delivered during the lecture. They thought that coming to a lecture for 2 days instead of 1 took up too much of their valuable time to study or do other things they needed or wanted to do. As a scholar, I feel I have discovered a valuable piece of the puzzle of student education that will enhance student learning. This accomplishment has made me

more confident that I can proceed to the next step in this research to ensure its successful execution.

Analysis of Self as Practitioner

Because I am a nursing education practitioner, teaching the students will allow me to address this gap in the teaching process. Providing students with alternative ways to learn can help them to retain information so that they can transfer it to the clinical setting. Receiving positive outcomes as shown in student clinical performance grades may encourage other faculty to teach using various methodologies to assist their students to learn.

Analysis of Self as Project Developer

Development of a new curriculum was both time consuming as well as frustrating at times. Given the large amount of information in the course textbook, I was able to select what specifically to include in the curriculum and what could be left out. I frequently reevaluated my project's priorities and made sure student objectives were being met. I reached out to peers in the education field to review and offer feedback on my curriculum project. I spoke clearly and concisely to people in the field of higher education about how my project can better prepare nursing students to care for their patients. I accepted their constructive criticism and made curriculum changes as suggested. I maintained my expertise in the field of various teaching methodologies so that I was able to respond to questions pertaining to the way students can learn from each teaching tool. I will share the responsibilities for getting this new curriculum

implemented and serve as a reference source. I will handle project issues quickly and effectively.

The Project's Potential Impact on Social Change

Reflection

Reflecting back, I realize this study has demonstrated that students want to learn, but they also want to be taught in ways that help them to better understand the information. They need to be shown how to perform a skill as they start to learn how to care for their patients while at the same time knowing the importance of why that care is needed. Helping students to understand how theory is connected to practice is the best way to learn and keep that information in memory for later retrieval. Sharing experiences and using simulation with manikins makes the learning environment safe as students learn from a real lifelike experience. Using simulation on medical manikins promotes collaboration between students as they learn from each other. Some students may assess the uterus of the pregnant woman on the manikin or the breast while other students observe. Together, the group learns with feedback from the faculty member on the pros and cons of their assessment.

Reflecting on how my study personally changed me, I have seen growth in a few different areas. I became far more organized and committed to any endeavor I have chosen to participate in. I am methodical about locating information from an assortment of sources on a topic, not settling for just the first one that is found. I keep all articles that involve a topic in one area, not to be mixed with any other information, for future

use. Coordination of objectives helps to keep me focused as I now focus on one at a time.

Doing my research has taught me patience through the many rewrites and the waiting time allowed for reviews. In the beginning of my research, I was frustrated because I equated the time being used for reviews as lost. But I soon replaced that waiting time with completing other parts of the research that was required. I also found that I became more patient with my students as they tried to figure out how to perform a nursing skill.

I was always determined to get my Doctor of Education (EdD) degree, but, found that life's many hurdles often got in the way. Through perseverance, I saw the light at the end of the tunnel and kept pushing through difficulties that I encountered. I hope one day to be able to share this postgraduate educational experience with my students as an example for encouragement when things appear to be very difficult.

Social Change

The quality of nursing student education will improve by incorporating new teaching methods into the lecture format. Students will have a better understanding of patient care and how theories relate to it. Nursing students will graduate prepared to provide patient care in the communities where they will be employed. Healthcare employers will reduce their spending on training of new graduate nurses to care safely for their patients. Universities can be assured that their students are receiving a high-quality education that will allow them to remain competitive with other universities.

Implication, Applications, and Directions for Future Research

Implication

This study's implication was the discovery that there is a gap between the traditional lecture practice and students ability to apply classroom knowledge to patient care. Providing stakeholders with the results from the study will support needed change in nursing education practices to better prepare students for the workplace after graduation. Equipping students with an understanding of nursing knowledge and skills in which they can provide highly competent care to the community has always been, and continues to be, the goal of the university where my study was done. Positive social changes will also be seen with educational reform. The development of new curriculum where different teaching methodologies are used to educate students will keep them engaged in their learning. These methodologies will consider students' learning styles whether visual, auditory, or tactile that will enhance understanding and retention of information into long term memory. This will enable students to successfully understand the theory behind the care they provide to their patients in the work place. The university will be graduating better-prepared nursing students who can safely care for their childbearing parents and their newborns. Patients in the hospital setting will feel more comfortable due to the care they receive from a confident nurse who has been well prepared.

Applications

Implementing this new curriculum for the fall semester nursing students would be an opening for further research into the way we teach students with different learning styles. Students having a say in how they are taught is a monumental jump in nursing education. Being able to provide various teaching methods to help students learn will help education continue to move forward as we make changes to help students understand nursing information provided to them. Evaluation of the curriculum plan should be ongoing as faculty and student input is valuable in helping to promote student learning.

Future Research

The participative curriculum plan project created in this study provided an alternative way to teach nursing students incorporating a mixture of teaching methods to encourage students to take part in their learning. One drawback of the study was not being able to compare it to existing traditional lecture methods to teach nursing students in the childbearing class. Comparing the participative curriculum to the traditional lecture format in the future by using a quantitative study would provide the positives and negatives to using a variety of teaching methods. The quantitative study would also provide data on student outcomes. Providing this study's outcomes to university stakeholders may offer an incentive to invest in a quantitative experimental research study comparing the two different methods of teaching to improve student nursing education.

To address this obvious gap in information, a quantitative experimental research design involving two separate childbearing classes on separate campuses and using the same instructor should be initiated. In one class, the instructor would use a 3-hour lecture method, and in the other class she would use different teaching methodologies to educate the students. The faculty member should be the same person teaching each class but using the different tools. This study would provide student outcomes as well as their feedback. From that research, data from the traditional lecture format could be compared to the new curriculum design so that a conclusive understanding of the best way to teach childbearing to nursing students could be used to help promote transfer of information to the clinical setting. Whichever direction this study does take in the future, I am ready for the challenge.

Conclusion

I know I am on the right track in addressing students' learning by offering a variety of teaching methods to enhance their ability to learn during 3-hour class lectures. The participative curriculum encourages the students to get involved in their learning, which also helps to improve cognitive development (Vondracek, 2009). The students are engaged in their learning by experiencing how theory works in the real world, enhancing their ability to transfer that knowledge to real-life settings as they provide patient care (Kolb, 1984). Providing students experiences that they can relate to promotes information being stored in long term-memory for future use (Cherney, 2008). Having the students be a part of their learning through discussion, role-playing, and simulation

are but a few teaching methodologies that can help them make meaning out of a new situation or make new meaning from an old meaning. This ability to make meaning of data is the start of developing critical thinking skills, which is a major component of nursing education (Smyth, 2009). Nursing education is an engaging lifelong learning process because medical research and technology are forever changing (Billett, 2010). Why should students not be part of their learning and be able to enjoy this lifelong process?

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Appendix A:

The Project

The Participative Curriculum

9-Week Plan

Teresa Pohle

Course Title: The Childbearing Family

Course Description

This course focuses on the theoretical foundations needed to deliver nursing care to childbearing women, their infants, and their families. Discussions of the reproductive periods will include antepartial, labor, postpartum, and the newborn period. Students will also have the opportunity to apply theory they have learned in lecture to the clinical setting as they collaborate with other healthcare professionals and their patients. Nursing students will also rely on their previous course work in humanities, anatomy and physiology, pharmacology, and health sciences to further develop their critical thinking skills.

Objectives

1. Explore previous nursing theories learned concerning care for the childbearing family.
2. Explore various cultural beliefs and value systems of the childbearing family.
3. Explore various environmental, social, and economic issues of the childbearing family.
4. Explore various methods of communicating with the childbearing family.
5. Explore the nurse's role in providing care to the childbearing family.
6. Explore appropriate health equipment and technologies used in the care of the childbearing mother.

7. Explore research findings to improve understanding of the events and methods employed during delivery.

8. Explore the role of the healthcare team in caring for the childbearing family.

Student Learning Outcomes

Students will be able to:

1. Apply theories learned in lecture to the clinical setting.

2. Apply the knowledge of various cultural beliefs and values of the patient to the care provided to the childbearing family.

3. Incorporate the understanding of environmental, social, and economic issues in the care of the childbearing family.

4. Apply various methods to communicate with the childbearing family.

5. Safely provide nursing care to promote health to the newborn infant and the mother.

6. Apply knowledge of healthcare equipment to safely care for the childbearing family.

7. Incorporate research findings information to help better provide a safe and knowledgeable experience for the childbearing family by allowing them to be a part of the decision-making process.

8. Provide knowledge of various healthcare professionals' roles caring for the childbearing family.

Teaching Materials and Methods:

1. Lecture

2. Discussion

3. Simulation

4. Role-playing

5. PowerPoint presentations

6. Hands-on equipment: Noel (pregnant manikin), intrauterine pressure catheter, fetal scalp electrode, amniotomy hook, anatomical fetus with umbilical cord, placenta, and pelvis. Doppler and toco demonstration will be done for monitoring of contractions and fetal heart rates. Actual fetal heart rate monitoring strips with contractions, decelerations, and accelerations of fetal heart rate. Vacuum and forceps extractor devices will be demonstrated.

7. One clicker quiz and 3 quizzes

8. One case study

9. Course text: *Maternity and Women's Healthcare,* 10th ed. (2012). Alden, K; Cashion, M; Lowdermilk, D; Perry, S. E. Elsevier Mosby. St. Louis, MO.

Evaluation

1. Quizzes

   Quiz 1 15%

   Quiz 2 15%

   Quiz 3 15%

2. Clicker quiz 10%

3. Class participation 15%

4. Final exam 30%

9-Week Curriculum Plan

Lecture class meets 1 day per week for 3 hours

Week 1 Introduction to the Class on Childbearing:

1. The course content and expectation that all chapters to be discussed will be read before class so that students are able to participate (15 minutes).

2. Chapter 1: (30 minutes)—Lecture on nursing roles and standards of practice, and start to introduce culture and family concepts and theories (PowerPoint).

3. Chapter 2: (30 minutes)—Prearrange discussion groups of students assigned a number from 1–5. All number 1's will go into a group, then all 2's, etc., forming 4 groups of 9 students and one group of 10 students. The first 15 minutes each group of students will discuss different cultural beliefs about labor with their assigned group members. A spokesman from each group will share information gathered with the entire class. The next 15 minutes, each group will be able to discuss their findings with other group members.

4. (10-minute break).

5. Chapter 3: (30 minutes)—Clinical Genetics will be presented in lecture format incorporating initial information.

6. Chapter 12: (45 minutes)—Conception and Fetal Development. Students will be divided into the same groups of 10 and will use the teaching tools made available on tables in the room, including models and poster diagrams as information is provided to assist them to understand the process of conception and fetal development.

7. Close out: (20 minutes) - End of 3-hour session will include review and questions to be answered (total 3 hours).

Week 2 The Pregnant Woman:

1. Chapter 13: (60 minutes) - Anatomy and Physiology of Pregnancy. Lecture incorporating large visual pregnancy growth charts showing different trimesters relating the signs and symptoms that occur with pregnancy to the visual charts so that students can better understand the physical changes that occur and how the

woman will adapt to the pregnancy. Also, a pregnant manikin for students to touch and see will be utilized. (PowerPoint)

2. Discussion: (30 minutes) - Medical terminology will be discussed and reinforced using handheld displays and wheels to assist students' understanding of their meaning.

3. (10-minute break).

4. Simulation and Role Playing: (15 minutes) - Utilizing the pregnancy belly device, students improve their understanding of what a woman goes through each day of pregnancy by wearing this device. Additionally, they can incorporate role-playing with the device and discuss the woman's physical changes and limitations as well as her emotional changes.

5. Discussion: (15 minutes) - Class members who wore the pregnancy belly device discuss their physical and possible emotional changes that occur from the hormonal shifts during pregnancy.

6. Chapter 14: (30 minutes) - Maternal and Fetal Nutrition lecture on pre-conception nutrition, weight gain, pregnancy nutrition, and pica eating.

7. Close Out: (20 minutes) - End-of-session review of material discussed and answer any questions students may have (total 3 hours).

Week 3 Care of the Pregnant Woman and Her Family

1. Quiz #1: (60 minutes) - Chapters 1, 2, 3, 12, 13, 14, and information covered during class weeks 1 and 2. There will be 15 multiple choice application questions.

2. (10-minute break).

3. Chapter 15: (45 minutes) - Nursing Care of the Family lecture, including prenatal care and its variations.

4. Simulation and Role Playing: (50 minutes) - Childbirth education including posters and equipment that the students can examine and ask questions about. Will also include the breathing and relaxation tools that students can utilize

through role-playing. Students will experience some of the teaching tool workouts so they may experience their purpose and develop a better understanding of their use. Using this interactive period, assist students to integrate the information into long-term memory.

5. Close Out: (15 minutes) - Questions and answers.

Week 4 Labor and Birth

1. Chapter 16: (45 minutes) - Labor and Birth Process lecture. Discuss the physiology of the birth process, how labor progresses, and the response of mother and baby to the process. (PowerPoint)

2. Simulation: (40 minutes) - Simulation of a manikin delivering a baby so students can observe a delivery in a safe environment.

3. Discussion: (20 minutes) - PowerPoint illustrating the 7 cardinal moves of a fetus during delivery.

4. (10-minute break)

5. Chapter 17: (30 minutes) - Lecture on Pain Management, pharmacological and non-pharmacological. Discuss the importance of using a pain scale and patient's different pain levels.

6. Demonstration: (20 minutes) - Demonstrate positioning for an epidural injection and show grafts of the proper placement in the spine. Time will be allowed for discussion.

7. Close Out: (15 minutes - Questions and answers.

Week 5 Assessing the Fetus during Labor

1. Quiz #2: (60 minutes) - Chapters 15, 16, 17, and information covered during class weeks 3 and 4. There will be 15 multiple choice application questions.

2. Chapter 18: (30 minutes) - Fetal Assessment during Labor lecture (PowerPoint).

3. (10-minute break)

4. Demonstration: (15 minutes) - Using model to demonstrate fetal positions at different stages of development; allow students to observe and present questions about fetal monitor placement.

5. Demonstration: (15 minutes) - Circulate fetal heart rate graft strip for students to observe and discuss how to read one. Draw fetal heart rate patterns on the blackboard and discuss their meaning with students.

6. Chapter 19: (15 minutes) - Lecture on Nursing Care of the Patient and Her Family during Labor.

7. Discussion: (20 minutes) - Circulate examples of dilatation charts to the students and discuss the first, second, third, and fourth stage of labor. Incorporate the anatomy and physiology information discussed in week 2 to enhance students' understanding of what the patient is experiencing.

8. Close Out: (15 minutes) - Questions and answers.

Week 6 The Postpartum Period

1. Chapter 20: (50 minutes) - Lecture on Physiological Changes during the Postpartum Period (PowerPoint).

2. Clicker Quiz: (30 minutes) - Medical terminology used during the maternity period, such as dilatation, effacement, fetal heart rate (FHR) deceleration, cervix, perineum, etc. Quiz will involve 15 match-ups of terms and their meaning. Objective is to provide instructor more information about students' learning and areas that may require further discussion.

3. (10-minute break)

4. Discussion: (15 minutes) - Review clicker quiz with class.

5. Chapter 21: (30 minutes) - Lecture covering Postpartum Care of Mother and Family, including physical and psychosocial issues as well as discharge planning.

6. Chapter 22: (30 minutes) - Transitioning into parenthood exercise where students will role-play using different parenting theories and discuss topics such as attachment, bonding, life changes, etc.

7. Close Out: (15 minutes) - Questions and answers.

Week 7 The Newborn Period

1. Quiz #3: (60 minutes) - Chapters 18, 19, 20, 21, 22, and information covered during class weeks 5 and 6. There will be 15 multiple choice application questions.

2. Chapter 23: (30 minutes) - Lecture on Newborn Transition to Extrauterine Life. (PowerPoint)

3. (10-minute break)

4. Chapter 24: (30 minutes) - Demonstrate the assessment of a newborn using PowerPoint and newborn models. The class of 40 will organize into their original subgroups established in week 1. Each of the 8 groups will work with their own infant model.

5. Chapter 25: (35 minutes) - Lecture on newborn nutrition and various feeding methods. Demonstration of feeding using an infant model.

6. Questions and answers (15 minutes). Total (3 hours).

Week 8 Pregnancy Complications

1. Chapter 26: (30 minutes) - Lecture on Assessing Risk Factors of Pregnancy Including Antepartial, Biophysical, and Biochemical Assessments. (PowerPoint)

2. Chapter 27: (45 minutes) - Discuss hypertension with its signs, symptoms, and complications during pregnancy. Provide hands-on equipment for students to see and test on each other.

3. (10-minute break)

4. Chapter 28: (45 minutes) - Lecture on Bleeding during Pregnancy.

5. Simulation: (35 minutes)—Using a pregnant manikin and an anatomical infant with placenta; demonstrate different bleeding scenarios during pregnancy.

6. Close out: (15 minutes) - Questions and answers.

Week 9 Pregnancy with Metabolic and Endocrine Disorders

1. Chapter 29: (60 minutes) - Lecture on Metabolic and Endocrine Disorders of Pregnancy Including Diabetes, Hyperemesis, Thyroid Disorders, and Maternal Phenylketonuria. (PowerPoint)

2. (10-minute break)

3. Chapter 30: (35 minutes) - Lecture on Medical Problems during Pregnancy Including Surgical Complications. (PowerPoint)

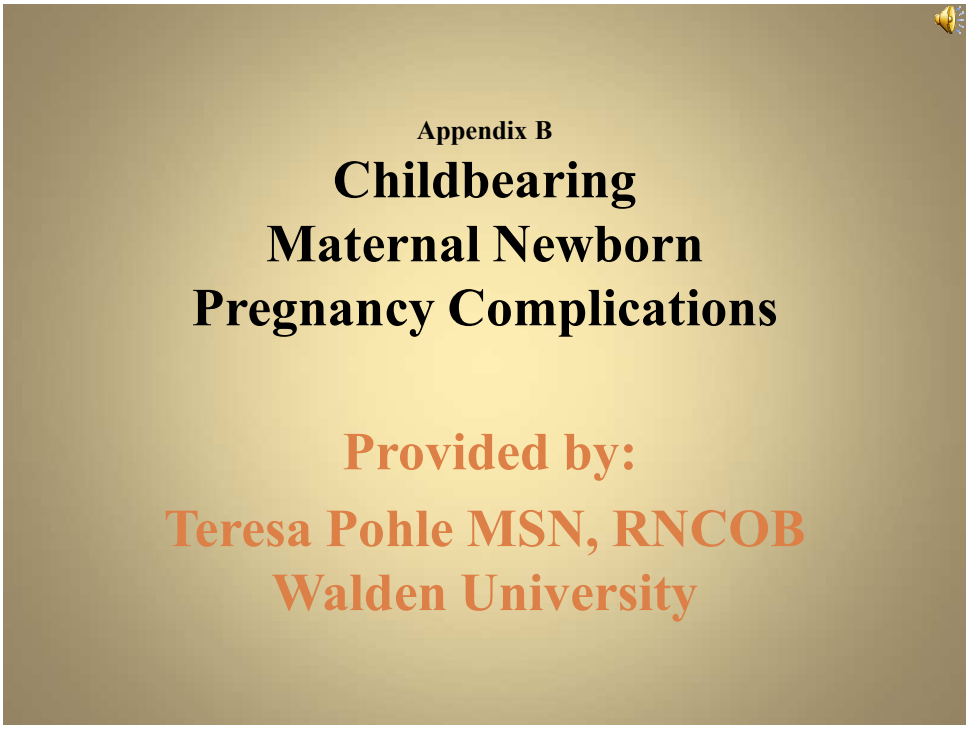
4. Chapter 32: (60 minutes) - Lecture on Mental Health Disorders Including Postpartum Psychological Complications and Substance Abuse. Includes a 30-minute case study evaluation period.

5. Close Out: (15 minutes) - Questions and answers.

End of Semester: Final Exam to include 50 application questions from a total of 14 weeks of classes.

Childbearing Presentation

(Double Click to View)



Clicker Quiz

Week 6 (Medical Terminology)

1. Dilation	A) Vaginal discharge from cervix
2. Effacement	B) Irregular tear of perineum tissue
3. Cervix	C) Pertaining to the head
4. Bloody show	D) Surgical incision of perineum
5. Gestation	E) Before labor
6. Parity	F) More than 5 uterine contractions in 10 minutes over a 30-minute window
7. Primigravida	G) Period of intrauterine fetal development, conception to birth
8. Primipara	H) Occurring before birth
9. Laceration	I) Thinning and shortening of cervix
10. Episiotomy	J) Lowest and narrow end of uterus
11. Antenatal	K) Number of pregnancies that reach 20 weeks
12. Antepartal	L) Baseline fetal heart rate below 110 beats per minute
13. Bradycardia	M) Women pregnant for the first time
14. Tachycardia	N) Women who completed first pregnancy with fetus that reached 20 weeks
15. Tachysystole	O) Baseline fetal heart rate above 160 beats per minute
	P) Stretching of the external OS

Answers to Clicker Quiz (in RED)

1-P 2-I 3-J 4-A 5-G 6-K 7-M 8-N 9-B 10-D
11-H 12-E 13-L 14-O 15-F

Childbearing Quiz #1 (Correct answer in red)

1. Which factors affect women's health?

   a) Race

   b) Age

   c) Violence

   d) All of the above

2. Ms. Smith dies after giving birth to a 9-lb. baby boy. This is a:

   a) Failure to rescue.

   b) Standard of care.

   c) Sentinel event.

   d) None of the above

3. "One's own culture's way of doing things is the best." This is called:

   a) Acculturation.

   b) Assimilation.

   c) Subculture.

   d) Ethnocentrism.

4. Which group of women is not considered vulnerable populations in our communities?

   a) Newlyweds

   b) Adolescent girls

   c) Incarcerated women

   d) Older women

5. Mrs. Smith delivers a 7-lb. baby boy vaginally. On your infant exam, you note an upward slant to the baby's eyes, a flat nasal bridge, a simian crease across the palm of his hands, and a slightly protruding tongue. What could this be indicative of and requiring a pediatric evaluation?

   a) Neurofibromas

   b) Down syndrome

   c) Phenylketonuria

   d) Tay-Sachs

6. Mrs. Jones's baby is being tested in the nursery for the four most commonly tested conditions, which include:

   a) PKU, hypothyroidism, galactosemia, and sickle cell disease.

   b) Down syndrome, PKU, sickle cell disease, Turner syndrome.

   c) PKU, hypothyroidism, sickle cell disease, neurofibromas.

   d) Down syndrome, neurofibromas, PKU, sickle cell disease.

7. When the female gamete (egg or ovum) and the male gamete (spermatozoon) unite to form the zygote, how many diploid human chromosomes should be restored?

   a) 23 single chromosomes

   b) 46 or 23 pairs

   c) 47

   d) 45

8. Between 6–10 days after conception, some women have slight bleeding or spotting at the time of their fist missed menstrual period. This is due to:

   a) chorionic villi projections.

   b) fertilization.

c) implantation.

d) spermatogenesis.

9. Certain maternal conditions can accelerate fetal lung maturity. Which of these are accurate?

a) Maternal hypertension

b) Gestational diabetes

c) Infection

d) Placental dysfunction

10. Mrs. Smith is a 35-year-old woman who is currently 30 weeks pregnant and has previously delivered two baby boys vaginally. She had a 20-week fetal demise and electively terminated two pregnancies, one at 6 weeks and one at 15 weeks. What are her gravida and parity?

a) G6 P3

b) G5 P2

c) G5 P5

d) G3 P2

11. Which of these functional changes does not occur with normal pregnancy?

a) The presence of proteinuria in a nonlaboring patient is common.

b) The pregnant woman who is lying supine causes the heavy uterus to compress the vena cava and the aorta, causing a decrease in cardiac output.

c) The pregnant woman in a side-lying position increases renal function, which increases urinary output and decreases edema.

d) The pregnant woman may experience lower abdominal pressure, and cramping due to stretching of the abdominal wall as the fetus grows.

12. Oxytocin is a hormone that is produced by the posterior pituitary gland in increasing amounts as the fetus matures. Its functions are:

    a) To stimulate uterine contractions during pregnancy.

    b) To stimulate the letdown or milk-ejection reflex.

    c) To stimulate breast development.

    d) To stimulate the relaxation of smooth muscles.

13. Nutritional risk factors of pregnant women include:

    a) Pica eating.

    b) Adolescent pregnancy.

    c) Nicotine use.

    d) All of the above

14. Neural tube defects are attributed to:

    a) Low magnesium intake.

    b) High sodium intake.

    c) Low folic acid intake.

    d) High protein intake.

15. Ways to address nausea and vomiting during pregnancy include:

    a) Eating fried foods instead of foods prepared by baking.

    b) Getting out of bed quickly to avoid nausea.

    c) Eating several small meals instead of three large meals.

    d) Remembering to brush your teeth right after eating a meal to feel better.

Childbearing Quiz #2 (Correct answer in red)

1) Rapid and unpredictable changes in mood, including mood swings, with feelings of happiness alternating with tears is called:

a) Cognitive restructuring.

b) Emotional lability.

c) Bipolar condition.

d) Emotional attachment.

2) Estimating date of birth (EDB) can be determined by using Nagele's rule (last menstrual period LMP). This includes:

a) First day LMP, (-minus) 3 calendar months and add 7 days.

b) Last day LMP, (+add) 3 calendar months and subtract 7 days.

c) First day LMP, (- minus) 3 calendar months and subtract 7 days.

d) None of the above

3) May (1982) describes three phases that characterize the developmental tasks experienced by the expectant father. When the father starts to concentrate on the experiences of the pregnancy and begins to think of himself as a father, this is called the:

a) Cognitive restructuring phase.

b) Announcement phase.

c) Focusing phase.

d) Moratorium phase,

4) The greatest danger of drug-caused developmental defects in the fetus occurs from the time of fertilization through the first trimester, a time when the woman may not realize she is pregnant. Which group of drugs is contraindicated during pregnancy?

a) Immunizations with live viruses, alcohol, cigarette smoke

b) Alcohol, tetanus, cigarette smoke

c) Influenza (inactivated), alcohol, caffeine

d) Recombinant hepatitis, alcohol, cigarette smoke

5) Maryann is a 25-year-old Middle Eastern woman who is a G1P0 at 39 weeks in active labor with her husband and mother-in-law at her bedside for support. Maryann asks her mother-in-law for pain medication, and the mother in-law tells her she cannot have any. The nurse's response should be to:

a) Inform the mother-in-law that this is the patient's request, not hers.

b) Tell the patient to not ask her mother-in-law but to ask the nurse.

c) Educate the family about the labor process and how contractions can be very painful, and about medications or alternate forms of relief.

d) Tell the husband that he should be supporting his wife in this decision.

6) Which factor does not affect the process of labor and birth?

a) Fetus

b) Increasing levels of progesterone

c) Passageway

d) Contractions

7) *Presentation* refers to the part of the fetus that enters the pelvic inlet first. This would then be referred to as:

a) Shoulder.

b) Cephalic.

c) Breech.

d) All of the above

8) Maryann was examined by her doctor and was told her dilatation, effacement, and station. Which answer correctly reflects that information in order?

a) LOA, 4, 25%

b) 4, 25%, -1

c) Cephalic, 25%, -1

d) 4, shoulder, -1

9) Maryann has now been pushing on her right side for 1 hour. Which statement is accurate?

a) Oxygen consumption decreases in the second stage of labor.

b) During the second stage of labor, the respiratory rate decreases.

c) Anxiety increases oxygen consumption.

d) In the unmedicated woman in the second stage of labor, oxygen consumption remains the same.

10) *Fontanels* are membranous-filled spaces that are located where sutures intersect on the fetal skull. Which statement is incorrect?

a) The anterior fontanel is diamond shaped and is 3cm by 2 cm.

b) The posterior fontanel is triangular and is 1cm by 2 cm.

c) The fontanels make the fetal head ridged during the birth process.

d) The anterior fontanel closes by 18 months after birth.

11) Nonpharmacologic pain management consists of:

a) Position changes.

b) Music.

c) Massage.

d) All the above

12) Sally is 8 cm's dilated and has been using patterned-paced (pant–blow) breathing to help her through this phase of labor. She is experiencing light-headedness, dizziness, and tingling of the fingers. What is this called?

a) Fetal descent

b) Hyperventilation

c) Cleansing breath

d) Rhythmic breathing

13) Which nonpharmacological strategies can Sally continue to use to help with her labor?

a) Effleurage and counterpressure

b) Water therapy

c) Application of heat and cold compresses

d) Sedatives

14) Opioid-dependent women may precipitate withdrawal symptoms when given?

a) Butorphanol (Stadol)

b) Nalbuphine (Nubain)

c) Naloxone (Narcan)

d) All of the above

15) Pharmacologic pain relief methods used for labor are Analgesia and Epidural Anesthesia. Side effects may include:

a) Hypotension.

b) Tinnitus (ringing in the ears).

c) Sweet taste.

d) A & B.

Childbearing Quiz #3 (Correct answer in red)

1) Fetal oxygen supply must be maintained during labor but can be decreased due to:

a) Excessive exogenous Oxytocin.

b) Hypervolemia.

c) Gestational hypertension.

d) Both A & C.

2) Sally has had a baseline FHR tracing showing absent baseline variability with recurrent variable decelerations. Which fetal heart rate classification would she be placed in?

a) Category 1

b) Category 2

c) Category 3

d) None of the above

3) To improve fetal oxygenation of Sally's baby with the above FHR strip, we would initiate immediate intrauterine resuscitation by:

a) Notifying her doctor, preparing for delivery, and calling anesthesia.

b) Providing oxygen, changing her position, and increasing IV fluids.

c) Doing a vaginal examination, telling the patient to push, and giving pain medication.

d) Increasing IV fluids, offering pain medication, and encouraging her to start pushing.

4) Lazarre Muffoia has just received an epidural and was placed on her back. What could this maneuver result in?

a) Compression of the central nervous system

b) Compression of the uterine wall

c) Compression of the aorta and inferior vena cava

d) Compression of the pelvic inlet

5) To assess Lazarre's contraction strength, you can:

a) Place her on an external fetal monitor using a tocodynomitor for contractions.

b) Palpate her contractions manually.

c) Listen to what the patient is telling you.

d) All of the above.

6) Lazarre is now 7 cm's dilated with contractions coming every 3–4 minutes lasting 55–65 seconds. What phase of labor is she in?

a) Pushing phase

b) Latent phase

c) Transition phase

d) Active phase

7) Lazarre asks her nurse, "Now that I have delivered, when will my swelling go away?" What is the correct answer to her question?

a) Within 2 hours after a women has given birth she loses all her extra fluid.

b) Women sweat heavily especially during the day on the second week after delivery.

c) Within 12 hours after birth, fluid loss through perspiration and increased urinary output occurs.

d) None of the above

8) During the first 24 hours, Lazarre may be able to express clear yellow fluid called colostrum from her breast. Colostrum transitions to mature milk by approximately:

a) 72–96 hours after birth.

b) 24–48 hours after birth.

c) 24–36 hours after birth.

d) 6–7 days after birth.

9) *Lochia* is a uterine discharge that occurs after birth. Initially it is bright red with small clots and can continue for up to:

a) 10–12 weeks after birth.

b) 4–8 weeks after birth.

c) 2–3 weeks after birth.

d) 12–14 weeks after birth.

10) The Newborns' and Mothers' Health and Protection Act of 1996 states that the minimum time of stay after a vaginal delivery or a Cesarean birth (C|S) is:

a) 48 hours for a vaginal birth and 96 hours for a C|S.

b) 24 hours for a vaginal birth and 48 hours for a C|S.

c) 36 hours for a vaginal delivery and 48 hours for a C|S.

d) 48 hours for a vaginal delivery and 72 hours for a C|S.

11) Sally has heavy bleeding 1 hour after delivery. This could be due to:

a) Distended bladder.

b) Retained placental fragments.

c) Vaginal or vulvar hematomas.

d) All of the above.

12) Sore nipples in breast-feeding mothers are most likely related to:

a) First-time mom's emotional embarrassment over breast-feeding.

b) Improperly fitting clothing.

c) Ineffective latch technique.

d) Strong suck of baby.

Childbearing Family Case Study

Mary is a 16-year-old teenager who lives with two full-time working parents in a two-bedroom apartment. She is in the tenth grade at the nearby high school. She just arrived at the ER with her mother, stating she has been vomiting for the last 2 months along with mild abdominal cramps that have not gone away for the last 3 hours. The mother complains it is because Mary smokes too much. When the ER doctor examines Mary, she palpates a pregnant abdomen. The ER doctor then calls the OB attending physician to the ER, and a bedside ultrasound is conducted along with drawing Mary's blood. This confirms Mary is pregnant.

The OB doctor asks Mary if she would like to talk in private, to which Mary requests that her mother be present. The OB doctor tells Mary and her mother that she is approximately 36 weeks pregnant based on the ultrasound measurements. Both the mother and Mary appear to be in shock at this news. Mary's mother becomes angry and starts to yell at her. The OB doctor attempts to defuse the situation by stating it is important that they now take care of Mary and the baby but need additional information and ask for their cooperation. The doctor then proceeds to ask Mary when her last period was, and Mary replies, "I think it was July 3rd or 4th. I can't remember when I had a regular period, but every month or so I have a little bleeding for a day or two. I just thought it was because I have been so sick with nausea and vomiting." When the OB doctor calculates dates from LMP, Mary is 40 weeks pregnant.

Questions

1. What factors can complicate this pregnancy?

a) Hyperemesis Gravidarum (weight loss, electrolyte imbalance, nutritional deficiencies, ketonuria)

b) Adolescent pregnancy (higher mortality rates, anemia, preeclampsia, prolonged labor, cephalopelvic disproportion; long-term social implications—early parenthood, lower educational levels, higher divorce rates, higher parity, and increased dependencies on government support programs).

c) Lack of prenatal care is a sociodemographic factor (failure to get pregnancy diagnosed and started on prenatal care for baby and mom; prenatal vitamins, prenatal blood work; test required for prenatal workup—pap test, GBS, RPR or VDRL, HIV, rubella, blood type, glucose tolerance test, and urinalysis).

d) Smoking is a psychosocial factor (LBW, increased incidences of fetal death and or miscarriage, and higher rates of premature rupture of membranes (PROM); smoking is also related to poor nutritional status).

e) Nutrition needs to be adequate to support fetal growth and development (teenagers have reported poor dietary intake chips, sodas, etc., food that has no nutritional support for the growing fetus).

f) Psychosocial support (Mary lives with parents in a two-bedroom apartment; she is still in school, does not work, and has not developed any parenting tools at this age).

2. How can we calculate her due date with an LMP of July 3rd or 4th using NAGELE'S RULE?

a) Determine the first day of the LMP

b) Subtract 3 calendar months

c) Add 7 days

Example:

LMP (month 12) (day 10) (year 2011)

(minus-3 months) plus (7 days) =

(month 9) (day 17)

3. What further assessment do we need to do for her complaints of cramping?

a) Do a sterile vaginal exam to check for dilatation, effacement, and presenting part.

b) Place Mary on an external fetal monitor to evaluate fetal heart rate status.

c) Start an IV per doctor's order for hydration and for vein access in case patient needs pain medications. Draw blood chemistries as ordered per doctor to check for electrolyte imbalance.

4. How do we support Mary and her family?

a) By explaining everything that will be done for them to help her through labor.

b) Explain the birthing process and what her body will be doing.

c) Explain what tools she can use to help her through labor and what pain medications are available, how they work, and what their side effects are.

d) Offer social worker support if needed.

e) Provide information about financial support, housing, and being able to continue school.

f) Transfer Mary to the labor room if the hospital has one or transfer her to a hospital with the ability to care for a baby who may have difficulties.

Formative and Summative Grading Guidelines for the Childbearing Clinical Class

Formative:

P (Progressing) = Student demonstrates progress toward compiled objectives.

1) Student demonstrates appropriate physical assessment skills on the mother with no more than 1 or 2 supportive cues.

2) Student demonstrates appropriate use of both verbal and body language to communicate with patient with no more than 1 or 2 supportive cues.

3) Student performs behaviors safely with no more than 1 or 2 supportive cues.

4) Student accomplishes task with no more than 1 or 2 supportive cues.

5) Student is able to relate care patient needs with theories learned.

6) Student demonstrates increasing confidence level.

7) Student demonstrates critical thinking skills with no more than 1 or 2 supportive cues.

8) Student demonstrates appropriate physical assessment skills of the newborn with no more than 1 or 2 supportive cues.

NI (Needs improvement) = Student does not demonstrate progress toward compiled objectives.

1) Student requires more than 2 cues in doing a physical assessment on the mother.

2) Student does not demonstrate appropriate use of verbal or body language when communicating with patient.

3) Student does not perform behaviors safely, requiring more than 2 cues.

4) Student requires more than 2 cues to accomplish task.

5) Student is unable to relate theories to patient care.

6) Anxiety interferes with student's ability to perform a task.

7) Student requires more than 2 cues in demonstrating critical thinking skills.

8) Student requires more than 2 cues to do a physical assessment on the newborn.

NO (No Opportunity) = Used when the student had no opportunity to be part of a particular learning experience.

Summative:

Final Evaluation: End of the Semester:

S (Satisfactory) = Student demonstrates achievement of compiled objectives.

1) Student demonstrates appropriate physical assessment skills on the mother with no supportive cues.

2) Student demonstrates appropriate use of both verbal and body language as they communicate with patient with no supportive cues.

3) Student performs behaviors safely with no supportive cues.

4) Student accomplishes task with no supportive cues.

5) Student is able to relate patient care needs with theories learned.

6) Student appears relaxed and confident.

7) Student demonstrates critical thinking skills with no supportive cues.

8) Student demonstrates appropriate physical assessment skills of the newborn with no supportive cues.

U (Unsatisfactory) = Student requires excessive guidance, unable to provide adequate patient care.

1) Student continues to require more than 2 cues in doing a physical assessment on the mother.

2) Student does not demonstrate appropriate use of verbal or body language when communicating with patient.

3) Student continues to perform behaviors unsafely, requiring more than 2 cues.

4) Student continues to require more than 2 cues to accomplish task.

5) Student at the semester end is still unable to relate theories to patient care.

6) Anxiety continues to interfere with student's ability to perform a task.

7) Student continues to require more than 2 cues in demonstrating critical thinking skills.

8) Student continues to require more than 2 cues to do a physical assessment on the newborn.

Grading Criteria	**P** Formative	**NI** Formative	**NO** Formative	**S** Summative	**U** Summative	Comments
Assessment of	Midterm	Midterm	Midterm	Final	Final	
Gathers data from the chart, family, patient, & staff						
Performs a head-to-toe assessment, respiratory, uterus, heart, etc.						
Identifies deviations from normal						
Provides appropriate nursing care for abnormal findings						
Assesses learning needs of patients and their families, considers age, sexual orientation, and culture						
Communicates therapeutically with patients						
Documents nursing assessment and care appropriately						
Communicates information well concerning patient's care with team members						

Nursing Diagnosis	**P** Formative	**NI** Formative	**NO** Formative	**S** Summative	**U** Summative	Comments
Uses critical thinking skills to analyze patient's healthcare needs						
Develops a nursing diagnosis						
Discusses nursing diagnosis with instructor and team members						
Applies a theoretical understanding to the plan of care so that the caregiver (student) as well as the patient understands the need for the care.						

Nursing Plan of Care	**P** Formative	**NI** Formative	**NO** Formative	**S** Summative	**U** Summative	Comments
Incorporates knowledge of pathophysiology in creating a plan of care						
Develops a plan of action to address patient's needs						
Develops appropriate interventions to address patient's needs						
Incorporates the patient and family						

into plan of care						
Utilizes previous class information learned (i.e., anatomy & physiology, growth & development, science, pharmacology, psychology, etc.) to create a plan of care						
Incorporates socioeconomically and environmental issues into the plan of care						
Student communicates effectively the plan of care to patient and family, and encourages participation from them.						
Implementation Plan of Care	**P** Formative	**NI** Formative	**NO** Formative	**S** Summative	**U** Summative	Comments
Provides plan of care in a safe, organized and timely manner						
When administering medications, (7) rights are verified with instructor						
Provides rationale for medication administration						
Correctly calculates, prepares, and						

administers medications						
Performs correct skills in administering care to the patient						
Keeps patient safe at all times (i.e., siderails up, bed in low position, call bell in easy reach)						
Maintains universal precautions at all times						
Introduces self to patient and discusses plan of care with patient, keeping patient involved in their care						
Follows practice guidelines and hospital policies						
Uses critical thinking in evaluating a patient, planning his/her care, and providing care						
Reports patient status to healthcare provider and instructor						
Seeks guidance and/or assistance in providing care as needed						
Uses appropriate communication to teach patient and his/her family dependent on their physical, emotional, and mental status.						

Provides care to patient irrespective of own beliefs or value system.						
Documents accurate data of patient care and patient response to care provided						
Communicates well with patient and his/her family as well as staff and the instructor						
Is aware of body language and how that is perceived as a form of communication to the patient						

Evaluation	**P** Formative	**NI** Formative	**NO** Formative	**S** Summative	**U** Summative	Comments
Evaluates attainment of goals						
Evaluate nursing intervention effectiveness						
Revises plan based on patient outcomes						
Incorporates patient, instructor, and team feedback in revision						

Ethical and Legal Standards of Care	**P** Formative	**NI** Formative	**NO** Formative	**S** Summative	**U** Summative	Comments
Abiding by HIPAA standards, maintains confidentiality of clients						
Reports any illegal or unethical practices						
Advocates for patients						
Brings concerns of staff or other students to instructor's attention for further investigation without penalty for being a whistle-blower						
Addresses all patients, staff, and fellow students with dignity and respect						

Responsible for Own Nursing Practice and Professional Growth	**P** Formative	**NI** Formative	**NO** Formative	**S** Summative	**U** Summative	Comments
Is appropriately dressed for clinical per instructor's and school's requirements						
Comes appropriately prepared for the clinical experience (i.e., reads the chapter ahead concerning unit assigned—labor/delivery, nursery, postpartum; looks up medications to be given including actions, side effects, dosages, and how given)						
Maintains punctuality, reporting any lateness or absenteeism to instructor						
Maintains appropriate behavior with patients, staff, instructor, and peers						
Seeks out additional opportunities to learn from						
Accepts constructive feedback and						

responds appropriately						
Is able to verbalize his/her own strengths and weaknesses and corrects if needed						

Appendix B:

Observational Protocol Guidelines for Students in Lecture

1. Does student participation keep the students engaged in the lecture?

2. What types of activities assist junior nursing students to learn during 3-hour class lectures?

    a) Which activities distract junior nursing students the most?

3. At what point in time do the students demonstrate difficulty in concentrating on the lecture topic during 3-hour lectures?

4. What maneuvers are observed being used by students during 3-hour lectures to keep them alert and focused on the topic?

    a) Going to bathroom, standing by desk, stretching, participating, etc.

5. What does the lecturer employ to maintain student participation in class or not?

Appendix C:

Observational Protocol Guideline for Students in Clinical

Check if Behavior Observed	Behavior	Comments
Care of Laboring Patient Student Will:		
☐	1.1 Assess and manage patient's pain level and provide comfort measures (i.e., reposition, massage, teach breathing, verbal support, and/or provide medication options).	
☐	1.2 Assess patient's vital signs. Document vitals and notify physician if necessary.	
☐	1.3 Assess patient's labor pattern and provide information to the patient on the stage of labor she is in. Explain events that she may experience.	
☐	1.4 Assess patient's learning needs and provide education to the patient (i.e., first stage, second stage, third stage of labor).	
☐	1.5 Assess patient's support system and encourage them to be part of the patient's labor process (i.e., verbal support, physical support, etc.).	
Care of Newborn Student Will:		
☐	2.1 Assess and encourage mother's bonding process (i.e., skin to skin, eye contact, holding, breast feeding).	

☐	2.2 Assess infant's vital signs using appropriate equipment, document normal or abnormal status, and notify team members.	
☐	2.3 Perform a physical assessment of the newborn with an understanding of normal and abnormal findings.	
☐	2.4 Administer medications to the newborn (i.e., erythromycin, vitamin K, triple ye). Provide drug action, route, dosage, location, documentation, and time, and use two patient identifiers.	
☐	2.5 Assess infant's need for cord care or circumcision care, and teach parents how to care for both.	
Postpartum Care Student Will:		
☐	3.1 Assess the patient's vaginal discharge—the amount, color, and odor.	
☐	3.2 Assess patient's fundus, height, firmness, and position. Provide information on findings or reasoning for findings.	
☐	3.3 Assess patient's comfort level and provide comfort measures (i.e., positioning, ice packs, medications prescribed by physician).	
☐	3.4 Assess patient's learning needs, (i.e., self-care, breast-feeding, infant care). Explain how to care for episiotomy, laceration, hemorrhoids, breast care, breast feeding, diaper	

	changes, infant bathing, and how to reach out for expert help. Parents will return demonstration with accuracy.	
☐	3.5 Assess patient's vital signs and document normal or abnormal status and inform appropriate team members (i.e., doctor, nurse) taking care of patient.	
Student's Explanation of Care		
☐	4.1 Explain reasoning for care being provided to mother and infant.	

Appendix D:

Observational Protocol Data

Date	Time	Space	Participant ID	Consent Form Y___ N___
Descriptive Notes Student Activities and Lecturer Activities				
Researcher/Thoughts				

Appendix E:

Student-Focused Interview Questions

1. What do you think about 3-hour childbearing lectures?

2. How comfortable are you with the use of new equipment in caring for your patient in the clinical setting?

3. How do you apply theory learned in lecture to the clinical setting?

4. How do you demonstrate your ability to perform a nursing skill appropriately?

5. What additional learning, if any, could better prepare you for the clinical setting?

6. How are you prepared to make decisions about your patient's care?

7. How do you use critical thinking to problem solve when dealing with patient care?

8. What is your opinion on use of 3-hour lectures to prepare nursing students to provide patient care?

9. What obstacles interfere with your ability to learn?

10. What ways help you to learn best?

    a) Tactile, visual, auditory

Appendix F:

Preceptor-Focused Interview Questions

1. How prepared do you think nursing students are to care for patients in the clinical setting?

2. How comfortable do you think students are with new equipment used to care for their patient in the clinical setting?

3. How do students apply theory learned in lecture in the clinical setting?

4. What signs alert you that the students understand how to perform a nursing skill for their patient appropriately?

5. What additional learning, if any, do you think could better prepare these nursing students for the clinical setting?

6. How do students demonstrate the ability to use critical thinking in making decisions about the care of their patients?

7. How do you think students demonstrate critical thinking skills to problem solve?

8. What do you think about 3-hour lectures being used to prepare nursing students to care for their patients?

9. What obstacles do you think interfere with students' ability to learn?

10. What are some examples where you find students learn the same nursing skills but in different ways?

    a) Tactile, visual, hearing?

Appendix G:

Faculty-Focused Interview Questions

1. How prepared do you think nursing students are to care for patients in the clinical setting?

2. How comfortable do you think students are with new equipment used to care for their patient in the clinical setting?

3. How do students apply theory learned in lecture to the clinical setting?

4. What signs alert you that the students understand how to perform a nursing skill for their patient appropriately?

5. What additional learning, if any, do you think could better prepare these nursing students for the clinical setting?

6. How do students demonstrate the ability to make decisions about the care of their patients?

7. How do you think students demonstrate critical thinking skills to problem solve?

8. What do you think about 3-hour lectures being used to prepare nursing students to care for their patients?

9. What obstacles do you think interfere with students' ability to learn?

10. What are some examples where you find students learn the same nursing skills but in different ways?

    a) Tactile, visual, hearing?

Appendix H:

Qualitative Code Book

Name of Code	Code Definition	Code Location

Appendix I:

Observation of Students during Lecture Class

September 12, 2013

1. Class begins 1:35 p.m.—Students connect with lecturer's computer via wireless LAN for access to PowerPoint presentation to be used for that day's class.

2. I was sitting in the back row of the lecture hall that had stadium seating where I could view all the students. In the last row, two of the nine students were connected to external websites and were interacting with them, not paying attention to the lecture at the beginning of the class. Some students' listening to what instructor is talking about.

3. One student got up to go to the restroom, I assumed, and returned shortly thereafter.

4. 2:15 p.m.—Three students in the back row observed talking with their neighbors and not listening to the lecture.

5. 2:25 p.m.—Five students in back row now interacting with other websites, paying no attention to lecturer.

6. 3:30 p.m.—Out of a total of 14 students who may have gone to the bathroom, 12 have returned. Ten students appear to be restless, moving around in seats, talking to other students and not paying attention to lecture. Lecturer asks whether there are any questions; no one answers.

7. 3:30 p.m.—A student asks the lecturer for a break, and class stops. Students begin using cell phones and talking among themselves. Two students pick up their laptops and leave.

8. 4:00 p.m.—Class does not resume until this time. Students asking lecturer questions pertaining to other issues and class does not resume until now.

9. 4:20 p.m.—Students begin packing laptops; the lecturer is trying to get the group to provide her a list of those who will be presenting as groups, but students are leaving. Lecturer receives a few replies before they all leave.

10. 4:45 p.m.—Official end of class

Appendix J:

Preceptor Interview

September 9, 2013, Time 19:05 p.m.

Participant P02 (B1) (Private Office at Hospital)

1. Me: Question #8—*"What do you think about 3-hour lectures being used to prepare nursing students to care for their patients?"*

2. P02: Answer—*"I think 3-hour lectures are a little long. I think it would be good if they were broken up. In my ideal world, I would have a lecture on, say like for simplistic reasons, Foley catheter placement. You have the lecture, and then you do it; you debrief on what was discussed and talk about anything that could have been done better, and then you redo it again because doing it once and telling them what was wrong needs to be backed up by them doing it again. And keep doing it until they get it right. So I'd like to see lecture on hypertension, and the students would assess a simulator or a patient and what they could've done better and then do it again until is ingrained in their head. That's what I would like to see."*

3. Me: Question—*"So you are saying a lot of repetition and use of simulation?"*

4. P02: Answer—*"Yes, because simulation is excellent, you know, like do one, then see one, teach one kind of thing, yeah, learn it and then do it and then fix it."*