5-2019

A Comparison of the Curricula of the Top-Ranked Prelicensure Baccalaureate Nursing Programs in the United States

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A Comparison of the Curricula of the Top-Ranked Prelicensure Baccalaureate Nursing Programs in the United States

A dissertation submitted in partial fulfillment
of the requirements for the degree of
Doctor of Philosophy in Curriculum and Instruction

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ABSTRACT

What constitutes an ideal prelicensure nursing curriculum is not well understood. Specifically, what are the strategic curricular sequencing and curricular themes or focus might be included to contribute to producing high quality graduates? The purpose of this qualitative multiple case study investigation was to look at successful programs and identify effective curricular sequencing and curricular themes or focus that might be inferred to have contributed to producing high quality graduates. Seven top-ranked prelicensure baccalaureate nursing programs were selected based on three national college rankings services. Based on data from interviews and publicly accessible documents, seven case studies were compared and analyzed for curriculum components (didactic, clinical, and interdisciplinary activities) and performance (NCLEX-RN). Results showed a common curricular sequence in preparing nursing students through liberal education classes and the first three fundamental nursing courses (pharmacology, pathophysiology, and health assessment) along with a curricular focus in the AACN Essentials' theme of liberal education and generalist baccalaureate nursing. A few commonalities could be learned from these successful programs, such as the pharmacology course, interdisciplinary learning activities, and other pre-requisite courses (i.e. microbiology, chemistry, and anatomy and physiology). Furthermore, the researcher found that state boards of nursing's requirement for minimum average NCLEX-RN passing rates were different. Researcher recommended further studies include exploring correlations between the respective state boards of nursing's approval requirement on NCLEX-RN passing rates and one's prelicensure BSN program performance.

ACKNOWLEDGMENTS

I would like to thank my dissertation committee for their patience, thoughtful guidance, and expertise during my learning process.

- Dr. William McComas, Chair of my dissertation committee, who did not give up on me and continuously assisted and patiently supported me in finishing my doctoral program. I also greatly appreciate his help with administrative procedures, faculty recommendation letters, and working with my dissertation committee.
- Dr. Jan Emory for sharing your academic strategies and personal story about your doctoral journey that encouraged me to see a light at the end of the tunnel.
- Dr. Tom Kippenbrock for giving referrals and ideas in data mining. Your calming voice and flexibility appeased my anxiety.
- Dr. Patricia Conard for willingness to help with my proposal when I was struggling.

I would like to acknowledge the contributions of the following individuals for their assistance along the way toward completion of my research project.

- Dr. Carolyn Mosley, Dean, University of Arkansas Fort Smith, College of Health Sciences, for mentoring and supporting me in finishing my doctoral program during my employment.
- Dr. Pamela Blesch, Associate Professor Emeritus, University of Arkansas Fort Smith, School of Nursing, for giving your expertise in curriculum and helping me with constructing the interview questions. Your advices related to qualitative studies and transcription was valuable and deeply appreciated.

- Dr. Patsy B. Cornelius, former Associate Professor, John Brown University, for providing advices related to surveys and giving your expertise in curriculum that helped me in constructing the interview questions.
- Dr. Ellen Odell, Director of Nursing Program, John Brown University, for giving your expertise in curriculum and willingness to help me in pilot testing my interview questions.
- Dr. Wen-Juo Lo, Associate Professor, University of Arkansas, for encouraging and guiding me in pursuing a graduate certificate in Statistics. Your confidence in me was humbling.
- Patty and Bob Neal, my host family in Springfield, Missouri, for your endless prayers for my future and success.

DEDICATION

This achievement would not be possible without loving and faithful Christians around me. I would like to dedicate my success, first and foremost, to my heavenly Father for giving physical and spiritual strength and a supportive earthly father. Without God and my dad's guidance, love, and encouragement for me, I could not have persevered and completed my doctoral program.

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Chapter One: Introduction

Nurses are called to attend not only to acute illnesses and injuries but also to help address more complex patient needs and care environments. To engage this task effectively and holistically, nurses must have the highest level of education resulting in optimum levels of competency. According to Morris and Hancock (2013), few nursing programs explicitly addressed the Institute of Medicine (IOM) 2010 report pertaining to core nursing competencies. The IOM 2010 focused on the future of nursing education and expressed United States (U.S.) employers' and patients' expectations for the nursing profession. Hence, it is imperative to develop nursing education programs informed by a curriculum that addresses the demands of the nursing profession while assuring clinical preparedness.

"A curriculum provides the goals for an educational program and guidelines for how they will be delivered and ultimately, evaluated for effectiveness" (Keating, 2015, p. 1). The curriculum is an essential and crucial part of any education enterprise including nursing. An effective curriculum most certainly plays a role both in promoting graduates' licensure examination passing rates and even more importantly, in meeting professional and societal standards while aligning the current best practices of health care delivery. State boards of nursing are the authorized body to regulate standards and competencies for nurses and approve nursing programs in the U.S. Henceforth, the general curriculum requirements indicated in the respective state boards of nursing would be considered as the intended curriculum. Whereas, a prescribed curriculum refers to nursing content formulated by nurse educators or collaboration between nurse educators and institutional administrators for the needs of their learners (Ellis, 2004). The

prescribed curriculum for prelicensure baccalaureate nursing programs includes meeting the intended curriculum and general education required by the state. Nonetheless, state boards of nursing, nursing accrediting agencies, nurse administrators, and nurse educators all focus to some degree on curriculum development and evaluation.

Little is known of what constitutes the most effective curriculum for nursing education that meets the curriculum requirements of the respective state board of nursing and the nursing accrediting agencies and also help to ensure success among program graduates. This study was designed to address this topic by describing the prescribed curriculum at some of the top-ranked prelicensure baccalaureate nursing programs in the U.S. In this study—which is essentially an exemplary practice investigation—top-ranked nursing programs refer to programs that were nominated by national college ranking services. This study also discussed aspects to consider in developing the prelicensure nursing curriculum.

Statement of the Problem

The problem addressed in this study was to explore what curricular sequencing and curricular themes mostly likely contributed to the success of graduates from prelicensure nursing programs known for their high academic performance. Passing the National Council Licensure Examination for Registered Nurses (NCLEX-RN ® exam) is certainly one of the goals of the nursing graduate and having a 100% passing rate is one of the goals of those who design nursing education curricula and program outcomes. The state boards of nursing and accrediting agencies for prelicensure nursing programs utilize the NCLEX-RN ® exam passing rates as one of the measurements for the program outcomes and determination for a nursing program's operating status. Yet, prelicensure nursing programs do not make any promises that their graduates will pass the NCLEX-RN ® exam at their first attempt after completing their education. According to

Dawson (2015), many nursing graduates struggle to pass the national licensing examination despite the graduates having completed their educational programs.

There are several aspects that may challenge nurse educators in developing a nursing curriculum that provides effective educational experience for nursing students (Andre & Barnes, 2010; Callen & Lee, 2009; Giddens et al., 2008; Sullivan, 2010). For example, the prelicensure nursing curriculum in the U.S. adopts various structures, such as accelerated prelicensure nursing curriculum, three-year, and four-year prelicensure nursing curriculum, and integrates several organizing frameworks, such as concept based, community-based, medical-based, and competency or outcomes-based instructional philosophies. Other variables to consider when implementing an effective nursing curriculum are student attributes and nurse educators' characteristics. Student attributes, such as students' college readiness (perhaps as measured by the Scholastic Aptitude Test and American College Test), motivation or passion for majoring in nursing, ability to critically thinking and perseveres, et cetera, may affect the student progression in the curriculum. Nurse educators' teaching-learning philosophies and experience and clinical and educational backgrounds may affect the effectiveness for implementing a nursing curriculum.

Nurse educators, such as Forbes and Hickey (2009), Firth, Sewell, and Clark (2011), have worked to study the best practice nursing curriculum. However, their studies were limited to one or a few curriculum designs and organizing frameworks. Other empirical investigations related to nursing curricula focused on the program outcomes from a single institution (Andre & Barnes, 2010), a content area (Daack-Hirsch, Dieter, & Griffin, 2011), an organizing framework (Duncan & Schulz, 2015), or a consortium (Gubrud-Howe, Driggers, Tanner, Shores, & Schoessler, 2016). Even in a relatively recent national survey study (Giddens, Wright, & Gray 2012), the focus was not on an examination of curriculum components or themes as described in nationally

established standards or criteria; the common nationally established standards or criteria related to nursing curriculum include the National League for Nursing (NLN) Hallmark of Excellence for Curriculum (2004) and the American Association of Colleges of Nursing (AACN) Essentials of Baccalaureate Education for Professional Nursing Practice (2008). Therefore, there is a lack of research focusing on nursing curriculum components that impact the success of graduates. Nursing programs and curricula can be evaluated through the percentage of graduates that passed the national licensing examination at their first attempt upon the completion of their nursing program, employers' perceptions of the graduates as to whether or not they were adequately prepared to provide safe, effective, and holistic care, and the number or percentage of graduates who remained competent as nursing practice evolves and expands. These information were internally collected by the program and only available for internal quality improvement. Information related to percentage of graduates that passed the national licensing examination usually available either at the respective state board of nursing's public document or the program's webpage.

Purpose of the Study

The purpose of this study was to identify effective curricular sequencing and curricular themes or focus that contributed to high quality graduates by inferring that top-ranked programs likely had the most effective curriculum model. Common curricular sequencing and curricular themes or focus in exemplary prelicensure nursing curricula could be learned and used by other prelicensure nursing programs as a model for best practice. The underlying assumption is that top-ranked four-year prelicensure nursing program curriculum contains strategic curricular sequencing and specific nursing curriculum components that produce high quality graduates

including high passing rates on the NCLEX-RN. A proxy of top-ranked four-year prelicensure nursing curricula served as exemplary curricula in this study.

The nature of a curriculum in any educational setting serves as a blueprint for the development of a well-educated and prepared graduate, in this case a professional nurse. An effective and appropriate curriculum structure will allow nurse educators to determine what knowledge and skills are important in preparing nursing students for future professional roles (McEwen & Brown, 2002; Waters, Rochester, & McMillan, 2012). All nursing programs have their own curriculum structure designed to meet their program outcomes that leads to their graduates passing the NCLEX-RN ® exam. Yet, not all nursing programs are selected as top-ranked programs in the U.S. and/or have high passing rates on the NCLEX-RN ® exam, a program outcome measurement of all boards of nursing and other national accrediting agencies. Although other factors, such as student and faculty attributes, admission criteria, and student/faculty resources might affect the program outcomes, the study was designed to focus on the curriculum structure. The quality of a nursing program is indicated by how its curriculum is preparing students for nursing practice. Therefore, the purpose of this study was to identify common curricular sequencing and curricular themes or focus that likely contributed to high quality graduates by assessing exemplary nursing curricula. Furthermore, a comparison of graduates passing rates in the nursing licensure among those exemplary nursing programs was included.

The study reported here accounts for challenges in developing nursing curriculum that effectively produces graduates who meet the demands of the nursing workforce, and embrace changes in demographics, health care delivery, health conditions, and technology. Presumably, nursing programs with the most effective curricula produce high quality graduates in becoming

qualified registered nurses. With various structures and organizing frameworks incorporated in a prescribed curriculum, this represents a kind of natural occurrence worthy of study. Hence, an examination of the curriculum in nursing programs with high ranking according to well-established national ranking services could be enlightening.

According to Li and Kenward's (2006) national survey and the AACN (2008) Essentials of Baccalaureate Education for Professional Nursing Practice, common components of nursing curriculum include a didactic or theoretical component and clinical component. This study assessed these two curriculum components among a group of U.S. prelicensure baccalaureate nursing programs selected as top-ranked programs by national college ranking services. The researcher wanted to learn if these top-ranked nursing programs, selected by national ranking services College Choice, College Atlas, and Top Universities[1], had higher NCLEX-RN ® passing rates than the national NCLEX-RN ® exam passing rate.

Theoretical Framework

The theoretical framework for this study was inspired by the Bardach's (2011) best practice research (BPR) and the AACN (2008) Essentials of Baccalaureate Education for Professional Nursing Practice. Bardach's (2011) BPR was used to identify practices that successfully work somewhere else, disseminate reflection of what works, and facilitate learning from that practices (Stenström & Laine, 2006; Veselý, 2011). AACN (2008) was used to guide this study in identifying the common curricular theme or focus in the prelicensure baccalaureate nursing curriculum.

[1] College Atlas (https://www.collegeatlas.org/nursing-college-rankings.html), College Choice (http://www.collegechoice.net/rankings/best-undergraduate-nursing-schools/), and Top Universities (https://www.topuniversities.com/university-rankings/university-subject-rankings/).

Best Practice Research.

Various disciplines used the BPR method in identifying particular practices that were worthy to learn from or emulate. For example, Driscoll (1987) utilized BPR through ten case studies to identify factors and conditions associate with excellence in precollege mathematics. Driscoll (1987) found that careful decisions about the curriculum and its implementation, and teachers and their teaching were a couple factors of associated with excellence in precollege mathematics. National Research Council (1996) used BPR in introducing the U.S. National Science Education Standards. National Research Council (1996) encouraged the usage of standards by providing exemplary practices based on the best of current practices. Penick and Yager (1983) encouraged BPR studies, because practices using BPR will more likely be successful than the usual trial-and-error process. Penick and Yager (1983) described their BPR process in searching for excellence in science education, and shared the abbreviated criteria of exemplary programs for the U.S. National Science Teachers Association in searching for excellence in science education. Penick and Yager (1986) identified hallmarks of excellence in curriculum, instruction, goals, evaluation, and teacher qualifications in science and produced an immediate impact in science education.

Veselý (2011) considered Bardach's (2011) approach as one of the BPR, although Bardarch (2011) preferred the term smart practice rather than best practice. Bardach (2011) perceived the term best practice is misnomer as we rarely can identify the best practice of all practices and depending on the context, what is best practice in one setting may not be best practice in another setting. Bardarch's (2011) BPR supports the conduct of best of current practices to facilitate the potential transfer of practices that seem to work successfully elsewhere. By using Bardarch's (2011) BPR approach, findings from this study could be innovatively

adopted in other four-year prelicensure baccalaureate nursing programs. Eglene (2000, p1) stated, "Conducting current and best practices research is critical to developing a full understanding of a problem and all of its components from multiple and varied perspectives." McComas (2005) suggested focusing on exemplary outcomes with an inference that these relate to exemplary practices.

Therefore, this study integrated the Bardach (2011) BPR in investigating the curriculum components of top-ranked four-year prelicensure baccalaureate nursing programs in the U.S. The advantage of using Bardarch's BPR method is its focus on qualitative aspects and extrapolation (Veselý, 2011). From Bardach's perspective, extrapolation is not merely replicating a nursing program's practice in another nursing program. It is a process of learning from secondhand experiences which facilitate creating practices that can be applied to new and diverse circumstances (Ongaro, 2009; Veselý, 2011).

AACN Essentials of Baccalaureate Education for Professional Nursing Practice.

Many nursing education programs integrate the AACN (2008) Essentials of Baccalaureate Education for Professional Nursing Practice in designing their nursing program. Therefore, this study used the following nine essentials contained within AACN Essentials guidelines (AACN, 2008, p.3) to frame curricular theme or focus in the prelicensure baccalaureate nursing curriculum:

I. Liberal education for baccalaureate generalist nursing practice;
II. Basic organizational and systems leadership for quality care and patient safety;
III. Scholarship for evidence-based practice;
IV. Information management and application of patient care technology;
V. Health care policy, finance, and regulatory environments;
VI. Interprofessional communication and collaboration for improving patient health outcomes;
VII. Clinical prevention and population health;
VIII. Professionalism and professional values;
IX. Baccalaureate generalist nursing practice

The researcher utilized the AACN (2008) Essentials of baccalaureate Education for Professional Nursing practice to identify common curricular themes or focus in curriculum components among top-ranked four-year prelicensure baccalaureate nursing programs.

Significance of the Study

This study focused on the prelicensure baccalaureate nursing programs curriculum. Several prior studies (Aiken, Clarke, Cheung, Sloane, & Silber, 2003; Friese, Lake, Aiken, Silber & Sochalski, 2008) found a positive association between quality of patient care and the level of education among nurses. This assumption played a role here too. Although a few studies related to curriculum reviews had been reported, those were based on an individual program's curriculum, a certain conceptual framework, or one's degree plan. For example, Giddens and Morton (2010) reported their concept-based curriculum had improved their graduates licensing examination passing rates.

This study highlighted common curriculum components of top-ranked four-year prelicensure baccalaureate nursing programs in the nation. Nurse educators, stakeholders, and higher education administrators may be able to use the result of this study to recognize common components in a prelicensure baccalaureate nursing program's curriculum that are more effective in producing high quality nursing graduates and serve as a reference in increasing the number and quality of baccalaureate-prepared nurses. The result of this study offered a structure of nursing curriculum of top-ranked nursing programs in the U.S. The results of this study are offered to suggested likely best practices that can contribute to nursing education.

Research Questions

This study was conducted to address the following questions of interest:

1. What are the stated curricular components in each of the top-ranked prelicensure baccalaureate nursing programs?
2. What common of curricular sequencing and theme exist among the top-ranked prelicensure baccalaureate nursing programs?
3. What shared educational elements are present across the cases examined from the top-ranked prelicensure baccalaureate nursing programs?

Although nurse educators' attributes are confounding factors, the researcher was able to identify common nurse educators' characteristics, such as educational background and clinical experience, among the selected top-ranked prelicensure baccalaureate nursing programs using public information found on the institutions' websites. The researcher was able to identify some student attributes by examining the admission criteria of the schools utilized.

Overview of the Research Method

This descriptive study used qualitative research method, case studies design. Case studies refer to "reports of case material obtained while working with an individual, a group, a community, or an organization. Case studies illustrate a problem; indicate a means for solving a problem; and/or shed light on needed research, clinical applications, or theoretical matter" (American Psychological Association, 2010, p. 11).

With respect to the basic elements of the BPR, the researcher identified a target site of interest for comparison (See Appendix M) and source sites as exemplars. The researcher selected a prelicensure baccalaureate nursing program, University of Arkansas Fort Smith (UAFS), as the target site where the researcher is working to propose improvements. The selected top-ranked

prelicensure baccalaureate nursing programs were considered as the source sites that served as the exemplar in this study.

The researcher cross-referenced the following three college ranking services that evaluate prelicensure baccalaureate nursing programs using a variety of criteria. The services consulted in this study to find the top-ranked programs include: College Atlas, College Choice, and Top Universities. These services were consulted because they differentiate the college performance based on specific major for undergraduate programs. Students who are interested in prelicensure baccalaureate nursing programs may review these three college ranking services to find which nursing program that they want to apply.

Variables for comparison included total credit hours, plan of study or degree plan, sequencing of curriculum, organizing framework, and curriculum evaluation method, such as standardized tests in addition to the course instructor's examination. Although a nursing program curriculum typically has its own philosophy, mission, and vision, these curriculum elements vary, and normally conform to the parent institution's philosophy, mission, and vision. The nursing program outcomes are related to their parent institutions' and/or college's mission, vision, and philosophy. Hence, the program outcomes were not included in the variables.

The Bardach (2011) BPR approach was integrated to identify curricular sequencing and curricular themes or focus that could be learned from exemplary or source sites to the target site. Curricular sequencing, curricular themes, and core nursing courses were assessed and compared using the Bardach (2011) BPR approach. The researcher used nine essentials of the AACN (2008) Essentials of Baccalaureate Education for Professional Nursing Practice as curricular themes or focus to identify curricular themes in courses listed in the four-year prelicensure baccalaureate nursing curriculum.

Publicly-available documents from the institution or nursing program's public websites were used to collect information, such as organizing framework, total credit hours, and plan of study or degree plans of the selected top-ranked prelicensure baccalaureate nursing program. A systematic approach was used to collect curriculum data from publically accessible documents. This systematic approach is commonly used by nursing accrediting agencies to collect institutional curriculum data and demographic information. Publicly accessible documents typically include the institution's catalog, which contains information regarding course prerequisites, course description, and credit hours, the nursing degree plan, which outlines the program structure and sequencing of curriculum, the nursing student handbook, which describes program organizing framework and evaluation methods.

The researcher designed a set of interview questions for the top-ranked prelicensure baccalaureate nursing programs and field-tested it with three curriculum experts selected by the researcher. The researcher then administered the set of interview questions, via telephone interview, with each top-ranked prelicensure baccalaureate nursing program's key informant who was knowledgeable of their prelicensure baccalaureate nursing program curriculum. The key informant of the program typically assumed high level administration and leadership role in the program, such as dean, associate dean, and program director. Approximately a twenty-minute session with each key informant of the selected top-ranked prelicensure baccalaureate nursing program was held to answer the interview questions.

This study used publicly available documents as the main exemplar of evidence or data and telephone interviews as supporting data to ensure construct validity. To support the internal validity, this study adopted the Bardach (2011) BPR as follows: formulation of the question, gathering preliminary information, and conducting telephone interviews with the program's

curriculum committee chair-person or other key informant, such as program director or dean, to obtain information not found in the public documents. To assess trustworthiness of the collected data, the researcher triangulated data sources such as, interviews and publicly available information. Knafl and Breimayer (1991) suggested integrating a process of data checking. The researcher chose to implement Krefting's (1991) process of double coding where a set of data is coded, and then after a period the researcher returned and coded the same data set and compared the results. Merriam (1991) suggested multiple cases as a strategy to enhance the external validity of this study's findings; this study had seven cases.

Assumptions

The following assumptions were identified in this research study:

1. National college ranking services identify the best nursing programs based on the programs' academic performance and from an educational perspective.
2. Prelicensure baccalaureate nursing programs that are selected or met the ranking process of national ranking services are assumed as top-ranked prelicensure baccalaureate nursing programs in the U.S.
3. It is reasonable to assume that the top-ranked prelicensure baccalaureate nursing programs serve as an exemplary prelicensure baccalaureate nursing programs.
4. Top-ranked prelicensure baccalaureate nursing programs implement their prescribed curriculum.
5. Top-ranked prelicensure baccalaureate nursing programs are more effective in producing graduates who passed the licensure examination or are better in preparing their graduates to become qualified registered nurses.

6. Publicly available documents including electronic documents on the institution's website contain accurate and truthful information and the actual program of study in practice align with what is represented on the website.
7. Participants respond to all questions honestly and truthfully regarding their nursing program and/ or curriculum.
8. Three consecutive-year performances on the licensure examination (NCELX-RN) provide supporting evidence in demonstrating consistency in a nursing program's educational elements and program's curriculum.

Limitations on Generalization

The definition of top-ranked prelicensure baccalaureate nursing programs was broad and based on the national college ranking services' selection criteria. This study did not give full scope of discussion on the top-ranked prelicensure nursing programs' measuring indicators and high quality graduates' indicators. Although graduates from a top-ranked nursing program might receive a better education and could be better equipped for the job, the ranking of the program was not an absolute indication of quality of education provided by the program.

The national ranking services had their own selection and ranking methodologies. With different indicators for the program's academic performance and weights on those indicators, the generalization on the top-ranked prelicensure baccalaureate nursing programs was limited. The ranking services might assume scholarly productive faculty or faculty who had terminal degree produced higher quality graduates. Although nursing licensure examination passing rates is the most common objective measurement of the curriculum and program outcomes, employers and graduates' feedback about the educational preparation to the workforce did not reflect on the licensure examination passing rates. The NCLEX-RN measured the knowledge and its

application in clinical scenarios. However, it did not measure the kinesthetic and competency in skills performance that may relevant in a real clinical situation.

Since this study investigated only the top-ranked four-year prelicensure baccalaureate nursing program in the U.S., not all states in the U.S. were represented in this study. Therefore, not all schools of nursing curriculum, state boards of nursing guidelines or regulations were discussed in this study. Student attributes, faculty attributes, and program resources such as academic infrastructures were confounding factors in this study that might affect selection as a top-ranked four-year prelicensure baccalaureate nursing program limiting the generalization of this study.

Delimitations of Study

The researcher could not arrange a control and experimental group. This study could not randomly place students to certain top-ranked prelicensure nursing programs to validate the effectiveness of their curricula. The qualitative description case study design limits this study to describing the current effective curriculum components rather than predicting future curriculum components that effectively produce high quality graduates.

By utilizing the national college ranking services, this study was limited in analyzing and discussing programs that met the national college ranking services' selection methodologies. Prelicensure baccalaureate nursing programs that did not meet their selection methodologies could not be identified even though the programs' curricula contained the AACN (2008) Essentials of Baccalaureate Education for Professional Nursing Practice.

The researcher could not eliminate other confounding factors, such as students and faculty attributes, employers and healthcare consumers' expectations, and the NCLEX-RN standard for passing (the logit). Like in any qualitative study, this research is limited by the

sensitivity and integrity of the investigator. The researcher was the primary investigator, instrument of data collection, and analysis. As the participation in this study was voluntary, the quality and quantity of the information or completeness of the survey were subjected to the participating program's discretion. The researcher did not have any influences on the program's nursing leaders and/ or faculty members to provide information that they might perceive as their program's classified or proprietary information.

Chapter Two: Literature Review

This chapter contains a review of the current literature regarding prelicensure baccalaureate nursing curriculum and challenges related to nursing curriculum development. The literature presents research studies related to nursing curriculum components including traditional and current major curriculum components. In preparation to investigate components of nursing curriculum, relevant literature related to prelicensure baccalaureate nursing curriculum framework/model is included. In order to develop an understanding on how to meet and prepare for the current and future nursing demands, this chapter also contains a descriptive account of nursing education by featuring a brief history of nursing education, trends in the preparation of nurses, nursing regulation (licensure, certification, accreditation), and trends in the nature of nursing curriculum and instruction. Finally, the gaps in the existing literature related to prelicensure baccalaureate nursing curriculum are revealed as support for the completion of this research study.

The literature was retrieved from a search of the electronic database CINAHL, ProQuest, and PubMed. The literature search was conducted with limiting geographic terms to the U.S. or any states in the U.S. and the period from the year 2007 to January 2018. In searching CINAHL, the search terms were (MM "Education, Nursing, Baccalaureate"), (MM "Curriculum"), AND (MM "Exemplary") OR (MM "Top ranked") and filtered narrowing down to peer-review research. In searching PubMed, the search string were ("Education, Nursing, Baccalaureate"[Majr]) AND "Curriculum"[Mesh], then the results were filtered to the last ten years. Classical or historical articles and documents related to curriculum components, reform, revision, and innovation in prelicensure four-year baccalaureate nursing education were reviewed.

In the first section, the researcher presented a brief history of nursing education, trends in the preparation of nurses, nursing regulation (licensure, certification, accreditation), and trends in the nature of nursing curriculum and instruction. In the second section, the researcher briefly described literature related to the challenges in nursing curriculum. The third section covered traditional curriculum components. From there the researcher continued to discuss literature related to current and common nursing curriculum components.

Brief History of Nursing Education

Borsay (2009) affirmed that professional nurse education began with Florence Nightingale who was an upper class British woman and known for her nursing service during the Crimean War in 1854. Nursing care in the U.S. publicly began in the early 19th century with hospital-based training nurses. Various nursing education programs have become prevalent in the U.S. since the beginning of the 20th century. Nightingale emphasized education and developed a model for nursing education—theoretical and clinical components grounded in basic sciences and empirical research (Selanders & Crane, 2012).

The development and growth of the nursing workforce and nursing education were a response to people's needs in health care, including demographic changes, complex health conditions, economic dynamics, and other social forces. During the middle of the 20th century, changes in medical technology and expansion of knowledge in treatments for diseases required nurses to have sound theoretical preparation (Melosh, 1982). These changes opened a new era in nursing education where education would occur predominantly in colleges and universities. Isabel Stewart made efforts to redesign diploma nursing with new nursing education models including a two-year associate degree nursing education (ADN). Students would be prepared as semi-professional registered nurses (RNs) with sufficient nursing skills and judgment that met

the demand for nurses but not the expert skill and judgment of baccalaureate-prepared nurses (Montag, 1951).

By 1960s, baccalaureate nursing program (BSN) had been differentiated from diploma or associate nursing program (ADN), particularly in liberal education, intellectual skills, and content in leadership, management, and community health (Kelly & Joel, 2002). Although in 1965, the American Nurses Association (ANA) position statement called for the BSN to be the minimum preparation for the professional nurse, the ADN is still considered to be an entry-level degree into practice as an RN (Scheckel, 2009). In today's nursing licensing process, graduates from BSN and ADN programs take the same national examination to obtain their license as an RN. A series of studies found a correlation between higher levels of nursing education and improved patient outcomes (Aiken, Clarke, Cheung, Sloane, & Siber, 2003; Estabrooks, Midodzi, Cummings, Ricker, & Giovannetti, 2005; Tourangeau, 2007). This result encouraged states to propose BSN to be the minimum educational preparation for an entry-level RN: "In 2007, the New York State Nurses Association has introduced a bill [Assembly Bill A3013/Senate Bill S628] that requires registered professional nurses to attain a baccalaureate degree in nursing within 10 years of their initial licensure" (Scheckel, 2009, p. 39).

Trends in the Preparation of BSN Prepared Nurses

Health challenges in the U.S. in the 21st century have influenced the trends in preparation of nurses. The proportion of Americans age 65 and older will be nearly 20 percent of the population by 2030 (Institute of Medicine [IOM], 2010). The demographic has become more diverse in terms of race, ethnicity, culture, and socioeconomic class. Most health care issues are related to obesity and chronic diseases such as diabetes mellitus, hypertension, arthritis, cardiovascular problems, and mental health conditions (IOM, 2010). Nurses are called to attend

not only to acute illnesses and injuries, but also more complex patient needs and care environments. To take on this task, nurses need to have higher levels of education and competency.

Currently, the proportion of nurses holding a bachelor's or higher degree is approximately 55 percent, according to the April 2013 report, the most current report available at this time, compiled by the Health Resources and Services Administration (HRSA), U.S. Department of Health and Human Services (HHS), Bureau of Health Professions (BHPR), and National Center for Health Workforce Analysis. The HRSA BHPR report (2013) reported the RNs holding a bachelor's or higher degree increased by five percent (from 50 percent to 55 percent) from 2000 to 2010. Whereas, the IOM (2010) recommended increasing the proportion of BSN prepared nurses from 50 to 80 percent by 2020 in relation to the 21st century health care needs.

Nursing Regulation in the U.S.

As nursing programs flourished around the beginning of the 20th century, there were neither regulations for the nursing schools nor standards for the quality of nursing education. The need of regulation was so pressing, because nursing is one of the health professions that can pose a risk of harm to the public if practiced by someone who is unprepared and incompetent. The first licensure laws in the U.S. passed in North Carolina in 1903 (Appalachian State University, 2014).

To ensure public safety and competent nursing practice, nursing education programs in the U.S. have to be approved by the appropriate state boards of nursing. The National Council of State Boards of Nursing (NCSBN) "a not-for-profit organization whose members include the boards of nursing in the 50 states, the District of Columbia and four U.S. territories—American

Samoa, Guam, Northern Mariana Islands and the Virgin Islands. There are also seven associate members" (NCSBN, 2011, para. 1). Currently, the NCSBN, the U.S. nursing regulatory board, adopts a two-pronged licensure model (NCSBN, 2014). Nursing candidates/graduates must show evidence of completing a nursing program that is approved by the appropriate state board of nursing in order to be eligible to take NCLEX, an examination measuring minimum nursing knowledge. Upon passing either of the NCLEX—the NCLEX-RN for registered nurses and NCLEX-PN for practical nurses—the state board of nursing will issue a license.

In addition to the approval from the appropriate state board of nursing, schools of nursing in the U.S. voluntarily go through accreditation to foster continuous quality improvement of nursing education programs. In general, accreditation refers to a review process of an institution's (school of nursing's) programs, policies, and practices conducted by a third-party/ accrediting body to determine whether or not professional standards are being met (Scheckel, 2009). There are three accrediting bodies for schools of nursing approved by the U.S. Department of Education: the Accreditation Commission for Education in Nursing (ACEN), formerly known as the National League for Nursing Accrediting Commission (NLNAC), the American Association of Colleges of Nursing Commission on Collegiate Nursing Education (CCNE), and in 2013, National League for Nursing established Commission for Nursing Education Accreditation (CNEA). The ACEN and CNEA accredits all nursing programs, whereas, the CCNE accredits BSN, MSN, and DNP programs. Although accreditation is a voluntary activity, it is a professional and public acknowledgment of the quality of a nursing program.

Nursing Curriculum and Instruction

McEwen and Brown (2002) indicated, "A curriculum is a written document that delineates the organization of content, scope, and arrangement of an education program" (p. 6). Scheckel (2009) elaborated the nursing curriculum as "the overall structure of [actual] learning experiences within nursing education program that reflects a school of nursing mission and philosophy, program outcomes, course of study, and program evaluation methods" (p. 48). Whereas, instruction is "teaching and learning strategies and experiences faculty and students engage in to achieve the elements of the curriculum" (Scheckel, 2009, p. 49). Glatthorn, Boschee, Whitehead, and Boschee (2012) considered instruction as a relatively minor aspect of the curriculum.

The curriculum in most schools of nursing is still based on the Tylerian model, which was developed more than five decades ago and emphasized content, structure, and measurable behavioral outcomes (Robert Wood Johnson Foundation, 2012). The *Carnegie Foundation for the Advancement of Teaching* report and the IOM release of 2010 urged nurse researchers, educators, and administrators to review and evaluate nursing curricula and instructions. The Carnegie report titled *Educating Nurses: A Call for Radical Transformation* has called for curricular improvements that emphasize not only what content is taught but also how and what students learn (Benner, Sutphen, Leonard, & Day, 2009).

In addition to the state board of nursing practice acts that provide rules and regulations pertaining to the operation and curricula of schools of nursing, the AACN, a professional nursing organization serving baccalaureate nursing and higher degree nursing education programs, provides nationally established standards or criteria. For example, the AACN (2008) developed a document titled *The Essentials of Baccalaureate Education for Professional Nursing Practice*

that describes competencies needed by nursing students in order to function in the contemporary health care system. Many schools of nursing adopt this document in designing their nursing education program curricula.

Nurse researchers and educators are encouraged to propose creative innovations that can better prepare nursing students to meet the U.S. societal needs. Most schools of nursing programs' educational and curricular goals are articulated to meet the respective state board of nursing approval requirement. Just as the mission of the boards of nursing in all states is to protect the public's health and welfare (NCSBN, 2014), patient safety has always been a priority in all nursing programs' curriculum and instruction (Gregory, Gude, Dick, & Russell, 2007).

Changes in demographics, health conditions, technology, and professional nursing standards and competencies have also influenced the design and implementation of a nursing curriculum and instruction. According to the U.S. Census Bureau (2008), the U.S. is becoming more culturally and ethnically diverse. The Centers for Disease Control and Prevention (2013) projected that by 2030, twenty percent of the American population will be people over the age of 65. With these U.S. demographic changes, cultural sensitivity and gerontology are essential topics to be integrated throughout nursing curricula including both theoretical and clinical components of nursing education. The AACN offers supplemental curriculum guidelines for undergraduate and graduate-degree nursing programs to meet the U.S. societal needs (AACN, 2014).

Prior to Benner, Sutphen, Leonard, and Day (2009), Tanner (2007) urged nursing schools to revisit the nursing instruction issue—what students learn and how they learn. Since then, several student-centered teaching-learning strategies have been introduced, such as problem-based learning, cooperative learning, service learning, and concept-based learning (Scheckel,

2009). Besides a change from viewing students as passive learners to seeing them as active participants and partners in the educational journey, another trend in nursing instruction would be clinical reasoning—an approach to help nursing students acquire critical thinking skills and apply this skill in clinical settings (Allen, 2013). With current technology, nurse educators utilize high-fidelity simulation environments to create clinical scenarios in a safe, practice-based learning environment, which will allow students to use both critical thinking and psychomotor skills. Many nurse educators have adopted the revolution in K-12 instruction strategy known as the flipped classroom—nursing students arrive at class ready to apply knowledge and course content materials into clinical scenarios and to use clinical reasoning to provide safe, patient-centered, evidence-based nursing care (Allen, 2013). With the flipped classroom, instead of the nursing students arrive at class ready to learn the course content materials from the nurse educators, the nurse educators use clinical scenarios to assess, reinforce, and evaluate the nursing students' knowledge, comprehension, and teach nursing students how to analyze a clinical scenario and apply their knowledge and comprehension into the clinical scenario.

Challenges Related to Prelicensure Nursing Curriculum

In the U.S., prelicensure nursing graduates or candidates must pass the nursing licensure examination to ensure public safety and competent nursing practice. An entry-level prelicensure baccalaureate nursing program has to be approved by its state board of nursing otherwise the program's graduates could not participate in the nursing licensure examination—the NCLEX-RN. Candidates/graduates who pass the NCLEX-RN are issued a license to practice nursing by their respective state board of nursing. The BSN programs also would need to be accredited by a national accreditation agency; otherwise, their graduates would not be accepted by any advanced

nursing programs, such as Master of Science in Nursing (MSN) programs including nurse educator, clinical nurse specialist, and nurse practitioner.

In order to obtain approval from the respective state board of nursing and accreditation from nursing education-accrediting bodies, any prelicensure nursing educational program is required to present their curriculum and their graduates passing rates on the nursing licensure examination—the NCLEX-RN (NCSBN, 1999). In fact, most state boards of nursing sets a minimum percentage of first-time passing rate for NCLEX-RN takers as the state's acceptable criterion for continuing to approve a particular prelicensure nursing program. Therefore, most prelicensure nursing programs utilize the licensing examination passing rates of their graduates as one of their curriculum evaluation benchmarks. The licensing examination pass rate typically would be used as a way to measure the quality of the nursing education program (Jacobs & Koehn, 2004; Schug, 2012). Crow and Morisson (2004) conducted a national study to identify specific program requirements and educational interventions to promote success rates among graduates of prelicensure baccalaureate nursing programs in the nursing licensing examination. Unfortunately, many nursing graduates are still struggling to pass the licensing examination which becomes one of the contributing factors in a shortage of qualified RNs (Dawson, 2015).

Most prelicensure nursing programs' educational and curricular goals are articulated and evaluated to meet the appropriate state board of nursing accreditation requirement and their selected accreditation agencies. However, only few state boards of nursing clearly articulate the ratio of didactic and clinical contact hours or the total contact hours for theoretical courses and clinical experience. For example, Texas Board of Nursing (2018) recommends didactic and clinical course ratio as one contact hour of didactic to three contact hours of clinical practice. Yet other state boards of nursing do not specify the ratio of didactic and clinical contact hours nor the

total contact hours for theoretical courses and clinical experience. The length of nursing programs and total clinical hours vary without standardized total credit hours or contact hours. Pitter (1996) reported that credit hours required for bachelor's degrees in health professions, a discipline with relatively higher total credit hour requirements, ranges between 128 and 130 credit hours. Nursing is one of the academic programs that require higher total credit hours related to state regulation requirements. For BSN programs, the total of credit hours ranges between 120 and 149. Some nursing programs require prerequisites even before students can start the program; whereas, others include those prerequisites in their degree plan as part of the total credit hours (Johnson et. al, 2012).

Another challenge in the prelicensure nursing curriculum is associated with various structures of course sequence/ progression and inconsistency in the credit-hour of nursing courses in the average prescribed curriculum (Spector, 2012). Because nursing is a practice discipline, most prescribed nursing curricula have clinical components that allow students to apply theoretical concepts and knowledge in the practice environment. In nursing curricula, a nursing course can be with or without a clinical component or laboratory session which results in different allocation of contact hours in a nursing course credit hour (Halsted & Frank, 2010). Due to different credit hours in nursing courses and related program progression, students would encounter challenges to transfer from one nursing program to another or from one institution to another, even within the same state.

Along with various structures of course sequence and inconsistency in the credit hours of nursing courses, there are various structures of prelicensure baccalaureate nursing education curriculum or organizing frameworks, such as concept-based, team-based service learning, nursing theory based, medical-based, community-based, etc., which also contribute to

transferability issues in prelicensure baccalaureate degree in nursing programs. Table 2.1 shows examples for different structures of four-year prelicensure baccalaureate nursing education. The following examples were based on the program's self-identification toward its own curriculum structure.

A prelicensure four-year baccalaureate nursing degree plan may not necessarily encompass eight semesters as shown in Table 2.1. For example, a concept-based prelicensure baccalaureate nursing curriculum may have nine semesters—one summer semester between junior year and senior year or ten semesters with two summer semesters. Different amounts of semesters in a four-year baccalaureate nursing degree plan and variety in the program outcomes, which typically is based on the program's organizing framework, may affect the financial burden and transferability for students to complete the program.

In order to address some of the curriculum challenges, standardize and strengthen nursing education, enhance access to baccalaureate nursing education, eliminate curriculum redundancies, and share limited nurse educators, a few states in the U.S. articulate agreements among nursing education programs from associate degree to master's level to guide credit transfer and admission decisions in a given state

Table 2.1

Examples of Concept-based, Community-based, and Medical-based Prelicensure Baccalaureate Nursing Curriculum Structure

	Nursing Curriculum Structure					
	Concept-based	Credit	Community-based	Credit	Medical-based	Credit
Year 1 – Fall	Gateway Seminar in Religion Scholarship	2	First-Year Foundations		College Algebra	3
	Old Testament Survey	3	Writing I		College Composition I	3
	English I: Composition	3	Mathematics	3	The University Experience	1
	Concepts in Community Health & Wellness	2	Intro to Biomedical Sciences (Theory & Lab, recommended) or General Biology I	4	Human Anatomy & Physiology I	4
	Cell Biology	4	General Education Elective	3	General Psychology	3
	Total	14	Total	15	Total	14
Year 2 – Spring	English II: Literary Analysis & Research	3	Chemistry	4	College Composition II	3
	Introduction to Statistics	3	Fundamentals of Public Speaking	3	Economics for Social Issues	3
	Fundamentals of Chemistry	4	General Education Elective	6-9	Human Anatomy & Physiology II	5
	Social Science Core Elective	3			Chemistry for Allied Health Sciences/Lab	4
	Intercultural Communication	3			Success in Health Profession Programs	1
	Total	16	Total	13-16	Total	16
Year 1 - Summer	N/A	N/A	N/A	N/A	N/A	N/A

Table 2.1 (Cont.)

	Nursing Curriculum Structure					
	Concept-based	Credit	Community-based	Credit	Medical-based	Credit
Year 2 - Fall	Religion Related Survey	3	Human Anatomy (preferred) or Applied Human Anatomy	3-4	General & Medical Microbiology	5
	Western Civilization II	3	Introduction to Nutrition	3	Humanities	6
	American Government	3	General Education Elective	6-9	Fine Arts	3
	Overview of Professional Nursing	3			Nutrition for Human Development	3
	Anatomy & Physiology I	4				
	Total	16	Total	12-16	Total	17
Year 2 - Spring	Wellness Activity	1	Human Physiology (preferred) or Applied Human Physiology	3-4	Pathophysiology	4
	Informatics, Inquiry, & Evidence-Based Practice	4	Elements of Microbiology	3	Global Competencies (see list)	3
	Microbiology	4	Psychological Statistical Methods	3	American Government	3
	Anatomy & Physiology II	4			Lifetime Wellness	2
	Philosophy Elective	3			Communication	3
	Total	16	Total	15-16	Total	15
Year 2 – Summer	N/A	N/A	Concepts in Nursing	3	N/A	N/A
			Art and Science of Nursing I	5		
			Total	7		

Table 2.1 (Cont.)

	Nursing Curriculum Structure					
	Concept-based	Credit	Community-based	Credit	Medical-based	Credit
Year 3 – Fall	Pharmacology I	2	Art and Science of Nursing II	5	Pharmacology in Nursing	3
	Pathophysiology	4	Health Assessment	4	Health Assessment and Technologies	5
	Foundations of Professional Nursing Practice	5	Introduction to Pharmacology	3	Adult Nursing I	7
	Health Assessment & Therapeutic Interventions	4	Advanced Human Pathophysiology	3		
	Total	15	Total	15	Total	15
Year 3 – Spring	Evangelical Theology	3	The Pediatric Client and Family	3	Nursing Care of the Childbearing Family	4
	Pharmacology 2	2	The Adult Client	6	Mental Health Nursing	4
	Concepts of Professional Nursing 1	4	The Mental Health Client	4	Gerontologic Nursing	3
	Concepts of Professional Nursing 1 - Practicum	4	Nursing Research and Scholarly Writing	3	Nursing Care of the Child and Family	4
	Total	13	Total	16	Total	15
Year 3 - Summer	Concepts of Professional Nursing 2	4	The Pediatric Client and Family Clinical	2	N/A	N/A
	Concepts of Professional Nursing 2- Practicum	4	Nursing Internship (Optional)	3		
	Western Civilization I	3				
	Total	11	Total	2-5		

Table 2.1 (Cont.)

	Nursing Curriculum Structure					
	Concept-based	Credit	Community-based	Credit	Medical-based	Credit
Year 4 - Fall	Art Elective	3	The Childbearing Family	3	PSY 320 or MATH 310 or GB 321 or SOC 405	3
	Concepts of Professional Nursing 3	4	The Older Adult Client	2	Complex Nursing	6
	Concepts of Prof Nursing 3 Practicum	4	Community Health	6	Nursing Ethics and Informatics	3
	Concepts of Nursing Leadership	4	General Education Elective	3	Advanced Health Assessment	3
	Total	15	Total	15	Total	15
Year 4 - Spring	Capstone Seminar in Religious Life	2	Leadership and Management	6	Community Health Nursing	5
	Issues & Trends in Contemporary Nursing	4	Senior Seminar	2	Nursing Research	3
	Clinical Capstone in Nursing	6	Health Care Management	3	Nursing Management and Leadership	5
			Undergraduate elective	3		
	Total	12	Total	14	Total	13
Year 4 – Summer	N/A	N/A	N/A	N/A	N/A	N/A

Traditional Major Curriculum Components

Traditionally, a typical prelicensure undergraduate nursing curriculum has the following major components: the mission or vision statements and the philosophy statements with or without explicit organizational framework, overall goal or program outcomes, and the implementation plan (Keating, 2015; McCoy & Anema, 2012). From analyzing mission statements in higher education of the 331 best colleges across the United States in the 2011 Princeton Review, Meacham (2008) found that those statements emphasized liberal arts, service, and social responsibility. Meacham's findings was similar to Morphew and Hartley (2006). Those mission statements contained history and purpose of the institution, assessment of the program and its relevance to current goals, and visualization of the future direction of the institution (university/college). The nursing's program mission statement should be congruent with the parent institution, unless the nursing program is a stand-alone academic entity (Keating, 2015). The vision statement describes the institution's outlook into the future for the next decade or two. The philosophy statements typically reflect the faculty beliefs and values about teaching, perceptions about nursing and the program's role in preparing nurses for the future (Keating, 2015). A nursing program curriculum's philosophy needs to be congruent with its parent institution's philosophy and flow from its mission and/ or vision statements.

Current Curriculum Components

Based on the literature search from CINAHL and PubMed, common electronic databases that contain nursing related literature, the research studies pertaining to current curriculum components were related to didactic/theory/classroom, clinical component, and interdisciplinary activities that are integrated either in didactic, clinical, or in both components. Li and Kenward (2006) described elements of nursing education including curriculum, faculty, and program

characteristics. Figure 2.1 illustrates a typical relationship between the educational elements in a nursing program and common components in a nursing curriculum.

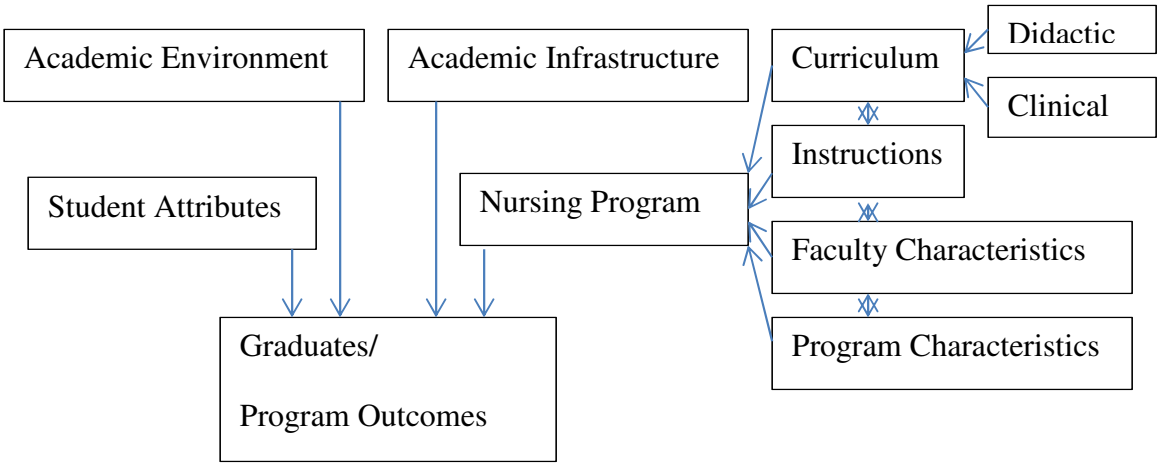


Figure 2.1. The relationship between the nursing education elements and curriculum components. Adopted from Li and Kenward (2006) Theoretical Model.

Four common structures in prelicensure baccalaureate nursing curriculum were identified: incorporating the nursing organizational recommendations, the content laden curricula, conceptual or organizing framework and/or theorist, and teaching using alternative pedagogies. A few nursing programs curricula assumed a set of competencies recommended by accrediting agencies (Schug, 2012) and the IOM recommendation to incorporate Quality and Safety Education for Nurses (QSEN) standards (Brady, 2011; Chenot & Daniel, 2010). Several nursing programs curricula continued covering content associated with the prelicensure examination, such as content related to genomics (Daack-Hirsch, Dieter, & Griffin, 2011; Thompson & Brooks, 2011), informatics (Choi, 2012; Ornes & Gassert, 2007;Thompson & Skiba, 2008), cultural competence (Calvillo, Clark, Ballantyne, Pacquiao, Purnell, & Villarruel, 2009; Cuellar, Brennan, Vito, & Leon Siantz, 2008), and gerontology (Gilje, Lacey, & Moore, 2007; Gebhardt, 2009). Many other nursing programs use conceptual or organizing framework and/or theorist,

such as the American Association of Colleges of Nursing (AACN) Essentials of Baccalaureate Education for Professional Nursing Practice (Fletcher & Kumm, 2012; Mailloux, 2011), concept-based (Dearmon, Lawson, & Hall, 2011; Giddens & Brady, 2007; Giddens & Morton, 2010), community-based (Zoucha, Mayle, & Colizza, 2011), competency outcomes performance assessment (Lenburg, Klein, Abdur-Rahman, Spncer, & Boyer, 2009), competency-based (Magnussen et al., 2013), outcomes-based (Kim, 2012), shared-making decision (D'Antonio, Brennan, & Curley, 2013), constructivist theory for learning (Rolloff, 2010), and Neuman system model (Beckman, Boxley-Harges, & Kaskel, 2012; Florczak, Poradzisz, & Hampton, 2012; Neuman & Reed, 2007). Other nursing programs use teaching-learning methods in constructing/modifying the curriculum, such as service-learning (Reising et al., 2008; Stallwood & Groh, 2011), conceptual teaching-learning (Giddens, 2007), clinical reasoning pedagogies (Kulper, 2013), and flipped or inverted classroom (Hanson, 2016; Harrington, Vanden Bosch, Schoofs, Beel-Bates, & Anderson, 2015; Patterson, Geist, Larimore, Rawiszer, & Al Sager, 2015; Ratta, 2015; Schlairet, Green, & Benton, 2014). Considering limited clinical time, clinical space, and student-faculty ratio to ensure patient safety and high quality clinical experience for students, few programs assume a curriculum focus on clinical component, such as clinical immersion nursing curriculum (Paulson, 2011), clinical simulation (Jeffries & Rizzolo, 2007; Hart et al., 2014), and interdisciplinary clinical learning activities (Newhouse & Spring, 2010; Reese, Jeffries, & Engum, 2010).

The AACN Essentials of Baccalaureate Education for Professional Nursing Practice (AACN Essentials) has been influential in nursing curriculum development since 1998. It provides a framework for baccalaureate nursing curriculum for the 21st century. Thus, most

prelicensure baccalaureate nursing programs integrate the AACN Essentials in their curriculum one way or another as shown in Appendix K.

With increasing emphasis on quality and safety in health care settings, the QSEN was designed to address safety and quality competencies in undergraduate nursing programs. For each QSEN competency, there is a listing of essential knowledge, skills, and attitudes (KSA). Although the QSEN can facilitate the integration of quality and safety into the nursing curriculum, Chenot and Daniel (2010) found that only portions of the QSEN competencies were addressed in nursing education.

In light of the increasing amount of required contents and competencies to prepare nursing students for the professional nursing roles, conceptual frameworks have been used to organize undergraduate nursing curricula. Nowadays, most nursing programs are incorporating more than one framework and/or theorist. A few of the states in the U.S. reimburse public universities based on the performance of their graduates. Subsequently, outcomes performance or outcome based curriculum has become one of the conceptual framework trends in undergraduate nursing programs (Gaines & Spencer, 2013; Kim, 2012; Lenburg, Klein, Abdur-Rahman, Spencer, & Boyer, 2009; Magnussen et al.). Some programs continued to cover content areas associated with the licensure examination; in the literature, this is referred to as content saturation or content laden. The concept-based curriculum has also become a conceptual framework trends (Giddens & Brady, 2007).

Based on the literature review, a literature gap was noted as few studies indicate the effectiveness of the curriculum structures or in what way the curriculum impacts the program outcomes on the graduate's licensure passing rates. Although the professional and social standards focus on preparing nurses who deliver safe, competent, and compassionate patient care

and promotes safe and high quality patient outcomes in all settings (Campaign for Action, 2010, 2017), Howard (2010) concluded there was a lack of dedicated patient safety education within top-ranked U.S. nursing program curriculum. Howard (2010) selected only the first ten nursing schools listed in the 2007 U.S. News and World Report top nursing school rankings. The 2007 U.S. News and World Report top nursing school rankings did not differentiate the nursing school's curriculum structures: four-year prelicensure baccalaureate nursing programs, accelerated prelicensure nursing programs (second baccalaureate degree in nursing), and prelicensure master nursing programs. His finding was based on keywords search "safety," "quality," and "error" in 174 course descriptions (Howards, 2010). The Appendix K lists literature reviewed in this research study representing current curriculum components.

Summary of the Chapter

From the history of nursing education, the nursing curriculum development and modification have been focusing on ensuring patient safety, meeting the program outcomes, and preparing high quality graduates. In developing and modifying curriculum, nursing faculty and scholars employ evidence-based practice and empirical researches. Many issues or challenges in nursing curriculum were related to complex reasons. Therefore, various solutions were attempted to address issues in curriculum and achieve quality improvement. A gap in the literature suggested the need for this research study—identifying exemplary or common curricular components in promoting student success.

Chapter Three: Research Methods

This study used a qualitative research method with descriptive case studies designed to identify effective curricular sequencing and curricular themes or focus among four-year prelicensure baccalaureate nursing programs. A qualitative approach was chosen to address immature concept due to lack of previous research related to this subject matter. A case study design allowed the researcher to explore a single entity (each specific program and its curriculum) that is intrinsically bounded and collect detailed information using a variety of data collection strategies (Merriam, 1991). In this study, a descriptive case study design was used to describe nursing curricula of four-year prelicensure baccalaureate nursing programs that were nominated by college ranking services between 2015 and 2018. The product of a descriptive case study contained a rich description of the phenomenon being studied (Merriam, 1991). Each case study contained a description of four-year prelicensure baccalaureate nursing curriculum with information obtained from the two data collection strategies. The purpose of merging two data collection strategies in this qualitative study was to allow them to complement each other, triangulation, and minimize the researcher's personal biases (Polit & Beck, 2012). A cross-case analysis was conducted as the researcher reviewed seven nursing programs' curricula. The researcher looked at any similarities and differences among seven cases.

The college ranking services' selection methodology included but was not limited to the program's academic reputation to produce high-quality graduates, reputation in the employment market for preparing high-quality graduates, teaching quality based on their graduates' comments, and the program's faculty research quality. These factors were assumed resulting to higher success rates among those selected programs' graduates although the researcher does not know for sure. The researcher considered that top-ranked prelicensure baccalaureate nursing

programs curricula were worth learning from because their programs produced high-quality graduates.

Since this study focused on four-year prelicensure baccalaureate programs' curricula, the researcher only reviewed four-year prelicensure baccalaureate nursing programs among the college ranking services' nominations not including accelerated or other than four-year prelicensure baccalaureate nursing programs. The researcher examined the four-year prelicensure baccalaureate nursing curricula searching for components that likely contributed to producing high-quality graduates and assumed that these programs implement their prescribed curriculum as written. Therefore, their curricula could serve as exemplars to the four-year prelicensure baccalaureate nursing programs that were not nominated by college ranking services. This method is validated by the Bardach's BPR approach, a common conceptual framework of extrapolating from best practice, that is, learning from the experience of others (Bardach & Patashnik, 2015). Hence, this study utilized Bardach's BPR notions to guide the data analysis in making use of curriculum components included in nursing program curricula, which have produced well prepared graduates and thus, obtained ranking status in the U.S. The ranking status corresponded with their high licensure exam passing rates of the graduates of these programs. This points to the wisdom of the components of their curriculum and is thus worthy of emulation—the Bardach's BPR of learning from the experience of others. In integrating the BPR approach, the researcher selected proxies of top-ranked four-year prelicensure baccalaureate nursing programs as source sites and one nursing program that would like to make improvement as a target site in this study.

Research Process: Formulation Stage

According to Collins, Onwuegbuzie, and Sutton (2006), the research process should begin with the research formulation stage followed by the planning and implementation stages. This research process corresponds to Bardach's BPR approach, the Eightfold Path. The Bardach's (2011) Eightfold Path, which are not necessarily taken in a precise order, and all are not necessarily significant in addressing every problem, include the following: define the problem, assemble some evidence, construct the alternatives, select the criteria, project the outcomes, confront the trade-offs, decide, and tell your story.

The formulation stage included identifying the overall aim of this study which was to produce findings that may further inform nurse educators regarding the nursing curriculum that promotes high quality nursing education, practice, and research. Early identification of practices in designing or redesigning nursing curricula may potentially increase the number of competent baccalaureate-prepared nurses in the workforce and thus increase the quality of patient care. Examining the stated curricula of top-ranked prelicensure baccalaureate nursing programs in the nation could serve as a reference to the stakeholders in nursing education and in promoting excellent performance, instead of a trial and error, reforming or piloting a curriculum.

The next step was to identify the research objective. The objective for this study was to identify effective curricular sequencing and curricular themes or focus that contributed to high quality graduates. The researcher assumed that their programs contain hallmarks of excellence in terms of curriculum components based on their status of producing high-quality graduates. The guiding research questions for this study were constructed after research objective was identified.

The following questions were constructed to guide the study:

1. What are the stated curricular components in each of the top-ranked prelicensure baccalaureate nursing programs?
2. What common of curricular sequencing and theme exist among the top-ranked prelicensure baccalaureate nursing programs?
3. What shared educational elements are present across the cases examined from the top-ranked prelicensure baccalaureate nursing programs?

Research Process: Planning Stage

In the planning stage, sampling design and methods were decided. The researcher used purposive sampling to allow more focus of studying a specific group of cases, reduce variation, and set up cross-case analysis (Polit & Beck, 2012). Source sites or exemplary programs were identified to address the research questions. A target site was identified for discussing experience that could be learned or transferred from source sites.

The researcher did not define or develop criteria to identify top-ranked four-year prelicensure baccalaureate nursing programs. The researcher assumed that the national college ranking services selection methodology and criteria were to identify and rank best undergraduate prelicensure nursing programs. The inclusion criteria for case selection were as follow: (a) a four-year prelicensure baccalaureate nursing program; (b) selected as one of top-ranked nursing programs by at least two ranking services, published between 2015 and 2018.

The rationale for using the national college ranking services' nomination was because they claimed to select and rank programs known for their high-quality graduates. The researcher constructed a list of proxies for top-ranked prelicensure four-year baccalaureate nursing programs obtained from well-known national college ranking services for undergraduate nursing

programs in the U.S. These three college ranking services, College Atlas, College Choice, and Top Universities were selected, because they provided their undergraduate programs' rankings per subject including nursing and their ranking methods included nursing licensure passing rates, program accreditation, and additional selection criteria. For example, College Atlas constructed their ranking list based on their proprietary selection methodology and reviewed other publications' rankings, such as US News & World Report and Kiplinger. College Choice constructed their ranking list based on a variety of sources, including US News & World Report, USA Today, and individual program websites, that reflected what they believe were the best programs in the country in preparing nursing profession. Top Universities constructed their ranking list in nursing based on 30% academic reputation, 10% employer reputation, 30% citations per paper, 30% h-index which measured both productivity and impact of the published work.

The researcher did not directly use rankings published by US News & World Report, Kiplinger, and USA Today. College Atlas (n.d.) assumed that the US News & World Report did not rank any public university in their nation's top twenty list. Furthermore, the US New & World Report did not specifically rank undergraduate nursing programs nor differentiate prelicensure or licensure baccalaureate nursing programs. Kiplinger ranked their colleges based on academic quality with heavy consideration on cost and financial aid. The USA Today considered a few factors including academic quality, program accreditation, retention and graduate rates, percentage of students at the school who studied a particular major, and graduate's early career earnings, which often reflected the employer's perception of how well the program prepared graduates for the workforce.

The researcher found seven top-ranked prelicensure baccalaureate nursing programs that met the inclusion criteria and served as the source sites/exemplars in this study. Each college ranking service had its propriety selection criteria and ranking methodology which weigh ranking indicators differently. The priority was in identifying the four-year prelicensure baccalaureate programs from the national college ranking services' publications. For example, a prelicensure nursing program ranked number ten; however, this program was an accelerated or eighteen-month prelicensure nursing program. Subsequently, this program was not included in the study as it did not meet the criteria of being a four-year baccalaureate nursing program. The researcher included a program that met the inclusion criteria, even though the program ranked number fifty. These programs were identified with pseudonyms linked to a regional or geographic location instead of the actual name of the program. Keeping names of programs in the case studies fictitious is a traditional practice in case study writing (Driscoll, 1987). These programs served as exemplary programs or proxies of the four-year prelicensure baccalaureate nursing programs that got nominated in national college ranking services. The top-ranked four-year prelicensure baccalaureate nursing programs from three national college ranking services included for examination in this study are showed in Table 3.1. To optimize the sample that represented a unique subset of the general population, the researcher merged information obtained from public documents related to curriculum and interviews of the program's key informant for each nursing program.

The researcher selected the UAFS prelicensure baccalaureate nursing program as a convenient target site to be compared with the results from the analysis of those labeled as "top-ranked." The researcher has been a nurse educator at the UAFS prelicensure BSN program since

Fall 2010 and has been a member of the program's curriculum committee since Fall 2011. Thus, there is high interest and potential applicability for the results from this study.

Table 3.1.

The Top-ranked Four-Year Prelicensure Baccalaureate Nursing Programs Featured in This Study

Program Pseudonym	Geographic Location	College Ranking Services							
		Top University			College Atlas			College Choice	
		2016	2017	2018	2015-2016	2016-2017	2018-2019	2016	2018
MCON	IA	51-100	51-100	-	-	23	27	25	32
MSON	MI	7	11	12	6	11	8	7	7
MWSON	MN	27	26	47	-	-	-	5	9
SESON	NC	9	14	14	17	-	14	-	24
NECON	OH	51-10	51-100	51-100	22	-	16	15	4
MASON	PA	12	17	16	5	-	7	6	11
SSON	TX	51-100	51-100	51-100	13	23	23	16	15

Note. Iowa (IA), Michigan (MI), Minnesota (MN), New York (NY), North Carolina (NC), Ohio (OH), Pennsylvania (PA), and Texas (TX). The numbers indicate the ranking the prelicensure baccalaureate nursing program based on the national ranking services.

Research Process: Implementation Stage

In the implementation stage, the researcher obtained permission to conduct the study from the Institutional Review Board (IRB) at the University of Arkansas Fayetteville before collecting the data. The University of Arkansas IRB Committee, that oversaw research with human subjects, granted an expedited approval letter allowing the researcher to conduct the study. Appendix C contained the expedited protocol number 1805121844 for this study. Upon receiving IRB permission to conduct the study, the researcher notified the Dean of the UAFS College of Health Sciences about the researcher's selection of UAFS as the target site. A supportive response was received from the Dean as shown in Appendix D.

Information obtained from public documents, such as the institution's catalog, program degree plan, NCLEX-RN passing rates, of the identified source sites were collected using a systematic approach used by nursing accrediting agencies in reviewing curriculum from public documents. The data collection procedure for the target site, the UAFS prelicensure BSN program, was the same as the seven source sites. The systematic approach used to review curriculum of nursing program from public documents included reviewing:

- the institution's catalog (web site address if available electronically) for the institution's mission or vision statement, and nursing course descriptions and objectives.
- the nursing program degree plan for the schedule (course sequence) and credit hours.
- the nursing student handbook (web site address if available electronically) for the program's mission or vision statement, and philosophy statement or curriculum framework, student progression requirement, and a list of objectives, outcomes, and competencies.
- the NCLEX-RN pass rate up to three calendar years (2015, 2016, and 2017) subject to the available announcement on the State Board of Nursing web site.

Information obtained from telephone interviewing key informants, such as nursing curriculum chair-person, nurse educator, or nurse administrator/leader from the seven source sites were collected using a set of interview questions. A set of interview questions was constructed, and field tested with three curriculum experts/program leaders prior to use. The procedure involving telephone interviewing key informants from seven source sites took approximately three weeks. The key informant of the selected program was identified either by calling the program or obtaining the contact information from the program's website. After identifying the key informant of the selected programs, the researcher contacted the key

informant by an introductory e-mail (Appendix A). Three days after sending out the introductory e-mail, the researcher sent out a recruitment e-mail asking for a thirty-minute interview (Appendix B). Upon obtaining the key informant's response and consent form (Appendix L), the researcher conducted the telephone interview with the key informant, whom was either the nursing program director, nursing college dean, associate dean, or academic dean. The telephone interview was recorded. A paid professional transcribed the interview content. The researcher used the following set of interview questions to collect qualitative data from each top-ranked nursing program's key informant:

- In your opinion what makes your nursing program one of the top (stellar) prelicensure programs in the nation?
- Could you please share your model for quality improvement?
- How does the curriculum change when the NCLEX-RN pass rate standard change (logit)?
- When was the last major curriculum revision (approval from the university committee is needed)? What did that revision entail? Major curriculum revision refers to revision that needs to be reviewed and approved by the university committee instead of just approved by the nursing department. If there was no major curriculum revision, do you think that anything should be revised? If so, what revisions are needed?
- Does your nursing program anticipate a major curriculum revision in this coming year? If so, what does it include?
- What specific strategies (e.g. remediation, interdisciplinary activities, high-fidelity simulation session, tutoring sessions provided by nursing faculty or senior nursing students, or student/peer mentorship) are used in your nursing program to retain students?

Knafl and Breimayer (1991) suggested using a process of member checking by sharing the researcher's interpretations of the data with the participants, and then the participants had an opportunity to discuss and clarify the interpretation. A simple intelligent style transcript of the telephone interview (without transcribing every word, not including sound like ehm... or other meaningless sounds) was e-mailed to each interviewee to check for accuracy. Soliciting feedback from interviewee was used to enhance validity (Stake, 1995). The researcher made necessary corrections based on the feedback from the interviewee.

If there was no response from the key-informant in two business days after sending the recruitment e-mail, the researcher made a follow-up telephone call. Although the key-informant declined the telephone interview or was unable to schedule the telephone interview, information pertaining to the program was obtained from the public documents and assessed. Since the combined methods in this study adopted identical sampling design, the risk for missing critical information was low. All information that would allow the identification of the selected nursing programs was omitted, and pseudonyms linked to geographic region were used.

Data Organization

Data were sequentially drawn from those institutions noted as source sites or top-ranked four-year prelicensure baccalaureate nursing programs. Although the researcher collected publicly accessible documents first and then from the telephone interview, all data were collected during the period comprising the end of the Summer 2018 into the early Fall 2018. All data were combined and presented in a case study, one for each nursing program studied. To describe each program holistically, a case study includes structural and demographic information, such as the type of institution, the relevant accrediting agency, and the nursing student enrollment. These cases are provided in Chapter IV.

The researcher utilized traditional manual methods of organizing the data by creating an electronic file folder for each nursing program. The relevant curriculum information and interview data of each nursing program were placed in one electronic folder. A master copy of eight electronic files representing seven selected nursing programs as the source sites and one target site was placed in one partition of the computer drive and separated from the coding copy.

To assess trustworthiness of the collected qualitative data, the researcher utilized triangulation of data sources. The researcher extracted curriculum information from the quantitative and qualitative data to support and triangulate information obtained. The data triangulation validated the collected information and showed consistent information obtained from public documents and telephone interview. The researcher assigned a code to quantitative and qualitative data of each nursing program. The pseudonym linked to a regional label for each program was omitted during the coding process to achieve Krefting (1991)'s double coding, as part of the triangulation process. The set of data was coded and then after two days, the researcher returned and coded the same data set and compared the results. The validation of the data followed and included a visual inspection of data for any discrepancies and to insure accuracy. Personal bias toward the subjects under study would be recognized as important in the validation of the results. The use of pseudonyms and data coding was meant to minimize the personal bias.

Data Analysis and Interpretation

The analysis of the curriculum sequencing was based on the degree plans found on the website. A percentage was calculated to identify proportion of liberal education versus core nursing courses in nursing curriculum. For example, a percentage was calculated for the total credit hours assigned for courses related to science, culture, and society in a baccalaureate

nursing degree plan. From the course description, themes or topics were identified. Based on the course description, more than one theme in a course was identified and matched to the corresponding description of the AACN (2008) Essentials. Table 3.2 shows the AACN (2008) Essentials with their respective description. The researcher identified trial themes based on the frequency of key contents/concepts surfacing in the interview, the course descriptions, and narrative from the nursing student handbooks reviewed. The researcher utilized licensure passing rates as objective measurement of the program's successfulness in producing high quality graduates who retain and apply knowledge to clinical scenarios.

Themes from data analysis of each site were constructed to address the research questions. The common curricular themes were identified from analyzing the seven top-ranked program's course descriptions and narrative from the nursing student handbooks. The common curriculum sequencing was identified from analyzing the seven programs' degree plans. The common curriculum sequencing and common curricular themes with their proportion of liberal education and learning were identified by comparing the entire selected top-ranked nursing program curriculum. Inferences were identified for generalizability of findings and transferability to other nursing programs.

All identifying information from the transcript of the interview were redacted. The redacted transcripts and other relevant documents were secured by the researcher in password protected files as required by the IRB permission and will be maintained for a minimum of three years past the completion of the study. Although all pertinent data came from public documents, names of the source sites or exemplary sites were kept out of the case study as Driscol (1978) indicated this is a traditional practice in case study writing and emphasized the reason for using

exemplary programs is for research not competition. Also, a key informant from one of the source sites asked how the study maintains confidentiality in discussing their program.

Table 3.2

AACN BSN Essentials and Their Respective Description

No.	BSN Essentials	Description
I	Liberal education for baccalaureate generalist nursing practice	The need for an education that exposes nurses to multiple fields of study providing the foundation for a global perspective of society as well as high level thinking and acquisition of skills that can be applied to complex patient and system-based problems
II	Basic organizational and system leadership for quality care and patient safety	The need for nurses to be able to understand power relationships and use decision-making and leadership skills to promote safe practice and quality improvement within healthcare systems.
III	Scholarship for evidence-based practice	The need for nurses to be able to understand the research process and base practice and clinical judgments upon fact-based evidence to enhance patient outcomes.
IV	Information management and application of patient care technology	The need for nurses to be able to use computer-based information management systems and patient care technology in the provision of patient care.
V	Healthcare policy, finance, and regulatory environments	The need for nurses to be able to understand the role of regulatory agencies in relation to the development of healthcare policies and their effect on patient care services, access to care, financial reimbursement, and scope of nursing practice.
VI	Interprofessional communication and collaboration for improving patient health outcomes	The need for nurses to be able to function as a member of the healthcare team while promoting an environment that supports interprofessional communication and collaboration with the goal of providing patient-centered care.
VII	Clinical prevention and population health	The need for nurses to be able to identify health related risk factors and facilitate behaviors that support health promotion, disease, and injury prevention, while providing population-focused care that is based on principles of epidemiology and promotes social justice.
VIII	Professionalism and professional values	The need for nurses to be able to practice nursing in a professional manner while providing patient-centered care that is caring, respects diversity, and is governed by legal and ethical tenets.
IX	Baccalaureate generalist nursing practice	The need for nurses to be able to practice as a generalist using clinical reasoning to provide care to patients across the lifespan and healthcare continuum and to individuals, families, groups, communities, and populations.

Chapter Four: Results

The result of data collection is provided in this chapter. Table 3.1 includes the list of the programs included in this study having met the selection criteria. In addition, Table 3.1 shows the academic performance for the three years (2015-2018). In this chapter each nursing program is presented as an individual case presented in alphabetical order based on the geographical location of the respective state board of nursing. The researcher considered these seven programs, as per Bardach's BPR, as exemplars for the target site. These seven programs identified their key-informant, who was knowledgeable about their nursing curriculum, for the interview. The key-informant at the seven programs included the dean or associate dean of the college, the nursing program director or the nursing program chairperson. A total of five key-informants were interviewed with individuals from two of the other sites declining my request for an interview. The names of those interviewed are omitted by all are individuals who know their program well and provided confirming information for purposes of triangulation. The seven cases of top-ranked prelicensure nursing programs are based on the available public information, such as the admission's Scholastic Assessment Test (SAT) scores, accreditations, and licensure passing rates as found on the website of the respective state boards of nursing.

Case 1: Prelicensure four-year BSN program at a public, research extensive institution in Iowa

The Iowa Board of Nursing (IBON) approved this prelicensure BSN program. The baccalaureate nursing programs in this college of nursing were accredited by the Commission on Collegiate Nursing Education (CCNE). The parent institution of this program was accredited by the Higher Learning Commission (HLC), one of many accrediting organizations recognized by

the U.S. Department of Education (USDE) and the Council for Higher Education Accreditation (CHEA).

Students are admitted to this BSN program once a year in fall with two admission options for prelicensure BSN program at this Midwestern College of Nursing (MCON). The freshman admission option offers a four-year (eight-semester curriculum) degree plan and is available for high school graduates only; whereas, the competitive admission option offers a five-year (nine-semester curriculum) degree plan and is available for change major or transfer applicants. Since the competitive admission has a five-year curriculum, this admission option did not meet the study's inclusion criteria; thus, the five-year curriculum is not discussed in this study. The researcher discussed the MCON's four-year curriculum which has a total of 128 semester hours including general education, pre-requisite, electives, and nursing major courses. The freshman admission option between Fall 2011 and Fall 2017 required that successful applicants earn an American College Testing (ACT) score of at least 28, ACT Science Reasoning score of 25 or higher (SAT 620 Math or higher), and a 3.8 or higher cumulative high school GPA. Minimum high school requirements included four years of high school English, one year of Biology, one year of Chemistry, one year of Physics, four years of the same world language, or two years of a world language combined with two years of a different world language. Additional requirements were Algebra I, Algebra II, and Geometry. For the freshman admission effective Fall 2018 and later, a score of 28 or higher is required on the ACT Composite (SAT 1310 or higher) and the same minimum high school requirements. In the freshman admission option, students must maintain a 3.0 or higher cumulative Grade Point Average (GPA) to keep a guaranteed seat and remain in good scholastic standing in the college of nursing.

The MCON had a mission of preparing nurse leaders for practice, education, and research, a vision of world class education and research to transform practice, and values of respect, excellence, learning, collaboration, caring, and integrity. In designing and implementing its nursing curriculum, the faculty's philosophy is that their students will develop critical thinking, decision-making skills, clinical judgment, cultural sensitivity, and professional nursing values in an increasingly complex health care system. The MCON's nursing program implemented cultural competence models and interprofessional learning experiences into the curriculum. Furthermore, the faculty assured that the curriculum follows the American Association of Colleges of Nursing (AACN) Essentials of Baccalaureate Education for Professional Nursing Practice (2008), the accreditation guidelines, the future of nursing report (Institute of Medicine [IOM], 2011), and addresses the community of interest (MCON, personal communication, September 5, 2018).

Responding to feedback from their students, a minor curriculum revision was implemented in spring 2018 (MCON, personal communication, September 5, 2018). Previous curriculum (July 2014 revision) and current (spring 2018 revision) freshman admission pre-licensure BSN degree plans are presented in Appendix H. There was no change in the total of semester hours. A minor curriculum change occurred in the first-year semester two course load and the second-year semester one course load. One credit hour of elective course was moved from the first-year semester two to second year semester two. All courses listed in Table 4.1 are the requirements for the MCON prelicensure BSN degree. Except for courses listed as general education courses, students have to follow the sequence of the nursing courses as listed in Table 4.1 in order to progress in the curriculum. For example, students must successfully complete five nursing courses (Pharmacology I, Health Assessment, Pathology, Professional Role I, and

Clinical Simulation I) in junior year semester one, because these courses are the prerequisite for courses listed in junior year semester two.

Table 4.1

An Overview of the MCON Prelicensure BSN Program Curriculum from Spring 2018

Semester	Credits	Semester	Credits
Freshman – 1st semester		Freshman – 2nd semester	
Rhetoric	4	General Chemistry II	3
General Chemistry I	3	Intro Animal Biology	3
Elementary Psychology	3	Human Dev & Behavior	4
Mathematics for the Biological Sciences	4	Sociology or Social Problems	1
NURS:1020 FYS: Nursing	1	International and Global Issues	3
Elective	1	Elective	
Total credit hours	16	Total credit hours	14
Sophomore – 1st semester	Credits	Sophomore – 2nd semester	Credits
Principles Human Anatomy	3	Healthcare Finance	3
Nutrition & Health	3	Nursing Microbiology	3
Literary, Visual & Performing Arts	3	Fundamentals of Human Physiology	3
Values & Culture or Diversity & Inclusion	3	Elective (preferred upper level statistics)	3
Elective	3	Elective	3
Elective	1	Elective	1
Total credit hours	16	Total credit hours	17
Junior – 1st semester	Credits	Junior – 2nd semester	Credits
Nursing and Pharmacological Interventions I	5	Nursing and Pharmacological II	5
NURS:3128 Health Assessment and Communication Across the Lifespan	3	NURS:3615 Adult Medical/Surgical Practicum	3
NURS:3518 Pathology	3	NURS:3620 Gerontological Nursing	3
NRS:3160 Professional Role I: Professionalism and Patient Safety	3	NURS:3625 Gerontological Nursing Practicum	2
NURS:3150 Clinical Simulation Laboratory I	3	NURS:3460 Professional Role: Research	3
		NURS:3450 Clinical Simulation Laboratory II	2
Total credit hours	17	Total credit hours	18

Table 4.1 (Cont.)

Semester	Credits	Semester	Credits
Senior – 1st semester		Senior – 2nd semester	
NURS:3630 Parent Child Nursing	3	NURS:3650 Community and Public Health Nursing	3
NURS:3640 Psychiatric/Mental Health Nursing	3	NRS:3655 Community and Public Health Nursing Practicum	2
NURS:3635 Parent Child Nursing Practicum	2	NURS:4155 Senior Nursing Internship	5
NURS:3645 Mental Health Nursing Practicum	2	NURS:4160 Professional Role IV: Leadership and Professional Engagement	3
NURS:3660 Professional Role III: Improving Health Systems	3	NURS:3650 Community and Public Health Nursing	3
Total Credit Hours	13	Total Credit Hours	13

As indicated in the MCON BSN student handbook (July 2017 revision), the BSN degree at MCON is awarded when the student has met all requirements including completion of courses with a grade of C (73.0% – 79.9%) or higher. For academic progression, students must maintain a minimum of a C in all nursing courses and earn a minimum of a 3.0 cumulative GPA. If the student earns less than a C in any nursing course, then the student had one opportunity to improve the grade. However, the student cannot progress in the curriculum. If the student earns less than a C in more than one course throughout the nursing program, the student will be dismissed from the college of nursing. If the student earns less than a 3.0 cumulative GPA, the student will be placed on probation with one semester opportunity to increase the GPA to the cumulative standard. If the student fails to achieve the 3.0 cumulative GPA at the end of the probation term, the student will be dismissed from the college of nursing. In addition to faculty prepared examinations, tests, or quizzes, a computerized testing program called Assessment Technologies Incorporated (ATI) that focused on specific content areas in the curriculum was administered to help students pass the licensure examination. ATI is a third-party vendor product used to evaluate students' knowledge of nursing concepts listed under the NCLEX-RN categories. MCON provided a list of technical standards for clinical courses, such as

communication, interpersonal skills, critical thinking, mobility, motor skills, to assist faculty in making informed decisions as to whether students could continue to participate in the nursing program. Practicum, laboratory, or internship courses were the courses where students had the opportunity to learn and practice nursing skills and provide patient care. This care occurred in a simulated environment or a healthcare facility, such as general hospitals, clinics, and doctor offices. Overall, faculty student ratio for direct clinical supervision was a maximum of eight students to one faculty. Table 4.2 shows the total hours for each nursing practicum, laboratory, or internship course.

Table 4.2

MCON Prelicensure BSN Clinical Components

Courses	Credit Hours/Semester	Total Clinical Hours/Semester
NURS:3150 Clinical Simulation Lab I	3	79
NURS:3615 Adult Medical/Surgical Practicum	3	492
NURS:3625 Gerontological Nursing Practicum	2	168
NURS:3450 Clinical Simulation Lab II	2	450
NURS:3635 Parent Child Nursing Practicum	2	450
NURS:3645 Mental Health Nursing Practicum	2	432
NRS:3655 Community and Public Health Nursing Practicum	2	189.5
NURS:4155 Senior Nursing Internship	5	216

The MCON students had the following resources available: The Office of Student Services, the Ombuds services that offered informal resolution, mediation, and/or negotiation to constituents, institutional technology services, student health service, university counseling service, student disability services, Office of International Programs, veteran's services, cultural centers, Office of Academic Support and Retention, tutorial labs, career center, Office of Student Financial Aid, Office of the Registrar, Women's Resource and Action Center, rape victim advocacy program, and libraries. In addition to the listed student resources, academic advisors,

faculty, and a learning support program, called supplemental instructions, was offered to help students with challenging nursing courses, such as pathophysiology, pharmacology, and medical-surgical nursing. This supplemental instruction referred to a tutoring program which upper classmates (one or two semesters ahead students) tutor the younger classmates and have study sessions with them (MCON, personal communication, September 5, 2018).

The IBON announces National Council Licensure Examination-Registered Nurses (NCLEX-RN) results by programs. The MCON BSN NCLEX-RN performance from 2015 to 2017 is provided in Table 4.3 as extracted from the IBON's nursing education program statistics (IBON, 2015, 2016, 2017, 2018).

Table 4.3

MCON BSN Graduates Licensure Pass Rates in 2015 - 2018

Year	Total Applicants	Pass Numbers	Pass Rate	National Pass Rate	Iowa Prelicensure BSN Pass Rate
2015	79	76	96.2%	87.5%	87.89%
2016	130	125	96.15%	87.8%	85.584%
2017	134	131	97.76%	90%	89.69%
2018	142	139	97.89%	88.3%	

The MCON BSN program's NCLEX-RN results for 2015, 2016, 2017, and 2018 surpassed the national passing percentage and the Iowa baccalaureate prepared applicants passing percentage. The IBON IAC 2.10 requires an institutional plan for improvement of schools of nursing who have two consecutive years of first-time applicants NCLEX-RN passing rates lower than 95% (IBON Annual Report, 2017).

Based on the national college ranking services selection methods and three consecutive years of NCLEX-RN passing rates, this prelicensure BSN program consistently performed as one of the top-ranked nursing programs in the nation. The institution had 86% retention rate for

first-year student which exceeds the accrediting bodies expected 70% retention rate. One of the college administrators believed that having nursing faculty who are top researchers and experts in their field and supporting student resources attract students who had critical thinking skills and excellent academic performance (MCON, personal communication, September 5, 2018). With the available resources, the faculty, and strong academic performing students, the program denied having retention issues among upper division nursing student and was able to produce excellent graduates (MCON, personal communication, September 5, 2018).

Case 2: Prelicensure four-year BSN program at a public, research extensive institution in Michigan

The Michigan State Board of Nursing (MSBON) approved this prelicensure BSN program. The baccalaureate degree program in this school of nursing (SON) was accredited by the CCNE. The parent institution of this program was accredited by the HLC.

This Midwestern SON (MSON) offered a four-year prelicensure BSN program with a total of 128 semester hours including general education, pre-requisite, electives, and nursing major courses. There were two types of entry into the prelicensure BSN program: Traditional entry for students who enter at the freshman level and sophomore entry for transfer students who have completed their first or more years at another college or university. The freshman applicants have to arrange to have their SAT or ACT results sent to MSON from the testing agency. They must also have four units of English, three units of math including second-year algebra and geometry, four units of science including two units of lab science, two units of foreign language, and students were encouraged to have additional Mathematics and science courses. Students from other universities, colleges, and other majors within the institution can apply as sophomore transfer applicants. The transfer applicants need to submit a resume and an

essay in addition to completing the first-year prerequisite coursework of the program's curriculum. The admission to the program is once a year in fall.

The MSON had a stated mission of improving the health of society through education, practice, and scholarship and to impacting local, national, and global communities through service, a vision of producing a knowledgeable, innovative, professional nurse leader in research, educational programs, and practice, and a statement of aspiration for leadership in nursing. In designing and implementing its nursing curriculum, the MSON's philosophy contains a holistic view of humans, consumer-centered nursing services, and values of the discipline. The faculty assures that the curriculum follows the AACN (2008) Essentials of Baccalaureate Education for Professional Nursing Practice (also knowns as Essentials) and accreditation guidelines. The MSON's undergraduate nursing curriculum balances nursing courses with humanities and social and biological sciences to meet their programs outcomes that the MSON's faculty assumes essential for professional nursing practices.

Responding to data analysis on academic performance and feedbacks from their faculty and students, the curriculum committee started working on a new curriculum three years ago (MSON, personal communication, September 4, 2018). The new curriculum has been implemented for new students entering in 2018-2019 academic year; currently enrolled students continue with the previous curriculum. Previous curriculum (2017-2018 and prior enrollment) and current (effective 2018-2019 and subsequent years) prelicensure BSN degree plan are presented in Appendix H. Although there is no change in the length of the curriculum as shown in Table 4.4, new topics were introduced, and courses were combined in an innovative, creative way. For example, the ecological framework was introduced as a basis for nursing practice in a

course called Context of C. Microbiology, epidemiology, and global studies were integrated into a course called Infectious Disease (MSON, personal communication, September 4, 2018).

Table 4.4

An Overview of the MSON Prelicensure BSN Program Curriculum from Fall 2018

Year	Credits	Year	Credits
Freshman		Sophomore	
Context of Care I	3	Pharmacology	4
Biochemistry 212	4	Pathophysiology	6
English 124 or other first-year writing course	3	Health Assessment, with lab	
Introduction to Developmental Psychology	3	Research & evidence-based practice (Using data in nursing)	
Anatomy and Physiology (NURS 210)	5	Infectious diseases	
Anatomy and Physiology Lab	1	Culture of Health	
Intro to Developmental Psychology (Psychology 250)	4	Nursing therapies (lecture & PNE)	
Applied Statistics	3		
Communications, Groups & Teams (NURS 196)	2		
Nursing Seminar	2	Senior	
Elective	1-2	Population Health (lecture & PNE)	
		Leadership for professional practice improvement (lecture & PNE)	
Junior		Context of Care II	
Care of the family: Infants, Children & Adolescent (lecture & PNE)		Nursing therapies III (lecture &clinical PNE)	
Elective, IPE course, and/or course to fulfill minor requirements		Role transition	
Nursing therapies II (lecture & PNE)		Elective, IPE course, and/or course to fulfill minor requirements	
Behavioral health (lecture & PNE)			

Note. Complete course credit hours have not been announced at the time of this report

The academic progression requirements for prelicensure BSN students included earning a minimum of a C (73%-76%) in the school of nursing course grading scale from A+ (97%+) to E (less than 60%) in all courses. Students also had to maintain a minimum cumulative GPA of a 2.0. In a repeated course, the student had to earn a minimum of B- (80%-82%) the second time.

In addition to faculty prepared examinations, tests, or quizzes, a computerized testing program called Kaplan, that focused on specific content areas in the curriculum, was administered to help students pass the licensure examination. Kaplan is a third-party vendor product used to evaluate students' knowledge of nursing concepts listed under the NCLEX-RN categories.

In compliance to the MSBON, the faculty student ratio for direct clinical supervision was a maximum of eight students to one faculty per section. The MSON incorporates clinical immersion and mentorship in the curriculum. Students are not assigned to a patient; students are assigned to work with clinical mentors who are part of the clinical facility's nursing team (MSON, personal communication, September 4, 2018). The MSON faculty members are involved in the hospital governance committees and unit committees. They are active in presenting evidence-based nursing practice and participating in hospital or unit quality improvement and policy and procedure changes. During the fourth year, the senior nursing students experience clinical immersion—the student follows a Registered Nurse's (RN) working schedule regardless of shift, learns from the nurse to take care of their patient's assignment, and collaborates with the clinical facility's leaders in evidence-based nursing projects (MSON, personal communication, September 4, 2018). Table 4.5 shows the total hours for each nursing clinical course.

The MSON offered counseling and psychological services, has a nursing clinical learning center and a simulation suite. The teaching course faculty and academic advisor offered academic assistance. The MSON also offered instructional aides who lead a study group for nursing students who were having academic difficulty (MSON, personal communication, September 4, 2018). For student resources, the MSON's parent institution had a writing center, diversity, equity, and inclusion officer and offered services for students with disabilities.

Table 4.5

MSON Prelicensure BSN Clinical Components Based on Spring 2018 Curriculum

Courses	Credit Hours/Semester	Total Clinical Hours/Semester
Health Maintenance I – Clinical	3	84 (72 clinical +12 lab)
Health Maintenance II – Clinical	3	84 (72 clinical +12 lab)
Health Assessment Laboratory	2	60
Health & Illness in Young, Middle & Older Adults – Clinical	4	88 (80 clinical + 8 sim)
Mental Health & Illness Across Lifespan – Clinical	4	104 (72 clinical + 32 sim)
Childbearing & Reproductive Health – Clinical	4	112 (64 clinical + 48 sim)
Infant, Child & Adolescent Health & Illness – Clinical	4	120 (96 clinical + 24 sim)
Community Health Nursing – Clinical	6	195
Care of Patients with Complex Needs I – Clinical	4	Approx. 540 (Preceptor's work schedule)
Care of Patients with Complex Needs II – Clinical	5	Approx. 540 (Preceptor's work schedule)

Note: Abbreviation used in this table: Lab refers to nursing skills laboratory, and sim refers to clinical simulation environment, simulating a hospital or a standardized patient or high-fidelity simulator in a patient room.

The key informant denied that their program had experienced any retention issues yet did not share their actual retention rate. Although the key informant did not specify the actual retention rate, the researcher assumed the rate was not below 70% which was the required minimum rate of CCNE, the MSON's accrediting body. Like other graduates from prelicensure nursing programs, graduates from the MSON are eligible to apply to take their licensure examination (NCLEX-RN). The MSON BSN NCLEX-RN performance from 2015 to 2017 is provided in Table 4.6 as obtained from the Michigan Department of Licensing and Regulatory Affairs (MI LARA) through the process of Michigan's Freedom of Information Act, 1976 PA 442.

Table 4.6

MSON BSN Graduates Licensure Pass Rates in 2015 - 2017

Year	Total Applicants	Pass Numbers	Pass Rate	National Pass Rate
2015	142	128	90.14%	87.5%
2016	131	118	90.08%	87.8%
2017	166	154	92.77%	90%

Regarding a pending rule change in R 338.10310 of Michigan Administrative Code, ". . . the Michigan State Board of Nursing may evaluate a nursing program if its pass rates for first-time NCLEX-RN takers is less than 80 percent for any one year of compiled statistics" (MI LARA, 2018) instead of the current statements "failure rate for first-time test takers on the required licensure examination reaches or exceeds 25% for any 1 year of compiled statistics or reaches or exceeds 15% for any 2 of 3 consecutive years of compiled annual statistics" (Michigan, 2018). Based on the current MSBON reporting format, the failure rates for first-time NCLEX-RN takers of the MSON BSN graduates in 2015 was fourteen of 129 (10.85%), in 2016 was 13 of 131 (9.92%), and in 2017 was twelve of 153 (7.84%); all were less than 15% failure rate. Based on the NCSBN publication, the national pass rate of first-time baccalaureate applicants in 2015 was 87.5%, in 2016 was 87.8%, and in 2017 was 90% (NCSBN, 2016, 2017, 2018); hence, the pass rates of the MSON BSN graduates in 2015, 2016, and 2017 consistently exceeded the national and state standards.

Case 3: Prelicensure four-year BSN program at a public, research institution in Minnesota

The Minnesota Board of Nursing (MBON) approved this professional prelicensure program leading to a baccalaureate degree. The CCNE accredited this prelicensure BSN program. The parent-institutional accreditation that host this program was the HLC.

This program has a total of 120 semester hours including prerequisite general education courses and nursing major courses. The program admits students every fall semester with two

admission options, which are freshman guarantee and transfer option. Students who are selected and admitted into this Midwestern SON (MWSON) at the point of freshman guaranteed transfer admission to the MWSON prelicensure BSN program. This competitive admission freshman guarantee program has a four-year degree plan with a total of 120 semester hours, as presented in Table 4.7. Students who have enrolled at any other colleges after graduating from high school will follow the transfer student degree plan. The transfer student program has a three-year curriculum plan and one year of prerequisite courses. Students have to maintain at least a GPA 3.0 in prerequisite courses for nursing program.

Table 4.7

An Overview of the MWSON Prelicensure BSN Program Curriculum

Semester	Credits	Semester	Credits
Freshman – 1st semester		Freshman – 2nd semester	
PSY 1001 General Psychology	4	FSCB 1112 Nutrition	3
CHEM 1015 General Chemistry	3	NURS 2001 Human Growth & Development: A Lifespan Approach	3
CHEM 1017 Chemistry Lab	1	BIOL 1009 General Biology	4
WRIT 1301 University Writing	4	NURS 1031 BSN Seminar	1
NURS 1030 BSN Seminar	1	Gen Ed: Historical Perspectives	3
Gen Ed: Environment	3		
Total credit hours	16	Total credit hours	14
Sophomore – 1st semester		Sophomore – 2nd semester	
PHSL 3051 Human Physiology	4	NURS 3803 Application of Genetics in Nursing	2
NURS 3703 Assessment & Basic Nursing Lab 1	3	PHAR 3800 Pharmacotherapy for the Health Professions	3
NURS 3801 PCC Adults/Older Adults I	3	NURS 3705 Nursing Interventions	2
NURS 3806 Nurse as Professional	2	NURS 3802 Nursing Care of Families I	3
NURS 5010 Foundations of Interprofessional Communication & Collaboration	1	VBS 2032 Microbiology	5
ANAT 3001 Human Anatomy	3		
Total credit hours	15	Total credit hours	15

Table 4.7 (Cont.)

Semester	Credits	Semester	Credits
Junior – 1st semester		Junior – 2nd semester	
NURS 4106 Nurse as Collaborator	1	NURS 4305 Practicum: Community-based Care Family	3
NURS 4104 Ethical Sensitivity & Reasoning in Health Care	2	NURS 4312 Nursing Care of Families II	4
NURS 4301 PCC Adults/Older Adults II	4	NURS 4321 Public Health Nursing	2
NURS 4303 Practicum: PCC Adults in Acute Care	3	NURS 4205W Nursing Theory & Research	3
NURS 3710 Stats for Clinical Research	3		
Total credit hours	16	Total credit hours	15
Senior – 1st semester		Senior – 2nd semester	
NURS 4703 Specialty Focused Practicum I	4	NURS 4705 Specialty Focus Practicum II	6
NURS 4706 Transition to Practice	1	NURS 4707 Nursing Leadership: Professional Practice in Complex Systems	2
NURS 4704 Continuum of Care Practicum	2	Gen Ed: Arts/Humanities	3
NURS 4402 Taking Ethical Action in Health Care	1	Gen Ed: Literature	3
NURS 477W Senior Project in the Nursing Major	3		
Gen Ed: Global Perspectives	3		
Total credit hours	15	Total Credit Hours	14

The MWSON's parent institution of this program uses a holistic assessment approach of an application. This approach refers to the consideration of the parent institution's primary and secondary factors for admission. Primary factors include high school coursework which include a minimum of four years in English and Mathematics, three years in social studies and science including biological and physical science, two years in a single second language, one year in arts, GPA, and ACT or SAT scores. Secondary factors include analysis of the student's achievements, rigor of the academic curriculum such as honors, advanced placement, community service and leadership, military service, first-generation college student, contribution to diversity of the

student body, family employment or attendance at the parent institution. Another secondary factor considered was the applicant's 250 words response to open-ended questions, such as "what have made you choose nursing" and "what studies and activities have prepared you for nursing"? The freshman nursing guarantee program had limited spaces. Thus, the selection of applicants was competitive and was based on attainment of the highest academic qualifications, such as achieving a high school class rank above 90th percentile and ACT score above 28.

The MWSON had a mission of generating and disseminating health promotion knowledge, improving diverse nursing care in society, and a vision of nurses leading in optimizing people's health. In preparing their students to be professional nurses, the faculty reviewed relevant healthcare resources, such as the American Association of Colleges of Nursing, Institute for Healthcare Improvement, and IOM (2011) Future of Nursing report to predict the future of health care delivery and nursing care (MWSON, personal communication, September 05, 2018). The MWSON's prelicensure BSN curriculum was designed to prepare graduates with critical thinking and analytic ability to face complex health care issues and various client needs and to develop life-long learners. The curriculum emphasizes clinical competences of leadership skills and critical evaluation. Based on the MWSON's SON faculty research a decade ago, the MWSON's curriculum focuses on community based practical experience (MWSON, personal communication, September 05, 2018). Furthermore, the MWSON's curriculum followed AACN (2008) Essentials, the competencies recommended by the Quality and Safety Education for Nurses (QSEN, 2012), and accreditation guidelines. Table 4.8 shows the total hours for the clinical component or field work of each nursing practicum or laboratory course.

Table 4.8

MWSON Prelicensure BSN Clinical Components

Courses	Credit Hours/Semester	Total Clinical Hours/Semester
Assessment & Basic Nursing Lab 1	3	60.17
Practicum: Adults in Acute Care	3	119
Practicum: Community-based Care Family	3	119
Specialty Focused Practicum I	3	119
Continuum of Care Practicum	2	12.5
Specialty Focus Practicum II	6	28.75

If a student receives less than a C- in one nursing course or fails to complete required courses, the student does not meet the baccalaureate degree program requirement and cannot progress in the nursing program. The student can retake a class only once. If the student receives less than a C- or a W in two or more nursing courses, the student will be dismissed from the program. Students are encouraged to discuss their academic difficulties and educational plans with their assigned professional academic advisor. The MWSON BSN program integrated ATI with specific content areas in the curriculum to help students in assessing their preparation for taking the licensure examination. Like others, the MWSON's parent institution offers a number of student resources related to health services, international student services, student counseling services, and student legal services.

Based on the MBON (n.d.) educational reports of the first-time taker passing rates of the NCLEX-RN in 2015, 2016, and 2017, the MWSON BSN graduates steadily performed above 84% as shown in Table 4.9. A licensure-preparing program in the State of Minnesota has to meet the standard of greater than 75% first-time taker passing rates on the NCLEX-RN in a calendar year (MBON, 2017); hence, the pass rates of the MWSON BSN graduates in 2015, 2016, and 2017 consistently exceeded the State of Minnesota's standards.

Table 4.9

MWSON BSN Graduates Licensure Pass Rates in 2015 - 2017

Year	Pass Numbers	Pass Rate	National Pass Rate
2015	124	88.71%	87.5%
2016	138	84.78%	87.8%
2017	139	88.49%	90%

Case 4: Prelicensure four-year BSN program at a public, research institution in North Carolina

This prelicensure BSN program was approved by the North Carolina Board of Nursing (NCBON). In addition, the baccalaureate nursing programs in this college of nursing were accredited by the CCNE. The parent institution of this program was accredited by the Southern Association of Colleges and Schools Commission on Colleges (SACSCOC), one of the accrediting organizations recognized by the USDE and the CHEA.

This Southeastern SON (SESON) offers a degree plan for students with and without a baccalaureate degree on admission. An accelerated prelicensure baccalaureate nursing program or second bachelor's degree in nursing is available for applicants who already have a bachelor degree in another field. Since the accelerated nursing program is less than four-year, this degree plan is excluded. This study discussed SESON's curriculum for students without a baccalaureate degree as presented in Table 4.10. This type of curriculum had a total of 120 semester hours including general education and nursing major courses. Table 4.11 shows the general education curriculum requirements. Most SESON students can fulfill requirements without taking additional credit hours.

Table 4.10

An Overview of the SESON Prelicensure BSN Program Curriculum

Semester	Credits	Semester	Credits
Freshman – 1st semester		Freshman – 2nd semester	
Gen Ed		Gen Ed	
Sophomore – 1st semester		Sophomore – 2nd semester	
Gen Ed		Gen Ed	
Sophomore Summer		Sophomore Summer	
NURS 254 Discipline of Nursing	1	NURS 361 Pathophysiology	3
NURS 261 Nursing Role in Normal Nutrition	2	NURS 366 Health Assessment	3
Junior Fall		Junior Spring	
NURS 253 Individual Development Across the Lifespan	2	NURS 371 Nursing Inquiry & Evidence-Based Practice	3
NURS 360 Concepts, Processes & Skills for Evidence-Based Nursing	4	NURS 382 Family-Centered Genomic Health Care	1
NURS 362 Pharmacology Across the Lifespan	3	NURS 477 Psychiatric/Mental Health Concepts for Broad Clinical Application in Nursing	5
NURS 364 Nursing Care of Adults with Major Health Problems I	6	NURS 479 Maternal/Newborn Nursing	5
Junior Summer			
NURS 487 Practicum in Nursing: Work-Study Experience	3		
or			
NURS 489 Practicum in Nursing: Global Health	3		
Senior Fall		Senior Spring	
NURS 456 Discipline of Nursing	2	NURS 588 Leadership in Health Care Organizations	4
NURS 470 Public Health Nursing	5	NURS 591 Nursing Care of Adults with Major Health Problems II	8
NURS 472 Nursing Care of Infants, Children & their Families	5		

Table 4.11

SESON General Education Curriculum

Category	Total Credit Hours
English Composition and Rhetoric	3
Foreign Languages	3-4
Quantitative Reasoning	3-4
Lifetime Fitness	1
Physical and Life Sciences	7
Social and Behavioral Sciences	9
Humanities and Fine Arts	9
Communication Intensive	3
Quantitative Intensive	3-4
Experiential Education	3-6
U.S. Diversity	3
North Atlantic World	3
Beyond the North Atlantic World	3
Global Issues	3

The SESON parent institution's admission is competitive. For high school graduates, the requirements include a minimum of 16 units of high school course work within literature, mathematics, physical and biological sciences, social sciences, and foreign languages. After students are admitted to the university and have completed the general education requirements, the students may seek admission to the SESON prelicensure BSN program. The admission to the SESON prelicensure BSN program was also competitive, which meant meeting the minimum admission criteria did not guarantee admission to the program. The applicants were required to submit a history of volunteerism and community service, descriptive essays, and had to have a 2.8 cumulative GPA. A grade of B- or better was also required in the key science courses, such as medical microbiology, human anatomy and physiology. A grade of a C or better was required in psychology and statistics. Students had to have completed the general education and nursing major prerequisites.

The mission statement of the SESON focused on empowering their graduates to advance health. The SESON also had a vision of being the world's leading nursing program. The SESON has a curricular framework consisting of 11 tenets: Diversity and inclusion, ethics, global health, health innovation, informatics, leadership, population health, quality and safety, relationship-centered care, research, scholarly communication and writing. According to the key informant, these tenets were based on consultation feedback from education experts and national recommendations of the AACN (2008) Essentials, the IOM (2011) future of nursing report, the American Nurses Association (2015) code of ethics for nurses, the QSEN (2012) competencies, and the National League for Nursing (2016). During this study's data collection period, the SESON anticipated to implement a new prelicensure BSN curriculum in Fall 2019. The proposed prelicensure BSN curriculum will have a change in the two-year upper division courses from a total of six consecutive semesters including summers of 65 semester credits to a total of five consecutive semesters of 60 semester credits. The SESON publicized their curriculum revision's methodology and process, which include using the Kotter model as a framework to guide the steering committee, students, faculty, and stakeholders. As part of their process for curricular changes, a steering committee interviewed their SESON administration, internal consultants, and external consultants. The committee also sent a survey to all SESON faculty and developed benchmarks by comparing their program to other schools within their institutional flag system, to school within their state, and to other schools that received National Institutes of Health funding in 2015-2017.

Like any nursing students at other programs, students must follow their SESON's rules, policies, and requirements in their BSN student handbook. In order to maintain good academic standing, this BSN student handbook indicates that the students are required to earn a C- or

better in all required nursing courses. If a student fails to meet the standard for academic performance, the student may be placed on probation or be dismissed from the SESON. For the clinical component, the student had to attend all clinical experiences or skills lab with preparation and was evaluated by the clinical instructor or preceptor. Should the student incur an absence due to illness that is reported prior to the scheduled day, the student had the responsibility to make up any experience that was missed. Besides having clinical experiences at the available clinical agencies, the SESON offered a simulated learning environment for clinical training and interprofessional learning activities. The SESON offers resources, such as academic advising, diversity and inclusiveness, and preadmission counseling. The SESON was one of the award recipients for the NLN's center of nursing excellence in nursing education for the category of enhancing student learning and professional development.

The parent institution of the SESON had resources for students to support their academic experience, such as counseling and wellness services, learning center, and writing center. This institution claimed, in their public document, to have student-faculty ratio of thirteen to one for undergraduates 2015-2016 and fourteen to one 2011-2012.

Students who successfully completed the SESON curriculum and received the BSN degree were eligible to sit for the NCLEX-RN. Based on the NCBON average three-year NCLEX-RN first-time test taker pass rate for 2015 to 2017, the SESON prelicensure BSN graduates had an average of 96% as shown in Table 4.12 (NCBON, n.d.).

Table 4.12

SESON BSN Graduates Licensure Pass Rates in 2015 - 2017

Year	Total Applicants	Pass Numbers	Average Pass Rate	National Pass Rate	North Carolina Prelicensure BSN Average Pass Rate
2015	NI	NI	95%	87.5%	89%
2016	167	161	96%	87.8%	90%
2017	161	156	97%	90%	93%

Note. Abbreviation used in this table: NI refers to Not Indicated

For three consecutive years, the SESON BSN graduates' NCLEX-RN pass rates consistently exceeded the national BSN pass rates and the North Carolina BSN averages pass rate (NCBON, n.d.).

Case 5: Prelicensure four-year BSN program at a public, research institution in Ohio

This prelicensure BSN program was approved by the Ohio Board of Nursing (OBON). The program is accredited by the CCNE. Its parent institution was accredited by the HLC.

This Northeastern College of Nursing (NECON) offered a four-year prelicensure baccalaureate nursing program that had a total of 121 semester credits. Prior to the NECON nursing program, students had to complete a nursing assistant course or equivalent nursing assistant experience as part of a clinical course requirement. However, after completion of the course, students were not required to take the certification examination to become a certified nursing assistant. The degree plan or curriculum is presented in Table 4.13.

Table 4.13

An Overview of the NECON Prelicensure BSN Program Curriculum

Semester	Credits	Semester	Credits
Freshman – 1st semester		Freshman – 2nd semester	
Nursing 1100 Nursing Survey	1	English 1110 First-Year English Composition	3
Chemistry 1210 General Chemistry	5	Psychology 1100 Intro to Psychology	3
Biology 1101 or 1113 Introductory Biology	4	EEOB 2520 Human Physiology	3
Sociology 1101 or Rural Sociology 1500 Introductory Sociology or Intro to Rural Sociology	3	Anatomy 2300.03, 3300, or EEOB 2510 Human Anatomy	4
GE Art and Humanities/Historical Study	3	Nutrition 2210 Science of Human Nutrition	3
Total credit hours	16	Total credit hours	16

Table 4.13 (Cont.)

Sophomore – 1st semester		Sophomore – 2nd semester	
Nursing 2100 Intro to Professional Nursing: Concepts & Practice	3	Nursing 2270 Nursing Care of Adults & Older Adults I	5
Nursing 2410 Health Assessment	3	Nursing 2470 Introductory Pharmacology for Nurses	3
Nursing 2450 Pathophysiology for Nursing Practice	3	Nursing 2780 Scholarship for Evidence-Based Practice	3
Nursing 1420 A Nursing Perspective: Life Span Development	3	Nursing 2460 Intro to Therapeutic Communication For Health Professionals	3
Microbiology 4000 Basic & Practical Microbiology	4		
Total credit hours	16	Total credit hours	14
Junior – 1st semester		Junior – 2nd semester	
Nursing 3270 Nursing Care of Adults & Older Adults II	7	Nursing 4260 Nursing Care of Children & Their Families	4
Nursing 3430 Cultural Competence in Health Care: US & Global Contexts	3	Nursing 4280 Nursing of Women & Their Families During Reproductive Transitions	4
General Education	3	General Education	3
General Education	3	General Education	3
Total credit hours	16	Total credit hours	14
Senior – 1st semester		Senior – 2nd semester	
Nursing 4240 Concepts in Community Health Nursing	4	Nursing 4270 Transition to Professional Nursing	6
Nursing 4340 Psychiatric & Mental Health Nursing	4	Nursing 4400 Leadership & Management of Nursing Practice	3
General Education	3	General Education	3
General Education	3	Elective	3
Total credit hours	14	Total credit hours	15

Criteria for the pre-nursing admission included having an ACT of 25 or higher or SAT of 1200 or higher. Students also had to meet this institution's minimum holistic admission criteria that focused on the high school class rank or GPA, status as a first-generation college student, leadership involvement, ability to contribute to a diverse campus community, and outstanding talent. If a student transferred from another major or higher education institution, the student had to meet the NECON prelicensure BSN admission criteria. The NECON prelicensure BSN

admission criteria included the parent institution's admission policy and completion of at least 30 semester hours with a 3.2 cumulative GPA or higher, that included a minimum grade of a C+ or better in all nursing program's prerequisite courses. If the student transferred from another institution that did not use a plus or minus grading scale, a minimum grade of a B or higher in all nursing program's prerequisite courses was required.

The NECON had a stated mission of delivering a healthier world and had a vision of achieving the impossible in transforming healthcare. The NECON curriculum reflected the faculty's philosophy of presenting a sound liberal and professional education that improved human health and patient care. Their curriculum followed the AACN (2008) Essentials and the accreditation guidelines. The curriculum also incorporated service learning as part of the clinical experience. In service-learning, there is a partnership between communities and nursing programs. Reflection process in the service learning facilitates the connection between clinical practice and theory and fosters critical thinking. Table 4.14 shows the total hours of the clinical component for each nursing course that has didactic and clinical components.

Table 4.14

NECON Prelicensure BSN Clinical Components

Courses	Credit Hours/Semester	Total Clinical Hours/Semester
Health Assessment	3	37.5
Nursing Care of Adults & Older Adults I	5	90
Nursing Care of Adults & Older Adults II	7	195
Nursing Care of Children & Their Families	4	91
Nursing of Women & Their Families During Reproductive Transitions	4	98
Concepts in Community Health Nursing	4	91
Psychiatric & Mental Health Nursing	4	84

The requirements for academic progression in this program included maintaining a minimum cumulative GPA of 2.5 and a grade of C+ in the required nursing courses. With the

grade forgiveness policy, the same course can be repeated once. The student had to obtain permission to apply this policy. This policy can be applied for a maximum of three courses. The NECON prelicensure BSN program requires students to use the ATI's comprehensive assessment review program and virtual ATI NCLEX review. The ATI's comprehensive assessment review program offers remediation resources for students.

As part of the completion requirement for the NECON prelicensure BSN program, students were required to take an end-of-program diagnostic test in the last semester of the curriculum. The student had to achieve a minimum ATI raw score of 66.7% which is an equivalent to 86% probability of passing the NCLEX-RN on the first attempt. If the student failed to achieve a raw score of 66.7%, the student has to complete the remediation program and take the test a second time. The NECON offered a structured academic support system to help nursing students in didactic and clinical competencies. This support system included pre-arranged study groups that paired first semester nursing students with upper-class nursing students. There was also peer mentoring from experienced students and nurses, that supported nursing students and one-on-one peer tutoring for clinical skills for a maximum one hour per week. Based on headcounts enrollment on the 15th day in the fall semester, the undergraduate nursing program in this college had 148 freshman and 177 sophomores in 2015, 160 freshman and 193 sophomores in 2016, and 156 freshman and 198 sophomores in 2017. Comparing the numbers between the freshman and sophomore enrollment and the graduates who took the NCLEX-RN in 2015 (153), 2016 (156), and 2017 (162), the program was able to retain most of their students from admission to graduation. Additionally, the university offered academic support services, such as counseling, writing, mathematics and statistics, and student health. With the program's curriculum, available academic support, and the teaching-learning efforts

among the faculty and students, the program had received an acknowledgement from the NLN as one of the center of nursing excellence in nursing education for the category of enhancing student learning and professional development since 2014 (NLN, n.d.).

The OBON's rule 4723-5-23 of the administrative code (OBON, n.d.) stated, ". . . a program shall attain a pass rate that meets or exceeds ninety-five percent of national average for first-time candidates . . ." Based on the OBON (2016, 2017) statistical report for first-time NCLEX-RN test-taker, the NESON BSN graduates performance in 2015-2017 as shown in Table 4.15 were above the state and national passing rates.

Table 4.15

NECON BSN Graduates Licensure Pass Rates in 2015 - 2017

Year	Total Applicants	Pass Numbers	Pass Rate	National Pass Rate	Ohio (95% of National Pass Rate)
2015	153	145	94.77%	87.5%	80.28%
2016	156	148	94.87%	87.8%	80.33%
2017	162	145	89.51%	90%	82.76%

Case 6: Prelicensure four-year BSN program at a public, research institution in Pennsylvania

This prelicensure BSN program was approved by the Pennsylvania State Board of Nursing (PASBON). It was accredited by the CCNE. Its parent institution was accredited by the Middle States Commission on Higher Education.

This Mid-Atlantic SON (MASON) directly admits high school graduates to the freshman year of the four-year prelicensure BSN program with a total of 124 semester credits required. These hours included prerequisite general education, electives, and nursing major courses. The MASON prelicensure BSN program admits students every fall semester. The MASON prelicensure BSN curriculum is presented in Table 4.16.

Table 4.16

An Overview of the MASON Prelicensure BSN Program Curriculum

Semester	Credits	Semester	Credits
Freshman – 1st semester		Freshman – 2nd semester	
Chemical Principles for Health Professions	4	Microbiology I	3
Human Anatomy & Psychology I	3	Microbiology I Lab	1
Nursing Anatomy & Psychology Lab I	1	Human Anatomy & Psychology II	3
English Composition	3	Human Anatomy & Psychology Lab II	1
Psychology	3	Intro to Basic Statistics for Evidence- Based Practice	3
Art, Music, Creative Expression, or Literature	3	Intro to Professional Nursing	3
First Year Seminar – Nursing Students	0	Nursing Informatics	2
Total credit hours	17	Total credit hours	16
Sophomore – 1st semester		Sophomore – 2nd semester	
Pathophysiologic Foundations of Nursing Care	4	Foundations of Nursing Practice II	2
Foundations of Nursing Practice I	3.5	Nursing Management of Adult w/ Acute/Chronic Health Problems	3
Foundations of Nursing Practice I Clinical	1.5	Nursing Management of Adult w/ Acute/Chronic Health Problems Clinical	4
Pharmacology & Therapeutics	3	Nursing Research Intro to Critical Appraisal & Evidence-Based Practice	3
Intro to Genetics & Molecular Therapeutics	3	Sociology	3
		Nutrition for Clinical Practice	3
Total credit hours	15	Total credit hours	18

Table 4.16 (Cont.)

Semester	Credits	Semester	Credits
Junior – 1st semester		Junior – 2nd semester	
Nursing Care of Mothers, Newborns, & Families	2.5	Nursing Care of Clients w/ Psych Mental Health Problems	2.5
Nursing Care of Mothers, Newborn, & Families Clinical	2.5	Nursing Care of Clients w/ Psych Mental Health Problems Clinical	2.5
Nursing Care of Children & Families	2.5	Advanced Nursing Management of Adult w/ Acute//Complex Health Problems	2.5
Nursing Care of Children & Families Clinical	2.5	Advanced Nursing Management of Adult w/ Acute/Complex Health Problems Clinical	2.5
Anthropology/Culture: American or Foreign	3	Nursing Care of Older Adults	2
Ethics in nursing and Health	3	Nursing Care of Older Adults Clinical	1
		Public Speaking	3
Total credit hours	16	Total credit hours	16
Senior – 1st semester		Senior – 2nd semester	
Community Health Nursing	2.5	Transition into Professional Nursing Practice	2
Community Health Nursing Clinical	2.5	Transition into Professional Nursing Practice Clinical	6
Advanced Clinical Problem Solving	3	Directed Elective	3
Advanced Clinical Problem Solving Clinical	2	Senior Seminar	1
Senior Special Topics Elective	2-3	Elective	2-3
Total credit hours	12-13	Total credit hours	14-15

The MASON BSN program's admission criteria included SAT or ACT scores, high school rank, and science course grades. High school courses included four years of English, four years of Mathematics, three years of social sciences, and three years of laboratory science which included Chemistry. Also required was five academic electives which related to statistics, computer science, and non-laboratory science courses. There are internal and external transfers to the freshman class in fall and spring semesters for the limited seats in the sophomore class.

The program's competitive transfer admission criteria included a minimum SAT scores of 1280 or ACT composite score of 27, a 3.5 minimum cumulative GPA, and completion of 24 college-level credits with science courses at a B or higher grade and liberal arts courses with a C or higher grade.

The MASON had a stated mission of providing high-quality undergraduate education and a philosophy of a lifelong educational process to nurture a diverse and global perspective of health care leaders. The MASON faculty ensured that the prelicensure BSN program curriculum met the AACN (2008) Essentials criterion. The curriculum was adjusted based on healthcare changes instead of the logits of the NCLEX-RN (MASON, personal communication, September 07, 2018). The faculties' and students' feedback, changes in the healthcare and clinical teaching-learning environment (simulated environment and the healthcare facilities) contributed to any changes in the curriculum to assure that the curriculum remained up-to-date and met the workforce needs. The MASON faculty members were certified in simulation principles and followed the standard recommended by the International Nursing Association for Clinical Simulation and Learning. The MASON faculty made a minor change in the required clinical hours and credit hours in the cohort 2017-2021 curriculum due to the students, faculty, and stakeholder's feedback; the total clinical hours changed to 855 hours from 1147.5 hours shown in Table 4.17.

For academic progression in the MASON prelicensure BSN program, students have to maintain a minimum 2.0 cumulative GPA throughout the program and have a C (74%-76%) or better in the Chemistry for health professions course and all nursing courses in the curriculum. If the student fails twice in achieving a 2.0 cumulative GPA, then the student will be dismissed from the program. The MASON's policy relating repeating a course is that there is only a one-

time repetition for up to two undergraduate level courses. If the student fails to meet the minimum grade for a third course, the student is dismissed from the MASON BSN program. A series of Kaplan preparation practice tests are integrated throughout the curriculum to help students to evaluate themselves and prepare them for the licensure examination. Toward the end of the MASON prelicensure BSN curriculum, the MASON provides students with a diagnostic preparation, predictor examination, and a four-day review to enhance student's NCLEX-RN preparation.

Table 4.17

MASON Prelicensure BSN Clinical Curriculum

Clinical Course	2017-2021 and after		Prior to 2017-2021	
	Clinical Hours	Credits	Clinical hours	Credits
Foundations of Nursing Practice 1	45	1.0	90	2.0
Nursing Management Adult w/ Acute/Chronic Illness	157.5	3.5	180	4.0
Nursing Care of Mothers, Newborns & Fam	90	2.0	112.5	2.5
Nursing care of Children & Families	90	2.0	112.5	2.5
Nursing Care of Clients w/ Psychiatric Mental Health	90	2.0	112.5	2.5
Advanced Nursing Management Adult w/ Acute Complex	90	2.0	112.5	2.5
Community Health Nursing	90	2.0	112.5	2.5
Transitions into Prof Nursing	202.5	4.5	270	6.0
Nursing Care of Older Adults	N/A	N/A	45	1.0

The MASON key informant denied any retention issues (MASON, personal communication, September 07, 2018). Although the key informant did not specify the actual retention rate, the researcher assumed the rate was not below 70% which was the required minimum rate of CCNE, the MASON's accrediting body. With the available resources that included university-wide student academic support, the MASON's peer tutor program for upper level nursing courses, and the open laboratory led by a graduate assistant, doctorally prepared

faculty, and strong academic performing student, the MASON BSN program was able to produce excellent graduates (MASON, personal communication, September 7, 2018). Based on the PASBON's statistical report for first-time NCLEX-RN test-taker, the MASON BSN graduates performance in 2015, 2016, and 2017 as shown in Table 4.20 exceeded the PASBON's requirement as per the PASBON Chapter 28 Pa. Code §107.12a RN §21.33b statement, ". . . a minimum pass rates of 80% or more of its first-time examinees . . ." (PASBON, n.d.). All MASON BSN graduate's performance in the nursing licensure examination was higher than the state and national passing rates.

Table 4.18

MASON BSN Graduates Licensure Pass Rates in 2015 - 2017

Year	Total Applicants	Pass Numbers	Pass Rate	National Pass Rate
2015	259	236	91.12%	87.5%
2016	233	207	88.85%	87.8%
2017	188	172	92.49%	90%

Case 7: Prelicensure four-year BSN program at a public, research institution in Texas

This prelicensure BSN program was approved by Texas Board of Nursing (TBON). The baccalaureate nursing program in this college of nursing was accredited by the CCNE. The parent institution of this program was accredited by the SACSCOC.

This Southern SON (SSON) has been admitting high school graduates to the freshman year of the four-year prelicensure BSN program since Fall 2014. The program has a total of 125-126 semester credits that include general education and nursing major requirements. The SSON prelicensure BSN program admits students every fall semester. The SSON admission requirement for freshman applicants is the same as the parent institution's admission requirement. Additionally, the SSON requires applicants to submit an essay pertaining to the applicants'

motivating factors for pursuing a career in nursing. Applicants are also asked to identify any academic and extracurricular activities they have been involved. Internal and external transfers to this prelicensure BSN program were subject to meeting the parent institution's admission requirements and the completion of 11 credit hours at the SSON's parent institution. The 11 credit courses included communication in health care settings, ethics of health care, nursing research, and pharmacology. The SSON BSN curriculum is presented in Table 4.19.

Table 4.19

An Overview of the SSON Prelicensure BSN Program Curriculum

Semester	Credits	Semester	Credits
Freshman – 1st semester		Freshman – 2nd semester	
Rhetoric & Writing	3	Introductory Biology I	3
Principles of Chemistry I	3	Fundamentals of Nutrition	3
Data Analysis for Health Sciences	3	Introduction to Psychology	3
UGS302 or UGS303 First-Year Signature Course	3	Global Health	3
Visual – Performing Arts	3	General Education	3
Total credit hours	15	Total credit hours	15
Sophomore – 1st semester		Sophomore – 2nd semester	
Human Microscopy & Gross Anatomy	4	Introduction to Patient-Centered Nursing Care	3
Introduction to Medical Microbiology	3	Health Assessment Skills	2
PSY304 or HDF313/113L	3	Clinical Nursing Skills I Practicum	1
American History Core Course	3	Ethics of Health Care	3
Communication in Health Care Settings	3	Human Systems Physiology	3
		Physiology Lab	1
		General Education	3
Total credit hours	16	Total credit hours	16
Junior – 1st semester		Junior – 2nd semester	
Mental Health Nursing Across Lifespan	3	Nursing Care of Childbearing Families	2
Problems in Mental Health Nursing Practicum	2	Nursing Care of Childbearing Families Practicum	3
Adult Health Nursing I	3	Adult Health IIA	2
Adult Health Nursing I Practicum	3	Clinical Nursing Skills II Practicum	1
Nursing Research	2	Genetics in Health Care	2
Total credit hours	13	Interprofessional Collaborative Practice	2
		Pharmacology	3
		Total credit hours	15

Table 4.19 (Cont.)

Semester	Credits	Semester	Credits
Senior – 1st semester		Senior – 2nd semester	
Nursing Care of Children & Families	2	Public Health Nursing	2
Nursing Care of Children & Families Practicum	3	Public Health Nursing Practicum	3
Adult Health IIB	2	Complex Nursing Care	3
Adult Health II Practicum	3	Leadership & Management of Nursing Care	3
Spanish for Health Care Professionals	3	Clinical Care Management Practicum	2
Quality & Safety for Nursing Practice	2	Capstone Preceptorship	2
Total credit hours	15	Total credit hours	15

The mission of the SSON was to achieve excellence in nursing education, research, and public service. Its core values included learning, discovery, freedom, leadership, individual opportunity, and responsibility. The SSON philosophy was reflected with the faculty's dedication to prepare their students within an environment of innovative educational excellence to be generalists prepared for a complex and changing world. The SSON faculty assured that the curriculum followed the AACN (2008) Essentials and the accreditation guidelines.

In order to progress in the SSON prelicensure BSN curriculum, students in this program were required to maintain a minimum 2.8 cumulative GPA and a minimum grade of C, which was equivalent to 75%-79% in the theory portion of the course and 70%-79% in the clinical portion of the course (SSON, personal communication, August 29, 2018). If the student fails to achieve the required GPA after one semester on probation, the student will be dismissed from the program. If the student fails to achieve a minimum grade of a C in a nursing course, the student may retake the course once, but cannot retake more than two nursing courses. In the beginning of each semester when clinical course is indicated, the student is required to take a medication calculation test with a minimum grade of 90%.

To help students in their preparation to take the NCLEX-RN, a computerized standardized testing called Kaplan is administered with specific content areas in the SSON BSN

curriculum. The SSON offers academic support resources for nursing students, such as peer academic coaching. This coaching may be provided by a nursing student who had demonstrated academic excellence or an RN who was working on advanced nursing degree. The session could be group or individual coaching sessions depending on the student's learning needs. Additionally, the parent institution has a learning center, writing center, counseling and mental health center, and an Office of Student Services to support all students.

With excellent students and faculty and rigorous educational preparation, the SSON has awarded BSN degree to 132 graduates in 2015-2016, 132 graduates in 2016-2017, and 120 graduates in 2017-2018. Based on the TBON statistical report on NCLEX-RN passing rates for the last five years, the SSON BSN graduate performance as shown in Table 4.20 consistently exceeded 80%, the minimum requirement for nursing programs under TBON §215.3 (TBON, 2018).

Table 4.20

SSON BSN Graduates Licensure Pass Rates in 2015 - 2017

Year	Total Applicants	Pass Numbers	Pass Rate	National Pass Rate
2015	120	115	95.83%	87.5%
2016	122	110	90.16%	87.8%
2017	115	107	93.94%	90%

Cross Case Synthesis

None of the top-ranked four-year prelicensure nursing programs were located in the same geographic region. All parent institutions of the nursing program were public institutions. The Carnegie classification for the parent institutions of the top-ranked nursing programs (the source sites in this study), were R1. This status is given to institution that offer doctoral degrees and that had the highest research activity. All parent institutions were accredited by an accrediting organization recognized by the USDE and CHEA.

Since none of the nursing programs was under the same state board of nursing jurisdiction, each nursing program was approved by their respective board of nursing where they were located. After reviewing the regulations or rules related to the standard for educational nursing programs in the state of Iowa, Michigan, Minnesota, North Carolina, Ohio, Pennsylvania, and Texas, the researcher found differences in the minimum NCLEX-RN passing rates in the board's approval requirements. Table 4.21 shows that not all state boards of nursing indicated their state's NCLEX-RN passing rates or used the same approach in reviewing the prelicensure BSN program's achievement in the NCLEX-RN. The minimum requirement related to the NCLEX-RN for receiving the board of nursing's approval might have influenced educational programs' admission criteria of students, academic progression requirements, expectations from the faculty, and rigor of the program curriculum.

Table 4.21

State Board of Nursing Minimum Requirement of the Programs NCLEX-RN Passing Rates

State Board of Nursing Geographic Location	Minimum Requirement of the Program's Graduates' Passing Rates in the first-time taker NCLEX-RN
Iowa	95%
Michigan	Failure rate <25% (current); Passing rate 80% (proposal)
Minnesota	75%
North Carolina	N/A
Ohio	95% of national average
Pennsylvania	80%
Texas	80%

Although having the graduates pass the NCLEX-RN might not be the only educational outcome or method to evaluate the quality of a nursing program, the licensure examination results are an objective measurement and commonly used to evaluate a program's success and is used to approve and accredit a nursing program. Graduates were not allowed to practice nursing until they pass the NCLEX-RN, even though they had completed their educational program and

received their BSN degree. The boards of nursing do not issue the RN license to BSN graduates until they passed the NCLEX-RN.

Based on the seven exemplary nursing curricula, all curricula for core nursing courses contain didactic and clinical components. Only two of the seven curricula had a designated course for interprofessional education learning activities. The other five curricula had no designated course for interprofessional learning activities. Based on the five interviews, all key informants claimed to integrated interprofessional learning activities somewhat in the didactic, clinical, or both components. Based on the seven curricula review, the theme or focus on interprofessional communication and collaboration was reflected in the clinical component and in courses related to professionalism, communication, and leadership; hence, interdisciplinary learning activities occurred in didactic, clinical, or both components.

The seven top-ranked prelicensure BSN programs used the AACN (2008) Essentials to guide and implement their program curriculum. In addition to the AACN (2008) Essentials, the faculty used resources, such as the AACN's (2008) faculty tool kit cultural competency in baccalaureate nursing education, the AACN's (2010) supplement to the Essential related to competencies and curricular guidelines for the nursing care of older adults, the AACN's (2013) supplement to the Essentials related to competencies and curricular guidelines in public health nursing. Faculty also used contemporary documents, such as the IOM's (2011) Future of Nursing report, the American Nurses Association (2015) Code of Ethics for Nurses, the QSEN (2012) Competencies, and the NLN (2016) Achieving Diversity and Meaning Inclusion in Nursing Education to guide the nursing curriculum

In this study, the AACN Essentials curricular themes were interpreted based on the nine AACN (2008) Essentials. The course name/title listed in the prelicensure baccalaureate nursing

curriculum and course description in the undergraduate catalog were reviewed and identified with the respective AACN Essentials curricular themes. The researcher found that one AACN Essentials' curricular theme might be integrated in several courses throughout the curriculum. However, the researcher was unable to objectively measure the themes proportion in a credit-hour as the unit of measurement. If a course contained more than one curricular theme, then the researcher equally distributed the credit hours among the number of themes unless the course syllabus indicated the proportion of the themes in the course. Table 4.22 shows a few sample contents for each AACN (2008) Essentials. Table 4.23 shows the proportion of course credit hours to the total semester hours in a typical degree plan for each site studied. Using the sample of content for each essential listed in the AACN (2008) Essentials, the researcher interpreted the course description and categorize it into the nine AACN Essentials curricular themes.

Although the seven top-ranked BSN programs used the AACN (2008) Essentials to guide and implement their program curriculum, some of their curricular components met the NLN (2004) Hallmark of Excellence for Curriculum criteria (Appendix F). Nursing programs can voluntarily submit their application with supporting evidence to meet the NLN Centers of Nursing Excellence Awards under certain categories. The NLN reviewed the submission and made the judgment on which programs receives the award. In 2018, two of the seven top-ranked prelicensure BSN programs were recognized as NLN Centers of Nursing Excellence under the category of nursing education.

Table 4.22

Example of Sample Content for Each AACN (2008) Essentials

Number	AACN Essentials	Sample Content
I	Liberal education for baccalaureate generalist nursing practice	Principles that teach students to work with people from diverse cultures, concepts about the sciences (physical science, life sciences, mathematical sciences, and social sciences), concepts about the arts (fine arts, performing arts, and humanities), concepts about globalization and migration
II	Basic organizational and system leadership for quality care and patient safety	Leadership, community organizing models, quality improvement, teamwork skills, and healthcare systems and organizational structures
III	Scholarship for evidence-based practice	Principles and models of evidence-based practice, basic applied statistics, locating and evaluating sources of evidence, and levels of evidence
IV	Information management and application of patient care technology	Use of patient care technologies, computer skills, information management for patient safety, technological resources for evidence-based practice, information literacy, and electronic health record
V	Healthcare policy, finance, and regulatory environments	Policy development, legislative process, regulatory process, economics of healthcare, disparities in the healthcare system, and consumerism and advocacy
VI	Interprofessional communication and collaboration for improving patient health outcomes	Relationship building, conflict management, conflict resolution strategies, negotiation, participatory decision-making, and interprofessional and intraprofessional communication, collaboration, and socialization
VII	Clinical prevention and population health	Evidence-based clinical prevention interventions across the lifespan, public health core functions, nutrition, global health, pharmaceutical preventive strategies, and health literacy
VIII	Professionalism and professional values	Nurse Practice Acts, scope of practice, professional codes of conduct, professional standards, professional image, professional accountability, and contemporary nursing issues
IX	Baccalaureate generalist nursing practice	Principles of basic nursing care, management of acute and chronic physical and psychological conditions across the lifespan, care across the lifespan, integration of pathophysiology into care, and evidence-based practice

Table 4.23

The Proportion of the AACN Essentials Curricular Themes in the Curricula Examined

Program Pseudo-nym	Total Credit Hours	AACN Essentials Curricular Themes								
		I Liberal Education	II Leadership	III Evidence-based Practice	IV Patient Care Technology	V Policy and Environments	VI Interprofessional Collaboration	VII Population-focused Care	VIII Professionalism	IX Generalist
MCON	128	39 (30.47%)	2.5 (1.95%)	4.5 (3.52%)	13 (10.16%)	3 (2.34%)	2 (1.56%)	18 (14.06%)	7 (5.47%)	25 (19.53%)
MSON*	128	16 (12.5%)	1.67 (1.3%)	7.5 (5.86%)	17.67 (13.8%)	1 (0.78%)	2.33 (1.82%)	30.33 (23.7%)	1 (0.78%)	31.33 (24.48%)
MWSON	120	42 (35%)	1.67 (1.39%)	8 (6.67%)	10.33 (8.61%)	1 (0.83%)	3.5 (2.92%)	17.67 (14.72%)	7.17 (5.97%)	19.33 (16.11%)
SESON	128	31 (24.2%)	2 (1.56%)	3.5 (2.73%)	9.67 (7.55%)	1.5 (1.17%)	3.5 (2.73%)	20.17 (15.76%)	1.5 (1.17%)	23.17 (18.1%)
NECON	121	47 (38.84%)	1 (0.83%)	3 (2.48%)	9.33 (7.71%)	1.5 (1.24%)	2 (1.65%)	23.17 (19.15%)	3.5 (2.89%)	23.33 (19.29%)
MASON	124	28 (22.58%)	5 (4.03%)	6 (4.84%)	16 (12.9%)	1 (0.81%)	17 (13.71%)	16 (12.9%)	4 (3.23%)	22.67 (18.28%)
SSON	125	38 (30.4%)	2.75 (2.2%)	5 (4%)	11.75 (9.4%)	1.5 (1.2%)	3.5 (2.8%)	19.92 (15.93%)	3 (2.4%)	22.92 (18.33%)

Note. *Based on MSON curriculum 2017-2018.

Based on the NLN (2004) Hallmark of Excellence for Curriculum criteria, all seven curricula met all criteria except not all curricula had electives. One of the reasons for a nursing curriculum does not have electives is related to the total credit hours for a baccalaureate program allowed by the respective state higher education. A comparison of all source sites' nursing program curricula with the NLN Hallmark of Excellence for Curriculum reveals the following:

- The program curricula at IA, MI, and PA included electives—courses that matched student's area of interest, such as topics in specialty nursing and topics in health disparities/diversity.
- All curricula provided experiential learning activities to enhance students' ability to be culturally-sensitive in providing care to diverse patient populations.
- Besides strategic clinical placements that exposed students to patients from different cultural, ethnic/racial, and/or socioeconomic backgrounds, MSON and MWSON allowed nine semester credits of senior year at an overseas nursing program, providing a study abroad clinical experience.
- All curricula encouraged lifelong learning and incorporate current societal and health care trends and issues, research findings, innovative practices, and local as well as global perspectives.

Chapter Five: Discussion, Implications, and Conclusions

How to effectively design the most effective prescribed curriculum for a prelicensure baccalaureate nursing program that meets the professional, societal expectations and state expectations, is a challenge for nurse educators. The purpose of this descriptive study was to identify common curricular sequencing and curricular themes or focus that contributed to high quality graduates. In this chapter, the researcher addresses the research questions and discusses the commonalities that could be learned from the source sites to the target site using the Bardach BPR approach. The researcher discusses the study limitations with respect to generalizability. Finally, this chapter contains a discussion of results of this study for future research and educational implication.

The cross-case synthesis in the Chapter Four, Table 4.21, State Board of Nursing Minimum Requirement of the Programs NCLEX-RN Passing Rates, and Table 4.23, The Proportion of the AACN Essentials Curricular Themes in the Curricula Examined, were applied in answering the research questions and adding to the discussion in this chapter. Responses to the research questions follow:

Research question: What are the stated curricular components in each of the top-ranked prelicensure baccalaureate nursing programs?

Based on seven top-ranked four-year prelicensure baccalaureate nursing curricula listed in Chapter Four, the stated curricular components in each of the program are didactic and clinical components. These two curricular components corresponded with the literature review and the standard curriculum requirements for educational nursing as identified by the respective state boards of nursing. Although interprofessional learning activities can be considered as one of the stated curricular components in each of the top-ranked program, this component is more

likely integrated in didactic, clinical, or both components. The curriculum at the source site shared similarity in core nursing courses and their didactic and clinical components. Table 5.1 shows common core nursing courses/contents that were typically prescribed in a four-year prelicensure baccalaureate nursing curriculum.

Research question: What common of curricular sequencing exists among the top-ranked prelicensure baccalaureate nursing programs?

Despite having a different number of total semester credits in each program, which might depend on the requirements from each state legislation or department of higher education, the common sequencing of curriculum among the selected top-ranked prelicensure baccalaureate nursing programs was to have nursing curriculum begin with liberal education courses which were met by the required general education courses, followed by the core nursing courses. The liberal education courses were typically placed during the freshman year or the first three of eight semesters in the prelicensure BSN curricula. These courses provided a foundation for the required core nursing courses in the curriculum as shown in Table 5.2. Such courses were designed to assist the student in developing tools for critical thinking, effective communication, and an understanding of richly diverse human heritage. The general education courses were also designed to teach flexibility in adapting to a rapidly changing world and to encourage a capacity for lifelong learning. Furthermore, baccalaureate nursing education expanded upon the liberal arts and sciences. The AACN (2008) Essentials believes that a solid base in liberal education provides the cornerstone for nursing practice.

Table 5.1

Common Core Nursing Courses/Contents in the Top-Ranked BSN Programs Examined

Course	Credit Hours	Pre-Requisites	Numbers of Programs Containing the Content/Course in the Curriculum
Pharmacology	3-4	Human Anatomy & Physiology, Microbiology, and Chemistry; or BioChem.	7
Pathophysiology	3	Human Anatomy & Physiology, Microbiology, and Chemistry; or BioChem.	7
Health Assessment has didactic and clinical component	3	Human Anatomy & Physiology.	7
Adult Medical-Surgical /Gerontological Nursing in two semesters and has didactic and clinical component	9-12	Pharmacology, Pathophysiology, & Health Assessment.	7
Nursing Care of Mothers, Newborns, & Families has didactic and clinical component	4-5	Pharmacology, Pathophysiology, & Health Assessment; Co-Requisites: Nursing Care of Children.	7
Nursing Care of Children has didactic and clinical component has didactic and clinical component	4-5	Pharmacology, Pathophysiology, & Health Assessment; Co-Requisites Nursing Care of Mothers, Newborns, & Families.	7
Adult Medical-Surgical /Gerontological Nursing in two semesters and has didactic and clinical component	9-12	Pharmacology, Pathophysiology, & Health Assessment.	7
Nursing Care of Mothers, Newborns, & Families has didactic and clinical component	4-5	Pharmacology, Pathophysiology, & Health Assessment; Co-Requisites: Nursing Care of Children.	7
Nursing Care of Children has didactic and clinical component	4-5	Pharmacology, Pathophysiology, & Health Assessment; Co-Requisites Nursing Care of Mothers, Newborns, & Families.	7

Table 5.1 (Cont.)

Course	Credit Hours	Pre-Requisites	Numbers of Programs Containing the Content/Course in the Curriculum
Mental Health & Illness Across Lifespan has didactic and clinical component	5	Adult Medical-Surgical /Gerontological Nursing.	7
Population Health has didactic and clinical component	4-5	Adult Medical-Surgical /Gerontological Nursing.	7
Nursing Leadership: Professional Practice in Complex Systems has didactic and clinical component	4	Adult Medical-Surgical /Gerontological Nursing.	7
Nursing Research	3	Statistics.	7

Table 5.2

Incorporation of General Education Courses into Nursing Practices

Examples of General Education Courses Related to Arts, Sciences, and Humanities	Nursing Courses
Sciences	Sciences
Anatomy and Physiology Microbiology Chemistry	Pathophysiology: Pathophysiology requires previous knowledge of courses such as Anatomy and Physiology, Microbiology and Chemistry. Pharmacology: Knowledge from Chemistry course are fundamental in Pharmacology when relating pharmacokinetics, pharmacodynamics, and mechanism of action. Health Assessment: Knowledge from courses such as Anatomy and Physiology are fundamental in Health Assessment practice when completing a head-to-toe assessment. Health, Population Health Nursing, High Acuity Nursing, Leadership and Management). Medical/surgical nursing courses and all specialty nursing courses: Knowledge from courses like Anatomy, Physiology and Chemistry are fundamental in Health Assessment, Nursing Skills, all medical/surgical classes, and all specialty nursing courses (Adult/Gerontology, Maternal and Newborn, Child and Adolescent, Mental.

Table 5.2 (Cont.)

Examples of General Education Courses Related to Arts, Sciences, and Humanities	Nursing Courses
<u>Fine Arts</u>	<u>Fine Arts</u>
Humanities through the Arts Music Appreciation	Clinical skills: Knowledge from courses like Music Appreciation and Humanities through the Arts are integrated into nursing care practices as Complementary and Alternative Therapies. Medical/surgical nursing courses and all specialty nursing courses: Knowledge from courses like Music Appreciation and Humanities through the Arts are integrated into nursing care practices. For example, guided imagery, music therapy, and art as therapy are used in nursing interventions and patient education in alternative therapy and nonpharmacological methods of pain management. Guided imagery and music therapy are also used as distraction for patients in labor. Arts like drawings and carving/sculpting are used as therapeutic communications for pediatric patients.
<u>Humanities</u>	<u>Humanities</u>
World Religions Global Perspectives Introduction to Philosophy	Global health/issues, Medical/surgical nursing courses, and all specialty nursing courses: Knowledge from courses like World Religion and Introduction to Global Literature prepare nursing students to provide culturally sensitive patient care. Students are encouraged to provide individualized patient care while focusing on their religion, culture, and geographical location.
<u>Social Sciences</u>	<u>Social Sciences</u>
Cultural Anthropology Human Geography	Global health/issues, Medical/surgical nursing courses, and all specialty nursing courses: Knowledge from courses like Cultural Anthropology and Human Geography provided foundation to provide understand patient care and diseases. For example, prevalence of diseases returning due to lack of immunization. Some diseases are more prevalent locally or from other geographical locations. Cultural anthropology is incorporated into nursing practice when planning holistic patient care.

After the general education courses, some curricula required pre-requisite nursing courses. The junior and senior year of the four-year program generally focus on core competencies, core knowledge, and role development in professional nursing. There were variations in the sequence of nursing courses, yet they were logically structured to achieve expected learning outcomes. An example of the logical structuring of the curriculum to facilitate student achievement of outcomes was for students took Chemistry, Microbiology, Human Anatomy and Physiology prior to taking Pathophysiology. Table 5.3 shows a common sequence of the curriculum among the top-ranked prelicensure baccalaureate nursing programs beginning with the freshman year. These commonalities were identified by comparing every course in every semester in the degree plan of all top-ranked prelicensure BSN programs.

Table 5.3

A Model Curricular Sequencing of All Seven Top-Ranked Prelicensure BSN Programs

Freshman Year: General Education courses: Rhetoric and writing requirement, human anatomy and physiology, chemistry or biochemistry, mathematics for health care; psychology, sociology, and lifespan development; Nursing courses: Nurse as professional; Global issues/health.
Sophomore Year: Gen Ed: US history, humanities, microbiology Nursing courses: Nutrition; Pathophysiology; Pharmacology; Data analysis/ Statistics; Research; Nursing courses: Health assessment and clinical skills; Electives in nursing topics, such as Topics in Specialty Nursing Care (students choose additional credit hours in specialty nursing that they are interested in), Care of Adults with Cancer, and Topics in Health Equality, Inequities, and Disparities
Junior Year: Nursing courses: Mental health, Adult/gerontological health nursing; Maternal and newborn health nursing; Child and Adolescent health nursing.
Senior Year: Nursing courses: Population health nursing; Leadership and management; Complex nursing care; Electives in nursing topics, such as Topics in Specialty Nursing Care (students choose additional credit hours in specialty nursing that they are interested in), Care of Adults with Cancer, and Topics in Health Equality, Inequities, and Disparities

Research question: What common curricular theme exist among the top-ranked prelicensure baccalaureate nursing programs?

Since all seven top-ranked nursing programs used the AACN (2008) Essentials to guide their curriculum design, the common curricular themes among the top-ranked prelicensure baccalaureate programs corresponded with the nine AACN Essentials curricular themes. Based on Table 4.23, The Proportion of the AACN Essentials Curricular Themes in the Curricula Examined, the theme of liberal education (Essential I) and generalist nursing practice (Essential IX) were the common themes exist among the top-ranked four-year prelicensure baccalaureate nursing programs.

Higher credit hours in proportion to the nursing curriculum are under themes of liberal education and generalist nursing practice. A proportion of the nursing curriculum ranging from 12.5% to 38.84% is in liberal education (Essential I). This substantial proportion of curricular theme is related to liberal education which allows nursing students to address changes in technology, demographics, and economics and which provides baccalaureate nursing students' opportunity to the knowledge, skills, and values from the sciences and the arts. A proportion of the curriculum ranging from 16.11% to 24.48% is in generalist nursing practice (Essential IX). This substantial proportion of curricular theme in generalist nursing practice is related to the way baccalaureate graduates were prepared to care for patients across the lifespan and in a changing practice environment. Nursing care across the lifespan included nursing care of children, adult, the aged, maternity nursing, and nursing care of individuals with mental health. These two AACN themes corresponded to their respective state boards of nursing requirements for approving a nursing educational program.

Research question: What shared educational elements are present across the cases examined from the top-ranked prelicensure baccalaureate nursing programs?

A comparison of the educational elements among the seven top-ranked nursing programs is presented in Table 5.4.

Table 5.4

A Comparison of the Educational Elements Among the Seven Top-ranked Nursing Programs

Educational Elements	Similarities	Differences
Admission Standards	ACT of 25 or higher or SAT of 1200 or higher.	Minimum nursing program's prerequisite GPA, ranges from GPA ≥2 to GPA ≥3.5
Performance in Courses	High standard of academic performance in science and nursing courses (A minimum of a C)	-
Retake Policy	Retake of any sciences and/or nursing courses are no more than two attempts.	-
Curriculum Guidelines	AACN (2008) Essentials for baccalaureate	Different AACN supplements are integrated in the curriculum
Standardized Testing/Third-party Vendor's Evaluation (Benchmark)	Use third-party vendor's evaluation computerized program in addition to the faculty's exams;	Different implantations of the third-party vendor's evaluation program in the course; Different calculation of the standardized testing in the course grading; Different third-party vendors;
Quality of the Graduates (NCLEX-RN)	Exceeded their respective state board of nursing requirement; Able to maintain above the national passing rates;	Different state boards of nursing passing rates;
Faculty Educational Preparation	Majority (>70%) has Terminal Degree (Doctoral level either Ph.D. or DNP)	-
Type Course Instructor	Didactic courses were taught by a master or doctoral prepared faculty and clinical courses or the clinical component of nursing courses were taught or supervised by a baccalaureate, master, or doctoral prepared nursing faculty.	Different implementation in terms of adjunct course instructors; licensed nurses at the health facility did not have to be an academician.

Discussion of Transferrable Curriculum Components

The UAFS prelicensure baccalaureate nursing program was selected as the comparison/target site, because the researcher has professional interest related to potential curriculum improvement at this four-year prelicensure baccalaureate nursing program, which was not one of the top-ranked nursing programs. Details about this program curriculum can be found in Appendix M. Table 5.5 lists the admission standards and academic resources among the source sites and target site. Based on the Table 5.5, the UAFS nursing program had the lowest admission standard. Two source sites, top-ranked nursing programs, did not indicate their standardized testing, the third-party vendor software that was typically integrated into the curriculum. Six source sites integrated standardized testing in their curriculum to enhance student preparation in the licensure examination and evaluate student readiness to take the licensure examination. Four top-ranked nursing programs (50%) of the source sites utilized peers or students helping other students as the student supplemental learning resources and support. This student supplemental learning resources and support was provided by the nursing program and were not offered to other non-nursing students.

The guiding reference of the prelicensure nursing curriculum at the source sites and target site was the AACN (2008) Essentials. Based on the admission criteria, all parent institutions of the top-ranked nursing program had high standards for freshman applicants (SAT≥1200-1310 or ACT≥1200-1310). Although one of the top-ranked nursing programs had a minimum prerequisite GPA≥2.0, which was lower than the UAFS nursing program (GPA ≥2.5), the admission to all studied nursing programs was selective and competitive. Furthermore, all top-ranked nursing programs had no issue in retaining their nursing students. The courses focused on the application of evidence-based practice in patient-centered care, interprofessional learning

experiences, and culturally sensitive nursing practice. The nursing programs at the target site and most of the source sites utilized a computerized standardized testing, such as ATI, HESI, or Kaplan, to help students in their preparation for taking the licensure examination.

Table 5.5

Admission and Enrollment Standards and Academic Resources among the Nine Prelicensure BSN Programs

Program	Average Student Size of the entire four-year classes	Admission Standard		Total Credit Hours	Standardized Testing	Supplemental Learning Resources
		High school graduation requirement	GPA to nursing program			
MCON	600	ACT≥28/ SAT≥1310	GPA≥3.0	128	ATI	Peer Tutoring
MSON	675	NI*	GPA≥2.0	128	Kaplan	Instructional Aides
MWSON	407	ACT≥28	GPA≥3.0	120	ATI	NI*
NESON	383	NI*	GPA≥2.5	128	HESI	NI*
SESON	276	NI*	GPA≥2.8	120	NI*	NI*
NECON	NI*	ACT≥25/ SAT≥1200	GPA≥3.2	121	ATI	Peer Mentoring, Peer Tutoring
MASON	480	ACT≥27/ SAT≥1280	GPA≥3.5	124	NI*	Peer Tutoring, G.A. Open Lab
SSON	NI*	NI*	GPA≥2.8	125-126	Kaplan	Peer Coaching
UAFS	NI*	ACT≥19	GPA≥2.5	120	ATI	None

Note. *Not Indicated (NI). Two top-ranked nursing programs and UAFS nursing program did not indicate the total prelicensure nursing students in the program.

Although the Arkansas State Board of Nursing requirement of minimum average NCLEX-RN performance is lower than the respective state boards of nursing that approved the exemplary programs, except for Minnesota has the same minimum requirement set 75% based on Table 4.21, State Board of Nursing Minimum Requirement of the Programs NCLEX-RN Passing Rates; other state boards of nursing set higher than 75% for the minimum requirement to approve an educational nursing program. In reviewing three years NCLEX-RN performance at

only MWSON, one of the seven source sites had lower passing rates than the NCLEX-RN national average in 2016 and 2017. All other six source sites had higher passing rates than the state and national NCLEX-RN average passing rates. A further research related to MWSON students and faculty attributes for those years might explain this interesting disparity. Also, a further investigation on how the two college ranking services' selection and ranking methodologies reviewed MWSON's academic performance in 2016 and 2017. Based on Table 3.1, Top-ranked Four-Year Prelicensure Baccalaureate Nursing Programs in the Study, MWSON ranked at number 27 in 2016 and 26 in 2017 per Top University and ranked at number five in 2016 per College Choice. The College Atlas did not select or rank MWSON in their publication 2015-2016, 2016-2017, and 2018-2019. MWSON was included in the study because it met this study's criteria.

SSON, one of the exemplary sites, required a minimum 90% on the medication calculation test which involved simple arithmetic. This minimum 90% may become a concern that a student could correctly administer medications 90% of the occurrences. Medication errors remain a concern among all health care professionals. Having this 90% standard for new nurses may increase occurrences of medication errors in administering medications to patients. Incorrectly administering a medication dosage to a patient will endanger or cause harm to a patient. One of the licensed nurses' responsibilities is to ensure patient safety. The target site required their nursing students to pass 100% on the medication calculation test in order to progress in the curriculum or remain in the nursing program.

After reviewing similarities and differences in curriculum components for transfer from the source sites to the target site, the researcher acknowledged that the mission, vision, and/or philosophy of the program would not be a realistic curriculum component to be considered for

transfer. Although typically these are major curriculum components from the traditional perspective, these components would need to be congruent with the parent institution, unless the nursing program was a stand-alone academic entity. However, the mission, vision, and/or philosophy of the parent institution at the source site and target site shared similarity in the theme of preparing their graduates to have an impact on global world. Thus, the mission, vision, and/or philosophy of the nursing program focused on preparing their graduates to contribute in improving global health. Based on the Bardach's BPR approach, the researcher laid out the common curriculum components from the source sites and mapped the common curriculum components to the target site. The researcher then identified where and how the practice at the source sites could be adopted elsewhere.

Nurses have many opportunities to influence patient care both individually and through an interprofessional team culture because they spend more time in direct patient care than many other health professionals. Hence, the IOM's (2011) urged nursing education to advance Interprofessional Education (IPE) to meet the professional and societal expectations for safe, high quality, and patient-centered health care service. According to World Health Organization and AACN, IPE occurs when students from more than two professions learn about their respective professions; learn from and with each other to effectively collaborate in improving patient's health outcomes. Although not all curricula at the source sites designed a course for IPE, the source site's key informants shared that they integrated interdisciplinary activities including interprofessonal communication and collaborative practice in the clinical component of suitable nursing courses. Many nursing programs at the source sites, such as MSON, MWSON, and SSON, arranged interdisciplinary activities between their nursing students and students from dentistry, medicine, pharmacy, public health, social work, and/or all other health science schools.

AACN and NLN offer resources for nursing faculty to infuse interdisciplinary activities into the curriculum. Besides these resources, the faculty at the target site may be able to review examples of the IPE course at MSON, MWSON, and SSON. For example, in the MSON elective IPE course syllabus, the faculty assigned interdisciplinary students to a team-based clinical rotation. The interprofessional collaborative practice, a three credit-hour course at SSON, has a course description stating the purpose and focus of the course. The course focuses on developing the competencies needed among healthcare professional. This course has a few learning outcomes, such as to understand the roles and responsibilities of the different healthcare professionals in providing safe, efficient, and effective patient-centered care and to demonstrate effective teamwork by applying principles of team dynamics, process of improvement, and conflict management. The students were assigned to develop team-based care plans for complex health care situations. In the SSON IPE course syllabus, the faculty assigned interdisciplinary students in a group and provided clinical case scenarios. Students were also assigned to create a video clip showing effective interprofessional collaborative practice. These interdisciplinary activities could be transferred to the target site by working together with the faculty from dentistry and social work programs. The implementation IPE in the target site's curriculum would require changing the course learning outcomes for some courses such as in the health assessment course, leadership course, and community health course.

The faculty at source sites and target site integrated the nine AACN Essentials curricular themes in constructing and implementing the curriculum. Based on the model cross case curricula from the source sites that produced high quality graduates, the current curriculum at the target site showed similarity in the credit hours of the nursing courses and in the sequencing the courses as shown in Table 5.1 and Table 5.2 The common sequencing of courses was that

pharmacology, pathophysiology, and health assessment were the first three foundational nursing courses. Other upper level nursing courses required students to successfully complete these three courses in order to progress in the curriculum.

Pharmacology was a course that provided general principles of medications, pharmacokinetics, and medication administration. This course was related to patient safety in pharmacological therapies. In the MCON's curriculum, this course had two parts with five credit hours for each part; one part was arranged during the junior first semester and the other part was during the junior second semester. Based on these two courses' description in the catalog, the course objectives included nursing and pharmacological interventions related to fluids and electrolytes, shock, perioperative care, skin care, wound healing, immobility, infection, and human response to selected disorders/diseases. Based on the course description, this course contained curricular themes related to evidence-based practice/quality improvement and nursing across the lifespan. Compared to the source sites, the pharmacology course at the target site was three credit hours and focused on general pharmacology rather than a combination of nursing and pharmacological interventions. In the licensure examination, the percentage of test questions related to pharmacological therapies is 12%-18%, second to management of care which has 20%, the largest portion of the licensure distribution of content (NCSBN, 2016).

Pharmacology and pathophysiology were required for inclusion in nursing education under the AACN (2008) Essential IX. Pathophysiology was a course that helps nursing students to understand the concepts and applications of microorganism, immune system, pathophysiology, and pharmacology in diagnosis and treatment. Based on the course description and credit hours for pathophysiology at the source sites and the target site, they showed similarity. The course description and credit hours for health assessment at the source sites and target site was also

similar. Based on the health assessment course syllabus at the target site (UAFS, n.d.), this course's learning outcomes included using evidence-based practice and cultural sensitivity in communication with patients and conducting holistic health assessment for patients at all ages. In this course, students learned to correlate pathological findings with relevant disease processes using critical thinking skills. Based on these outcomes, this course contained more than one Essentials' curricular themes—professional identity/communication, evidence-based practice/quality improvement, and nursing across the lifespan. Although there was no category or subcategory of the licensure test questions related to pathophysiology and health assessment, these two courses were the building blocks for students in providing and managing care.

Content areas in other pre-requisite courses at the source sites, such as microbiology, chemistry, and human anatomy and physiology, can be considered for transfer to the target site. For example, in the new curriculum at MSON, the faculty designed a course that combined the content areas of microbiology, epidemiology, and global studies to better prepare nursing students related to infectious diseases and global health in the ever-changing global world. And, instead of a basic chemical principles course, such as the course offered at the target site, the nursing curriculum at MSON arranged a biochemistry course, which included energy conservation metabolism and membrane transport. These two concepts would prepare nursing students in the pathophysiology course.

With the similarity of the curricular course sequencing at the top-ranked sites examined and the target school, transferring the concept of combining nursing and pharmacological interventions into the pharmacology course at the target site would likely not meet resistance from the target site's faculty and stakeholder. The content area related to pharmacological interventions was consistent with the patient safety, the AACN (2008) Essential IX, and the

licensure test questions. Pertaining to the process of curriculum revision's methodology and process, UAFS SON may use the process implemented at one of the source sites nursing programs. SESON shared their curriculum revision's methodology, process, and progression. SESON provided a discussion forum regarding their curriculum revision on their website. The process of curriculum revision typically was initiated based on the results from the periodically course crosswalks, cross-walking curriculum, or curriculum mapping, which refers to the process of comparing the course objectives with specific curriculum objectives. Table 5.6 provides an example of cross-walking curriculum.

Table 5.6

Sample Crosswalk for AACN (2008) Essentials for Information Management and Patient Care Technologies

Key 1. Classroom Activities 2. Simulation Activities 3. Clinical Activities 4. Syllabus 5. Readings 6. Assignments	Demonstrate skills in using patient care technologies, information systems, and communication devices that support safe nursing practice.	Understand the use of Clinical Information Systems (CIS) to document interventions related to achieving nurse sensitive outcomes	Advocate for the use of new patient care technologies for safe, quality care	Use telecommunication technologies to assist in effective communication in a variety healthcare settings
Senior – 1st semester				
HLTH 4103 Research in the Health Sciences	6	1,2,4,5,6	6	6
NURS 4340 Nursing Care of the Adult II	1,2,3,4,5,6	1,2,3,4,5,6	1,2,3,6	1,2,3,6

Faculty at the source sites actively and periodically conducted course crosswalks. The nursing curriculum committee or a steering committee should identify peer institutions for benchmarking, should conduct interviews, and send surveys to the stakeholders and nursing

faculty for input. Survey questions for nursing faculty should be designed to obtain the faculty's specific or detailed recommendations related to achieving the parent institution's goal. In this case, the target site had a goal to prepare a successful nurse generalist in an ever-changing global world. The following examples of questions conducting curriculum mapping:

- What is missing and should be added in the curriculum?
- What are we currently doing that needs to be deleted?

Asking these questions would help in creating a sense of urgency, build a guiding coalition, and form a strategic vision. Faculty development, scholarship/research, and continuing appraisal are essential in the process of developing, revising, and/or evaluating a curriculum. Through this process, the curriculum would be based on systematically and purposely gathered evidence, relevant to students, current and projected professional and societal expectation, and would have level and course learning outcomes that were consistent with the program's outcomes.

The SESON's process of curriculum revision can be applied in conducting a minor/limited curriculum revision, which typically refers to correcting any content gaps or redundancies and aligning learning experiences in more logically sequence in one or two courses. A major curriculum revision, which typically refers to modernizing/updating a successful curriculum and resulting modifications to all courses was also an option.

In addition to discussing the above commonalities that can be considered for transfer from the source sites to the target site, the researcher noticed appealing findings related to the elements in the nursing program. For instance, based on the source sites institution's websites and personal communication with the source site's key informants, the didactic component of nursing courses was taught by doctoral-prepared nursing faculty. These doctoral prepared faculty were considered to be experts in their field and were actively conducting NIH funded-research,

which was one of the national college ranking service criteria in selecting their school. However, recruiting a doctoral- prepared nursing faculty at the target site may be challenging. Nationally, the annual number of doctoral graduates with a Ph.D. has not much changed from 2010 to 2016; the influx noted in 2017 was for the DNP, a practice doctorate, as showed in Figure 5.1 and 5.2. The IOM, AACN, and NLN recognize that shortage of doctoral-prepared nursing faculty is a contributing factor to the overall shortage of competent nurses.

Limitations of this Study

The limitation of this study should be considered when interpreting the results. The organizing framework of the curriculum at the source sites and target site were based on the researcher's interpretation of the publicly accessible documents and personal communication with key informants of the source sites. The sequencing of the curriculum was based on the publicly accessible degree plans at the source sites and target site. The identified common curricular themes were based on the course name and description in the publicly accessible documents. And, the focus was based on the interpretation of the program's outcomes, description, mission, vision, philosophy, or strategic plans. Since not all course syllabi were publicly accessible, the common curricular themes were limited to the information or details provided in the course description. Hence, these limitations could affect data analysis. The selected seven top-ranked nursing programs and the nursing program at the target site were accredited by CCNE. Data related to the employer's satisfaction of graduates from the source sites and target site were not found in any publicly accessed documents yet were included in the national college ranking services' source of data.

The study is limited in using the NCLEX-RN passing rates as the objective indicator of the program outcomes and quality of the graduates. The NCLEX-RN performance of the

graduates from the nationally nominated top-ranked prelicensure baccalaureate programs in this study was higher than the national standards and the state requirements. However, when compared to non-selected schools of nursing with a similar size of student cohort, the nursing programs at the source sites did not always have the highest NCLEX-RN passing rates for the observed three consecutive years. For example, the prelicensure baccalaureate nursing program of the Baylor University had NCLEX-RN passing rate pf 97% (200/205) in 2017, 95% (190/200) in 2016, and 96.89% (187/193) in 2015 (Texas Board of Nursing, n.d.). However, this program was not identified as one of the top-ranked prelicensure nursing programs nationally as it did not have a consistent nomination from the three national college ranking services. These aspects limit the generalization of this study's findings.

Further studies should be conducted using all course syllabi, the faculty's teaching plan indicating the amount of time spent on the content, objective, or outcomes, and the NCSBN's program reports showing the graduates' performance on the NCLEX-RN content areas. Although this study was limited to four-year prelicensure nursing curriculum, the core nursing courses in the curriculum could be adapted to other program types, such as accelerated prelicensure nursing programs either two-year or three-year degree plan.

Number of people receiving nursing doctoral degrees annually

	2010	2011	2012	2013	2014	2015	2016	2017	Total
DNP	1,282	1,595	1,858	2,443	3,065	4,100	4,855	6,090	25,288
PhD	532	601	610	628	743	709	773	795	5,391
Total	1,814	2,196	2,468	3,071	3,808	4,809	5,628	6,885	30,679

Figure 5.1. Number of Nursing Doctoral Graduates from Ph.D. and DNP Programs in 2010-2017. This figure was from the secondary indicator graphics in the Campaign for Action (2018). Indicator 2: Doctoral Degrees – Double the Number of Nurses with a Doctorate by 2020: Number of People Receiving nursing Doctoral Degrees Annually. Copyright 2018 by Campaign for Action.

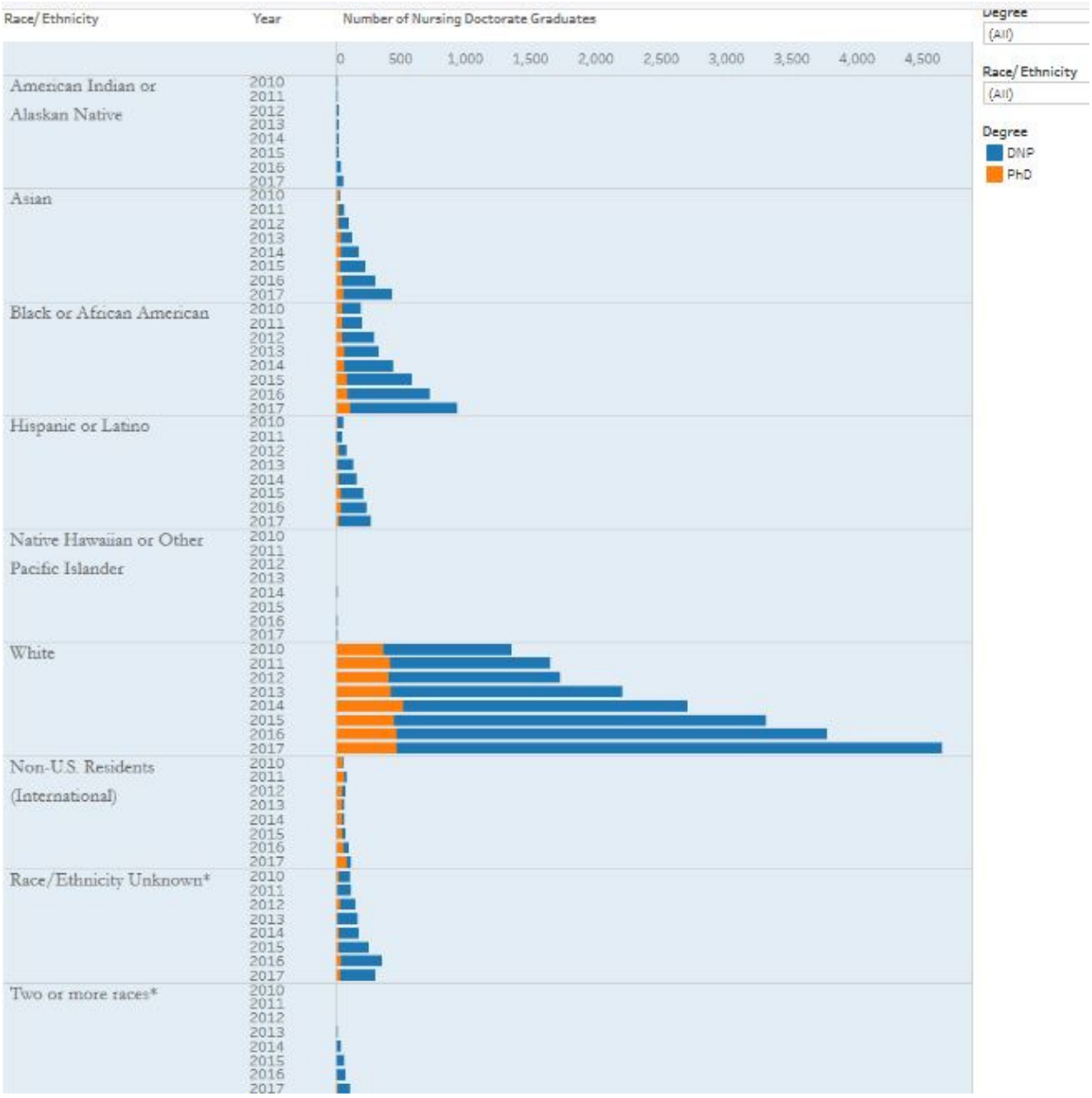


Figure 5.2. Number of Nursing Doctoral Graduates from Ph.D. and DNP Programs in 2010-2017 and Their Diversity. The figure was from the secondary indicator graphics in the Campaign for Action (2018). Indicator 7: Diversity-Make Diversity in the Nursing Workforce a Priority. Copyright 2018 by Campaign for Action.

Implications for Nursing Education and Future Research

The results of this study are best seen as an initial assessment of exemplary prelicensure four-year baccalaureate nursing program from the perspective of the curriculum structure. Since there was no published research study depicting an exemplary prescribed curriculum, this study can be utilized as a starting point for nursing faculty in developing and revising a nursing curriculum. Instead of trial and error or reforming and piloting a curriculum, nurse educators, stakeholders, or higher education administrators could review the results of this study as practical and successful exemplars. Organizations or individuals, who are interested in effectively increasing and optimizing the supply of baccalaureate prepared nurses, could use this study to identify the source sites' elements in the nursing education and curriculum component. This study might become a practical curriculum reference in reviewing areas to improve the licensure passing rates. This study might also be used as a curriculum comparison to other research studies that select prelicensure four-year baccalaureate nursing programs with NCLEX-RN passing rates lower than the national standards or the state board requirements.

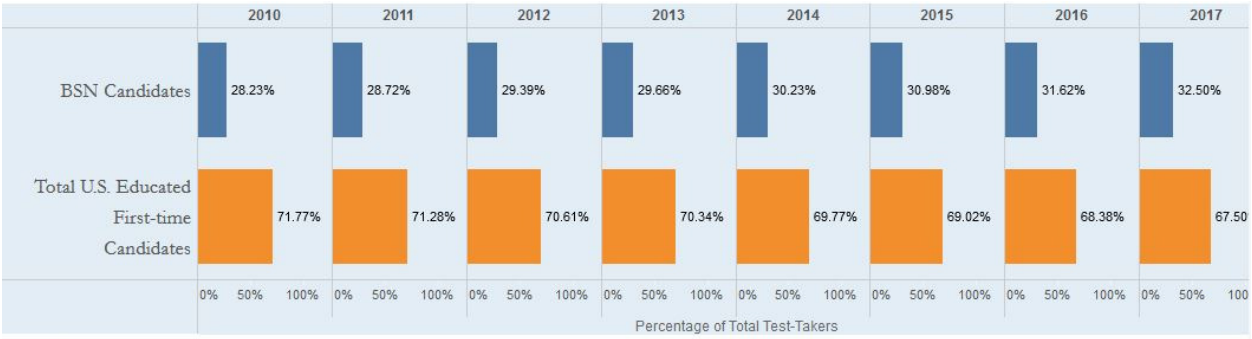
Because the curriculum at the source sites and target site showed similarity in the sequencing of curriculum, the proportion of the five AACN (2008) Essentials curricular themes, and curricular focus, the discussion of transferrable curriculum components is limited to enhancing the content related to pharmacological nursing interventions and advancing the level of content related to chemistry. These two courses would enhance student's clinical judgment related to safe medication administration and interpretation of the patient's laboratory results. Nursing faculty may want to review other courses related to patient safety in medication administration, nursing procedures, and clinical data interpretation.

Based on the NCLEX-RN results at the target site and source sites, the researcher noticed that student attributes, faculty educational background, and academic support services possibly had minimal affect in producing high quality graduates. Despite the master-prepared faculty members and students with lower SAT or ACT scores at the target site, the faculty's commitment in implementing exemplary rigorous curriculum, as shown in their academic progression standards, showed that the target site's program outcomes and their graduate's performance were comparable to nationally known top-ranked nursing programs. This should encourage individuals or organizations who are interested in developing or supporting prelicensure baccalaureate nursing programs in spite of the limited availability of doctoral-prepared faculty.

Furthermore, the IOM (2010) urged nursing programs to increase the number of baccalaureate-prepared nurses in the workforce to 80 percent by 2020. According to the April 2013 report, the proportion of nurses holding a bachelor's or higher degree was approximately 55 percent (Health Resources and Services Administration Bureau of Health Professions, 2013). Based on the NCLEX-RN statistical report from the National Council of State Boards of Nursing (NCSBN) shown in Figure 5.3, the number of BSN candidates has not changed much from 2010 to 2017. Thus, those interested in effectively increasing and optimizing the supply of baccalaureate prepared nurses will be able to utilize the results of this study.

With the health reform legislation and the American Recovery and Reinvestment Act of 2009, many health care institutions rely on interventions performed within the RN scope of practice (Sochalski & Weiner, 2011). However, the IOM (2003, 2010) expressed concern related to nursing deficiencies in the quality of patient care. Since nursing curriculum serves as a blueprint to develop a professional nurse, the result of this study provided exemplars of

curriculum related to topics or themes in the curriculum for nursing faculty to support and prepare nursing students for the professional RN role. This study offered guidance to those involved in the design of nursing educational plans and curriculum. Furthermore, this study offered a reference to curriculum components that can be transferred from one program to another and not replication of a program's practice in another school of nursing or university.



Summary Table

Number and percent of U.S.-educated, first-time NCLEX-takers with BSN

	2010	2011	2012	2013	2014	2015	2016	2017
BSN Candidates	55,407	58,246	62,535	65,406	68,175	70,889	72,655	75,944
BSN Candidates - Percentage	39.3%	40.3%	41.6%	42.2%	43.3%	44.9%	46.2%	48.2%
Non-BSN Candidates	85,475	86,337	87,731	89,692	89,197	87,068	84,488	81,776
Non-BSN Candidates - Percentage	60.7%	59.7%	58.4%	57.8%	56.7%	55.1%	53.8%	51.8%

Figure 5.3. Comparison of the Number of BSN Candidates to Non-BSN Candidates Taking the NCEX-RN for the First-time in 2010-2017. This figure was from the secondary indicator graphics in the Campaign for Action (2018). Indicator 1: Education-Increase the Proportion of Nurses with a Baccalaureate Degree to 80 percent by 2020: Number and percent of U.S. – educated, first-time NCLEX-takers with BSN. Copyright 2018 by Campaign for Action.

Conclusion

This study potentially contributes to understanding the common sequencing of curriculum (Table 5.2) and common curricular foci (Table 4.26) of the top-ranked prelicensure baccalaureate programs. After considering the confounding factors, such as student attributes, faculty educational background, the parent institution and the program's academic resources, an exemplary prelicensure baccalaureate nursing curriculum would contain: (1) didactic and clinical component; (2) a significant proportion of the AACN curricular themes of liberal education and generalist nursing. This study also found that the curricula sequencing of an exemplary

curriculum incorporated the AACN Essentials. There was no consensus on the total amount of time in providing clinical experience among the seven selected top-ranked prelicensure baccalaureate nursing programs, all programs utilized current educational technologies, such as simulators, real-time response systems, and computerized examination programs.

This study provides a practical curriculum reference of an exemplary prescribed nursing curriculum because there is a lack of research focusing on nursing curriculum components that impact the success of graduates. Since there were no other publicized studies that compared top-ranked prelicensure baccalaureate nursing programs, this study might be utilized as a reference for future research. The case studies in this study showed that each nursing curriculum focuses on patient safety and quality of patient care. This study showed that curriculum components could be transferred from the source sites to the target site without replicating a program's practice in another school of nursing or university. Although the students and faculty' attributes might affect the performance of the program, the constructing and implementing a curriculum, that meets the components discussed in this study, is crucial in producing high quality graduates.

Readers and reviewers must consider the limitations, delimitations, and research design in interpreting the results of this study. Further studies are needed in identifying specific AACN's (2008) 109 outcomes statements that are included in prescribed prelicensure nursing curricula in multiple top-ranked prelicensure baccalaureate nursing programs. After identifying the peer institutions of the target site, a study that compares graduate performance at the target site with another four-year prelicensure BSN programs at its peer institutions could provide insights for further curriculum improvement. The researcher recommends the following empirical studies in the near future:

- Identify AACN (2008) Essentials' or the updated AACN Essentials' outcomes statements, if any, in other types of prelicensure BSN curriculum structures, such as the prelicensure accelerated BSN curriculum.
- Compare AACN (2008) Essentials' or the updated AACN Essentials' outcomes statements, if any, with multiple curricula of top-ranked prelicensure accelerated BSN programs.
- Compare curriculum components between four-year prelicensure BSN program in U.S. and in Canada as graduates from these two countries sit on the NCSBN NCLEX-RN examination.
- Explore any correlations between the respective states boards of nursing's minimal NCLEX-RN passing rates and the prelicensure BSN graduates' preparation and clinical experience.
- Explore International four-year prelicensure BSN curriculum structures that had their graduates passed the NCLEX-RN (First-time, Internationally Educated).

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Appendix A

Introductory E-mail

Dear XXX [Key-Informant Name],

I am a graduate student in the Curriculum and Instruction Doctor of Philosophy program at the University of Arkansas Fayetteville. I would like to gain insight regarding your prelicensure BSN curriculum as your program has been listed as one of top-ranked four-year prelicensure BSN programs in the nation between 2016 and 2018, in addition to public documents including but not limited to undergraduate catalog.

The purpose of researching these information is to create a descriptive analysis of top-ranked nursing program curriculum in the U.S. Your participation in this research will enrich the nursing education and scholarship. Furthermore, you will have the first access to my result that will strengthen and enhance your nursing program.

I sincerely ask for your assistance to add or clarify information that are found on your institution or program website, such as your model of quality improvement. Could you kindly spare approximately 15 – 20 minutes of a telephone interview session? Information provided will remain confidential, unless they are already public information.

Please know that participation in the interview voluntary and your responses are confidential. The University of Arkansas Institutional Review Board (IRB) has approved this project. Please feel free to contact me with questions regarding the interview or the results. Kindly let me know your convenient date and time for the telephone interview. My email address is xxx@uark.edu and my cell-phone number is xxx-xxx-xxxx.

Look forward to hearing from you soon.

Thank you for your time and consideration of participating!

Appendix B

Recruitment E-mail

Dear XXX [Key-Informant Name],

Further to my initial e-mail dated xx/xx/xxxx, as a nurse leader and educator, you are in an ideal position to provide valuable information on effective, evidence-based curriculum design that may influence the success of nursing students and faculty who are involved in teaching-learning. Your program has been listed as one of top-ranked four-year prelicensure BSN programs in the nation between 2016 and 2018. The purpose of this e-mail is to encourage you to participate in my research project analyzing top-ranked four-year BSN prelicensure program curriculum. By participating in a telephone interview, you are providing valuable information in addition to public information. The telephone interview is approximately 15- 20 minutes to complete. Your participation in my research project is crucial in completing my dissertation and contributing to nursing education and scholarship. If you are interested in the result of my research project, I would be gladly sent it to you. Please let me know your convenient date and time for the telephone interview. My email address is xxx@uark.edu and my cell-phone number is xxx-xxx-xxxx.

Look forward to speaking with you.

Thank you for generously sharing your time.

Appendix C
University of Arkansas IRB Approval Letter

UNIVERSITY OF ARKANSAS

To:	Silvia Imanda
From:	Douglas James Adams, Chair IRB Committee
Date:	08/07/2018
Action:	**Expedited Approval**
Action Date:	08/07/2018
Protocol #:	1805121844
Study Title:	An Analysis of the Top-ranked Pre-licensure BSN Curriculum
Expiration Date:	06/24/2019
Last Approval Date:	

The above-referenced protocol has been approved following expedited review by the IRB Committee that oversees research with human subjects.

If the research involves collaboration with another institution then the research cannot commence until the Committee receives written notification of approval from the collaborating institution's IRB.

It is the Principal Investigator's responsibility to obtain review and continued approval before the expiration date.

Protocols are approved for a maximum period of one year. You may not continue any research activity beyond the expiration date without Committee approval. Please submit continuation requests early enough to allow sufficient time for review. Failure to receive approval for continuation before the expiration date will result in the automatic suspension of the approval of this protocol. Information collected following suspension is unapproved research and cannot be reported or published as research data. If you do not wish continued approval, please notify the Committee of the study closure.

Adverse Events: Any serious or unexpected adverse event must be reported to the IRB Committee within 48 hours. All other adverse events should be reported within 10 working days.

Amendments: If you wish to change any aspect of this study, such as the procedures, the consent forms, study personnel, or number of participants, please submit an amendment to the IRB. All changes must be approved by the IRB Committee before they can be initiated.

You must maintain a research file for at least 3 years after completion of the study. This file should include all correspondence with the IRB Committee, original signed consent forms, and study data.

Appendix D

University of Arkansas Fort Smith College of Health Sciences

Re: Permission to use UAFS SON BSN curriculum information

Carolyn Mosley

Sent: Friday, September 14, 2018 4:44 PM
To: Silvia Imanda
Cc: Lynn Korvick; Carolyn Mosley; Carol Hill

Silvia: The SON curriculum is public information as it is in the catalog and university website.

Sent from my iPhone

> On Sep 12, 2018, at 7:20 PM, Silvia Imanda <Silvia.Imanda@uafs.edu> wrote:
>
> Dr. Korvick,
>
> Kindly advise how to obtain a permission to use our curriculum information in my dissertation project. Dr. Mosley is aware about my study as she has been supporting and helping me in the proposal process. My research project has been approved by the Univ. of Arkansas IRB. Enclosed is my proposal and IRB approval letter for your review.
>
> The participating nursing programs for this study are selected from prelicensure four-year baccalaureate programs nominated by at least by three national college ranking services for the year 2015 to 2018 from the following list: College Affordability (https://www.collegeaffordabilityguide.org/ subjects/nursing), College Atlas (https://www.collegeatlas.org/nursing-college-rankings.html), College Choice (http://www.collegechoice.net/rankings/best-undergraduate-nursing-schools/), Top Universities (https://www.topuniversities.com/university-rankings/university-subject-rankings/), and Value College (https://www.valuecolleges.com/rankings/best-value-bsn-programs). The University of Arkansas Fort Smith (UAFS) prelicensure four-year baccalaureate program is selected as the target site in this study design, which is Bardach smart practice.
>
> Look forward to hearing from you.
>
> Thank you.
> Sincerely,
> Silvia
> <Defended proposal 13April 2018.docx>
> <IRB ExpeditedApprovalLetter.pdf>

Appendix E

National League for Nursing Permission to Reprint or Republish Curriculum Portion

FW: New form entry is submitted

Amy McGuire [amcguire@nln.org] on behalf of Copyright Permission [cpermission@nln.org]
Sent: Friday, August 11, 2017 10:57 AM
To: Silvia Imanda

Dear Silvia Imanda:

The NLN has received your request for permission to include the Curriculum portion of the *NLN Hallmarks of Excellence in Nursing Education*© in the appendix of your dissertation. We are pleased to grant you permission to use this content from the following source in the manner requested, provided the assumptions and caveats listed below will be respected.

> National League for Nursing (2004). *Hallmarks of Excellence in Nursing Education.* New York: National League for Nursing. Retrieved from: http://www.nln.org/professional-development-programs/teaching-resources/hallmarks-of-excellence#Curriculum .

- The content will only be used for the purpose outlined above.
- The content will be included in its entirety and not modified in any way.
- Acknowledge that the content is being used with the permission of the National League for Nursing, Washington, DC.
- The National League for Nursing is the sole owner of these rights being granted.
- No fees are being charged for this permission.

Respectfully,
Amy

Amy McGuire | Program Manager | National League for Nursing | www.nln.org | amcguire@nln.org | 202-909-2509 | 2600 Virginia Avenue NW, 8th Floor, Washington, DC 20037

From: generalinfo@nln.org [mailto:generalinfo@nln.org]
Sent: Monday, July 31, 2017 8:23 PM
To: General Information

Appendix F

National League for Nursing Hallmark of Excellence for Curriculum

The curriculum is flexible and reflects current societal and health care trends and issues, research findings and innovative practices, as well as local and global perspectives

- Are there opportunities for students to take electives that match their interests?
- Are there opportunities for students to take courses in a sequence that makes sense to them or that allows them to study areas when they have learning needs in that area? Are "open, uncommitted" areas available throughout the curriculum that allow faculty to address new issues, current trends, and scientific developments without having to wait for a major curriculum revision?
- Is the curriculum regularly refined to incorporate current societal and health care trends and issues, research findings, innovative practices, and local as well as global perspectives?

The curriculum provides experiential cultural learning activities that enhance students' abilities to think critically, reflect thoughtfully, and provide culturally-sensitive, evidence-based nursing care to diverse populations

- Do all students have an extended, relatively intense learning experience with individuals from cultures other than their own?
- How do faculty draw on learning experiences to enhance students' abilities to be culturally-sensitive in the care they provide?
- How do faculty help students heighten their awareness of their own values, biases, and stereotyping?

The curriculum emphasizes students' values development, socialization to the new role, commitment to lifelong learning, and creativity

- How much class time is devoted to self-reflection, values clarification, analysis of what it means to be a nurse in the 21st century, and developing and living one's commitments to the profession, lifelong learning, career development, etc.?
- To what extent are students allowed and encouraged to be creative?
- How do faculty respond to students who are "different" in terms of their approach to doing assignments, the ways they learn, the way they think, and how they set priorities?

The curriculum provides learning experiences that prepare graduates to assume roles that are essential to quality nursing practice, including but not limited to roles of care provider, patient advocate, teacher, communicator, change agent, care coordinator, user of information technology, collaborator, and decision maker

- What learning experiences give students the opportunity to develop confidence in their ability to advocate for patients/families, teach individuals and groups about health care, serve as a member of a multidisciplinary team, serve as a leader of a nursing team, facilitate change, manage conflict, and make decisions that affect their own well being and the health of the patients/families for whom they care?
- How are students helped to develop confidence in their ability to use technological resources and manage large amounts of information?

- How do faculty help students develop their writing skills, ability to speak to groups, ability to argue convincingly, ability to listen effectively, and other effective communication skills?

The curriculum provides learning experiences that support evidence-based practice, multidisciplinary approaches to care, student achievement of clinical competence, and, as appropriate, expertise in a specialty role

- To what extent does each clinical experience help students develop their ability to provide culturally-competent, evidence-based care to patients/families/ communities experiencing a wide range of health problems?
- Do graduate students have learning experiences that help them develop as experts in the full scope of their new role (i.e., advanced practitioner, educator, administrator, consultant, etc.), as members and leaders of multidisciplinary teams, and as professionals whose services (i.e., primary care, public health, teaching and curriculum development, etc.) are evidence-based?

The curriculum is evidence-based

- What research has been used to determine how the curriculum is designed?
- How is current research used to help faculty determine when to make changes in the curriculum and what those changes will be?

Source: http://www.nln.org/professional-development-programs/teaching-resources/hallmarks-of-excellence

Appendix G

Future of Nursing Campaign for Action Permission to Reprint or Republish Secondary Indicators

UNIVERSITY OF ARKANSAS

Silvia Imanda <simanda@email.uark.edu>

Permission to reprint or republish content from campaignforaction.org: Dissertation

campaignforaction <campaignforaction@aarp.org> Mon, Oct 15, 2018 at 7:59 AM
To: Silvia Imanda <[redacted]@email.uark.edu>

Good morning Silvia,

Permission granted. Please make sure you cite the Future of Nursing: *Campaign for Action*.

Good luck on your dissertation.

Regards,

Aidan Elizabeth McCallion

Digital Communications Project Analyst

Center to Champion Nursing in America

AARP Public Policy Institute

601 E Street NW

Washington, DC 20049

E-mail: amccallion@aarp.org

Office: 202-434-3852 |Cell: 202-615-5647

From: Silvia Imanda <[redacted]@email.uark.edu>
Sent: Saturday, October 13, 2018 11:59 AM
To: campaignforaction <campaignforaction@aarp.org>
Subject: Permission to reprint or republish content from campaignforaction.org: Dissertation

Campaign for Action,

I would like to obtain your permission to reprint or republish content from your Dashboard secondary indicators for my dissertation (doctoral research project). This dissertation project will be used in partial fulfillment of the requirements of the Doctoral of Philosophy in Science Education at University of Arkansas.

Appendix H

MCON Prelicensure BSN curriculum: Early admission model

	July 2014 – Fall 2017		**Spring 2018 and onwards**
		Freshman	
Credits	Courses	Credits	Courses
4	RHET:1030 Rhetoric	4	RHET:1030 Rhetoric
3	CHEM:1070 General Chemistry I	3	CHEM:1070 General Chemistry I
3	PSY:1001 Elementary Psychology	3	PSY:1001 Elementary Psychology
4	MATH:1440 Mathematics for the Biological Sciences	4	MATH:1440 Mathematics for the Biological Sciences
1	NURS:1020 FYS: Nursing	1	NURS:1020 FYS: Nursing
2	CSI:1600 Success at Iowa	1	Elective
17	Total credit hours	16	Total credit hours
3	CHEM:1080 General Chemistry II	3	CHEM:1080 General Chemistry II
4	BIOL: Intro Animal Biology	4	BIOL: Intro Animal Biology
3	NURS:1030 Human Dev & Behavior1141	3	NURS:1030 Human Dev & Behavior1141
3	SOC:1010 Sociology or SOC:1020 Social Problems	3	SOC:1010 Sociology or SOC:1020 Social Problems
3	International and Global Issues	3	International and Global Issues
		1	*Elective*
16	Total credit hours	*17*	*Total credit hours*
		Sophomore	
Credits	Courses	Credits	Courses
3	ACB:3100 Principles Human Anatomy	3	ACB:3100 Principles Human Anatomy
3	HHP:2310 Nutrition & Health	3	HHP:2310 Nutrition & Health
3	Literary, Visual & Performing Arts	3	Literary, Visual & Performing Arts
3	Values & Culture or Diversity & Inclusion	3	Values & Culture or Diversity & Inclusion
3	Elective	3	Elective
2	Elective	*1*	*Elective*
17	Total credit hours	*16*	*Total credit hours*
3	NURS:3110 Healthcare Finance	3	NURS:3110 Healthcare Finance
3	MICR:3164 Nursing Microbiology	3	MICR:3164 Nursing Microbiology
3	HHP:1300 Fundamentals of Human Physiology	3	HHP:1300 Fundamentals of Human Physiology
3	Elective (preferred upper level	3	Elective (preferred upper level

	statistics)		statistics)
		Sophomore (Continued)	
Credits	Courses	Credits	Courses
3	Elective	3	Elective
1	Elective	1	Elective
17	Total credit hours	17	Total credit hours
		Junior	
Credits	Courses	Credits	Courses
5	NURS:3138 Nursing and Pharmacological Interventions I	5	NURS:3138 Nursing and Pharmacological Interventions I
3	NURS:3128 Health Assessment and Communication Across the Lifespan	3	NURS:3128 Health Assessment and Communication Across the Lifespan
3	NURS:3518 Pathology	3	NURS:3518 Pathology
3	NRS:3160 Professional Role I: Professionalism and Patient Safety	3	NRS:3160 Professional Role I: Professionalism and Patient Safety
3	NURS:3150 Clinical Simulation Laboratory I	3	NURS:3150 Clinical Simulation Laboratory I
17	Total credit hours	17	Total credit hours
5	NURS:3438 Nursing and Pharmacological II	5	NURS:3438 Nursing and Pharmacological II
3	NURS:3615 Adult Medical/Surgical Practicum	3	NURS:3615 Adult Medical/Surgical Practicum
3	NURS:3620 Gerontological Nursing	3	NURS:3620 Gerontological Nursing
2	NURS:3625 Gerontological Nursing Practicum	2	NURS:3625 Gerontological Nursing Practicum
3	NURS:3460 Professional Role: Research	3	NURS:3460 Professional Role: Research
2	NURS:3450 Clinical Simulation Laboratory II	2	NURS:3450 Clinical Simulation Laboratory II
18	Total credit hours	18	Total credit hours
		Senior	
Credits	Courses	Credits	Courses
3	NURS:3630 Parent Child Nursing	3	NURS:3630 Parent Child Nursing
3	NURS:3640 Psychiatric/Mental Health Nursing	3	NURS:3640 Psychiatric/Mental Health Nursing
2	NURS:3635 Parent Chile Nursing Practicum	2	NURS:3635 Parent Chile Nursing Practicum
2	NURS:3645 Mental Health Nursing Practicum	2	NURS:3645 Mental Health Nursing Practicum
3	NURS:3660 Professional Role IIIL Improving Health Systems	3	NURS:3660 Professional Role IIIL Improving Health Systems

	BSN Honors		BSN Honors
13	Total Credit Hours	13	Total Credit Hours
	Senior (Continued)		
Credits	Courses	Credits	Courses
3	NURS:3650 Community and Public Health Nursing	3	NURS:3650 Community and Public Health Nursing
2	NRS:3655 Community and Public Health Nursing Practicum	2	NRS:3655 Community and Public Health Nursing Practicum
5	NURS:4155 Senior Nursing Internship	5	NURS:4155 Senior Nursing Internship
3	NURS:4160 Professional Role IV: Leadership and Professional Engagement	3	NURS:4160 Professional Role IV: Leadership and Professional Engagement
	BSN Honors		BSN Honors
13	Total Credit Hours	13	Total Credit Hours

Appendix I

MSON Prelicensure BSN curriculum

	Spring 2018 and prior		**Fall 2018 and onwards (Note: No credit hours was announced at the time of this study)**
		Freshman	
Credits	Courses	Credits	Courses
3	Nursing as a Societal & Interpersonal Profession (NURS 122)		Context of Care I
4	Organic & Biol Chem (BioChem 212)	4	Biochemistry 212
4	Intro to Psychology (Psych 111)		English 124 or other first-year writing course
4	First-Year Writing Requirement or Elective		Introduction to Psychology (Psychology 111)
15	Total credit hours	6	Anatomy and Physiology (NURS 210)
4	Health Assessment (NURS 152)		Anatomy and Physiology Lab (NURS 211)
6	Structure & Function of Human Body (NURS 210)	4	Intro to Developmental Psychology (Psychology 250)
4	Intro to Developmental Psych (Psych 250)		Applied Statistics (NURS 218)
4	First-Year Writing Requirement or Elective		Communications, Groups & Teams (NURS 196)
18	Total credit hours		Nursing Seminar (NURS 142)
		1-2	Elective
		Sophomore	
Credits	Courses	Credits	Courses
3	Health Promotion & Risk Reduction (NURS 230)	4	Pharmacology (NURS 240)
6	Pathophysiology (NURS 245)	6	Pathophysiology (NURS 245)
2	Health Maintenance I – Lecture (NURS 254)		Health Assessment, with lab
3	Health Maintenance I – Clinical (PNE 200-249)		Research & evidence-based practice (Using data in nursing)
2-3	Elective		Infectious diseases
16-17	Total credit hours		Culture of Health
			Nursing therapies (lecture & PNE)
		Sophomore	
4	Pharmacology (NURS 240)		
2	Health Maintenance II – Lecture (NURS 256)		
3	Health Maintenance II – Clinical		

	(PNE 250-299)		
3	Intro to Research Approach in Nursing (NURS 257)		
4	Intro to Statistics & Data Analysis (Stats 250)		
1-2	Elective		
17-18	Total credit hours		
		Junior	
Credits	Courses	Credits	Courses
5	Health & Illness in Young, Middle & Older Adults – Lecture (NURS 356)		Care of the family: Infants, Children & Adolescent (lecture & PNE)
4	Health & Illness in Young, Middle & Older Adults – Clinical (PNE 350-374)		Elective, IPE course, and/or course to fulfill minor requirements
3	Mental Health & Illness Across Lifespan – Lecture (NURS 358)		Nursing therapies II (lecture & PNE)
4	Mental Health & Illness Across Lifespan – Clinical (PNE 375-399)		Behavioral health (lecture & PNE)
16	Total credit hours		
3	Childbearing & Reproductive Health – Lecture (NURS 352)		
4	Childbearing & Reproductive Health – Clinical (PNE 300-324)		
5	Infant, Child & Adolescent Health & Illness – Lecture (NURS 354)		
4	Infant, Child & Adolescent Health & Illness – Clinical (PNE 325-349)		
16	Total credit hours		
		Senior	
Credits	Courses	Credits	Courses
2	Community Health Nursing – Lecture (NURS 456)		Population Health (lecture & PNE)
6	Community Health Nursing – Clinical (PNE 400-424)		Leadership for professional practice improvement (lecture & PNE)
5	Leadership & Management – (NURS 454)		Context of Care II
1-2	Elective		Nursing therapies III (lecture &clinical PNE)
14-15	Total credit hours		Role transition
			Elective, IPE course, and/or course to fulfill minor requirements

Senior (Continued)

2	Care of Patients with Complex Needs I – Lecture (NURS 457)
4	Care of Patients with Complex Needs I – Clinical (PNE 425-449)
2	Care of Patients with Complex Needs II – Lecture (NURS 459)
5	Care of Patients with Complex Needs II – Clinical (PNE 450-474)
1-2	Elective
14-15	Total credit hours

Appendix J

SSON Prelicensure BSN curriculum

2012-2014		2016-2018	
		Freshman	
Credits	Courses	Credits	Courses
3	RHE306 Rhetoric & Writing	3	RHE306 Rhetoric & Writing
3	CH301 Principles of Chemistry I	3	CH301 Principles of Chemistry I
3	SSC302 Data Analysis for Health Sciences	3	SDS302 Data Analysis for Health Sciences
3	UGS302 or UGS303 First-Year Signature Course	3	UGS302 or UGS303 First-Year Signature Course
3	Visual & Performing Arts Core Course	3	Visual – Performing Arts
15	Total credit hours	15	Total credit hours
3	BIO311C Introductory Biology I	3	BIO311C Introductory Biology I
3	NTR306 Fundamentals of Nutrition	3	NTR306 Fundamentals of Nutrition
3	PSY301 Intro to Psychology	3	PSY301 Intro to Psychology
3	GOV310L American Government	3	N309 Global Health
3	American History Core Course	3	E316L, E316M, E316N or E316P
15	Total credit hours	15	Total credit hours
		Sophomore	
Credits	Courses	Credits	Courses
3	N310 Communication in Health Care Settings	4	BIO446L Human Microscopy & Gross Anatomy
3	N309 Global Health	3	BIO326M Intro to Medical Microbiology
4	BIO446L Human Microscopy & Gross Anatomy	3	PSY304 or HDF313/113L
3	BIO326M Intro to Medical Microbiology	3	American History Core Course
3	E316K Masterworks of Literature	3	N310 Communication in Health Care Settings
16	Total credit hours	16	Total credit hours
3	Growth & Development	3	N320 Intro to Patient-Centered Nursing Care
3	N321 Ethics of Health Care	2	N224 Health Assessment Skills
3	BIO365S Systems Physiology	1	N127P Clinical Nursing Skills I Practicum
1	BIO165U Systems Physiology Lab	3	N321 Ethics of Health Care
3	PHR338 Intro to Pharmacology	3	BIO365S Human Systems Physiology

		1	BIO165U Physiology Lab
		3	GOV312L or 312P
13	Total credit hours	16	Total credit hours
		Junior	
Credits	Courses	Credits	Courses
2	N224 Health Assessment Skills	3	N356 Mental Health Nursing Across Lifespan
3	N325 Adult Health Nursing I	2	N256P Problems in Mental Health Nsg Practicum
3	N325P Adult Health Nursing I Practicum	3	N325 Adult Health Nursing I
1	N127P Clinical Nursing Skills I Practicum	3	N325P Adult Health Nursing I Practicum
3	N227 Conceptual Bases of Aging	2	N264 Nursing Research
12	Total credit hours	13	Total credit hours
3	N264 Nursing Research	2	N265 Nursing Care of Childbearing Families
3	N354 Spanish for Health Care Professionals	3	N365P Nsg Care of Childbearing Families Practicum
2	N455 Adult Health Nursing II	2	N255C Adult Health IIA
3	N355P Adult Health Nursing II Practicum	1	N157P Clinical Nursing Skills II Practicum
3	N356 Mental Health Nsg Across the Lifespan	2	N223 Genetics in Health Care
2	N356P Problem in Mental Health Nsg Practicum	2	N250 Interprofessional Collaborative Practice
1	N157P Clinical Nursing Skills II	3	PHM338 Pharmacology
17	Total credit hours	15	Total credit hours
		Senior	
Credits	Courses	Credits	Courses
2	N265 Nursing Care of Childbearing Families	2	N266 Nursing Care of Children & Families
3	N365P Nsg Care of Childbearing Families Pract	3	N366P Nsg Care of Children & Families Practicum
2	N266 Nursing Care of Children & Families	2	N255D Adult Health IIB
3	N366P Nursing Care of Children & Families Pract	3	N355P Adult Health II Practicum
3	N278 Contemporary Nursing Practice	3	N354 Spanish for Health Care Professionals
2	N323 Genetics in Health Care	2	N273 Quality & Safety for Nursing Practice
15	Total credit hours	15	Total credit hours

2	N275 Public Health Nursing	2	N275 Public Health Nursing
3	N375P Public Health Nursing Practicum	3	N375P Public Health Nursing Prac
2	N277P Clinical Care Management Practicum	3	N274 Complex Nursing Care
3	N377 Leadership & Management of Nsg Care	3	N377 Leadership & Management of Nursing Care
2	N279 Capstone Preceptorship	2	N277P Clinical Care Management Practicum
		2	N279P Capstone Preceptorship
12	Total credit hours	15	Total credit hours

Appendix K

Studies that Describe Curriculum Designs and Components

Themes	Topic	Author(s)/year	Type of Study	Lessons Learned
Organizational recommendations	The Quality and Safety Education for Nurses (QSEN)	Chenot and Daniel, 2010	Identifying the implementation of QSEN in nursing education	All of the participating baccalaureate programs included at least three of the six QSEN competencies for nursing: patient-centered care, teamwork and collaboration, evidence-based practice, safety, quality improvement, and informatics in their curricula.
	QSEN	Brady, 2011	Description of courses redesign in one's curriculum	The study found that QSEN provided a systematic structure to redesign course content and active learning modalities including clinical simulation.
Organizational recommendations	The National League for Nursing Accrediting Commission (NLNAC) standards and criteria	Schug, 2012	Description of one's program integrating NLNAC concept	The combination of three Cs model (context, content, and conduct) and six NLNAC concepts (context and environment, knowledge and science, personal and professional development, quality and safety, relationship-centered care, and teamwork) in the philosophy of one's nursing curriculum offered a systematic, comprehensive quality improvement of the program including the curriculum.
Content	Cultural competence	Cuellar, Brennan, Vito, and Leon Siantz, 2008	Description of the Blueprint for Integration of Cultural Competence in the Curriculum (BICCC)	The BICCC enhanced an undergraduate nursing curriculum focusing on cultural competence.

	Cultural competence	Calvillo, Clark, Ballantyne, Pacquiao, Purnell, and Villarruel, 2009	Recommendation for effective implementation of the integrated curriculum in cultural competence	Integration of five competencies of the AACN's cultural competency in baccalaureate curriculum prepares students to deliver quality care to the culturally diverse population of patients in the health care environment.
Content	Genomics	Daack-Hirsch, Dieter, and Griffin, 2011	Discussion of a genomic curriculum thread versus a standalone course	Incorporation of genomics into nursing practice should start in the undergraduate curricula. Genomics integrated in didactic and clinical component throughout the curriculum. To reinforce genomics in the clinical practice, internet-based tools such as WebQuest, Second Life, and wikis offer interactive and up-to-date platform.
	Genomics	Thompson and Brooks, 2011	A cross-sectional survey to evaluate the *Essential Nursing Competencies and Curricula Guidelines in Genetics and Genomics*	Based on a convenient sampling at a national nursing conference in 2008, most respondents admitted that their program (either the baccalaureate or the graduate level) did not fully meet the *Essentials* competencies.
Content	Gerontology/geriatric nursing	Gilje, Lacey, and Moore, 2007	National survey since the advent of the American Association of Colleges of Nursing's (AACN's) *Older Adults: Recommended*	Based on the survey of integration or stand-alone gerontology and geriatric nursing courses in undergraduate nursing curricula, the inclusion of gerontology/geriatric nursing care in disease and illness management is higher in the integrated type curriculum than in stand-alone courses. The authors encouraged programs to ensure the inclusion of

			Baccalaureate Competencies and Curricular Guidelines for Geriatric Nursing Care	gerontology/geriatric nursing care in the curriculum with sufficient time for students to value the care of older people and to be prepared to meet the demands of caring for this population.
Content	Informatics	Choi, 2012	Comparison of the informatics competencies of students among three undergraduate tracks: Traditional Pre-Licensure, Registered Nurse (RN) to Bachelor of Science in Nursing (BSN), and Accelerated BSN	The study found that Traditional Pre-Licensure students were the least competent comparing to Registered Nurse (RN) to Bachelor of Science in Nursing (BSN) students and Accelerated BSN students. The authors recommended specific areas of informatics competency (applied computer skills and clinical informatics role) to be integrated in nursing curricula.
	Informatics	Ornes and Gassert, 2007	Description of one's baccalaureate (BSN) curriculum evaluation of nursing informatics content	Based on a tool developed from the categories of informatics competencies, there was no informatics competencies included in the course syllabi. Although the students in this BSN program has some exposure to informatics, there was limited exposure to technologies in the clinical setting.
	Informatics	Thompson and Skiba, 2008	National survey to measure the informatics related requirements of	Although the majority of baccalaureate and graduate nursing programs claimed that informatics is integrated throughout the courses in their curricula and in clinical exposure to informatics, the authors cautioned

			nursing curricula	that nearly any type of computer-related activity was seen as informatics by the survey respondents.
Conceptual/ framework	the American Association of Colleges of Nursing (AACN) Essentials of Baccalaureate Education for Professional Nursing Practice	Fletcher and Kumm, 2012	Description of one's program curricular change journey from a medical structure to the AACN *Essentials*	The process and transition to a new curricular structure need strategic planning and a variety of theory, research, and interpersonnaly sensitive approach to guide faculty and implement the curriculum. The *Essentials* based curriculum better prepared a 21st century nurse generalist and decreased the program's disproportionate use of clinical resources.
	The AACN *Essentials*	Mailloux, 2011	Description of one's program curricular revision using the AACN *Essentials*	The AACN *Essentials* allows the curriculum to be consistent with the Commission on Collegiate Nursing Education accreditation standards. The author suggested other quantitative outcome assessment, such as retention and graduate rates, specialty and comprehensive standardized examination scores, licensure scores, and educational resource benchmarking reports, to determine if the new curriculum meets the program outcomes.
Conceptual/ framework	Community-based	Zoucha, Mayle, and Colizza, 2011	Description of one's program integrating cultural competent care and service learning concept in a community based BSN curriculum	The integration of Campinha-Bacote's transcultural nursing model and service learning in the community based curriculum allowed students to share their knowledge with other in the community and on campus and impact present and future health disparities in local and global communities.

Conceptual/ framework	Competency Outcomes Performance Assessment (COPA)	Lenburg, Klein, Abdur-Rahman, Spncer, and Boyer, 2009	Discussion of the Competency Outcomes Performance Assessment (COPA) model as a curricular framework to address quality care and competence for patient safety	The COPA model emphasizes eight core nursing practice competencies: Assessment and interventions skills, communication, critical thinking skills, human caring/relationship skills, teaching skills, managing skills, leadership skills, and knowledge integration skills; competency-based outcomes to guide program, courses, or learning outcomes; practice-driven learning; and competency performance examinations. Using the Klein Scales, linear regression analysis between COPA versus non-COPA students indicated significant higher competence scores.
Conceptual/ framework	Concept-based	Dearmon, Larson, and Hall, 2011	Description of one's prelicensure BSN program's curricular concept mapping experience	The concept mapping allowed faculty to evaluate and revise the concept-based course content within the curriculum focusing on concepts, such as safety quality (QSEN), culture (the AACN's Cultural Competencies in Baccalaureate Nursing Education), geriatrics (the AACN's Geriatric Nursing Education Consortium), and genetics (A Practice-Based Genetics Curriculum for Nurse Educators).
Conceptual/ framework	Outcomes-based	Kim, 2012	Description of outcomes based curriculum	The process of outcomes based curriculum development involved in10 steps including aligning the mission statements, goals, and philosophies of the nursing program with its parent university, meeting the curricular requirement of the parent university in terms of general education and credit allocation, satisfying the requirement of a State Board of

				Nursing, and addressing the standards for the Commission on Collegiate Nursing Education accreditation. The author pointed the need to develop teaching/learning approach to attain outcomes-oriented and competency based education as the conventional teaching/learning methods would not be appropriate.
Conceptual/ framework	Shared decision making	D'Antonio, Brennan, and Curley, 2013	Description of one's prelicensure BSN program's curricular change experience	Through the themes of judgment, inquiry, engagement, and voice, the shared decision making model curriculum offers the students to use class and clinical space as places where they can imagine themselves as a nurse. The Pennsylvania Board of Registration Of Nursing approved this new curriculum in Summer 2010.
Conceptual/ framework	Constructivist theory for learning	Rolloff, 2010	Description of a constructivist model in the baccalaureate nursing curriculum	Integration of constructivist theory for education in the baccalaureate nursing promotes strategic, student-centered teaching approach to adequately educate nursing students and advance evidence base practice in nurses.
Conceptual/ framework	Neuman system model	Beckman, Boxley-Harges, and Kaskel, 2012	Description of the efficiency of the Neuman systems model as a guiding framework for a baccalaureate nursing program	Based on the experience of three decades of using the Neuman system model in the nursing curriculum, the integration in the course, didactic, and clinical teaching has maintained the science and art of nursing in educating future nurses equipped for the delivery of high quality, competent, and personalized care.
Teaching-learning methods	Clinical reasoning pedagogies	Kulper, 2013	Description of integration of the Outcome-Present	The clinical reasoning pedagogies focus on complex and best judgments in positive patient outcomes, which are consistently

			State Test (OPT) model of clinical reasoning and mapping it in a baccalaureate nursing curriculum	integrated throughout the curriculum including didactic and clinical components.
Teaching-learning methods	Conceptual teaching-learning	Giddens, 2007	Description of one's program implementing *The Neighborhood* web-based platform to support conceptual teaching and learning	In a concept-based undergraduate curriculum, the web-based platform *The Neighborhood* across the curriculum offered multiple benefits such as, fostering deep learning as *The Neighborhood* allows for emotional experiences and ongoing exposure to the concept or exemplar as opposed to a single exposure during a seat-class session, facilitating student-centered learning, nurturing lifelong learning, and promoting Interdisciplinary relationships and cooperation.
Teaching-learning methods	Flipped or inverted classroom	Harrington, Vanden Bosch, Schoofs, Beel-Bates, and Anderson, 2015;	Description of a quantitative study comparing flipped and traditional nursing classroom of a first-level medical surgical nursing theory course	The result of comparing randomly assigned undergraduate students from a convenience sample of 82 baccalaureate nursing students showed no significant differences found for any student outcome measures within a concept-based curriculum.
	Flipped or inverted classroom	Ratta, 2015	Description of implementing team-based learning (TBL) within a flipped	Student performance on the final course examination showed improvement.

			classroom setting in an undergraduate nursing course	
	Flipped or inverted classroom	Hanson, 2016;	Description of student perception of the effectiveness of a flipped classroom	Result from the online survey from 26 of 51 sophomore nursing students in evaluating the effectiveness of a flipped classroom approach to increase understanding of pharmacology principles and the application of this knowledge to medication practice indicated positive student perception. The positive perception toward flipped classroom which was implemented as the eLecture pre-class and then attend the face-to-face workshop was voiced out by students who attended the face-to-face workshop.
Teaching-learning methods	Service-learning	Reising, Shea, Allen, Laux, Hensel, and Watts, 2008	Description of integrating service-learning among second and third year baccalaureate nursing students	The service learning is listed as an active learning strategy for nursing students at the baccalaureate level. The survey result of implementing service-learning research program among 173 of second year nursing students and 334 community participants indicated student satisfaction. Student perceived that the service-learning project has increased their understanding in nursing skills related to health promotion, assessment, civic engagement, and research.
Teaching-learning methods (Clinical component)	Clinical immersion nursing curriculum	Paulson, 2011	Description of the faculty experience with an innovative clinical immersion curriculum	The clinical immersion curriculum addressed the lack of qualified clinical faculty and the lack of agencies/clinical sites. The interpretive inquiry into the clinical immersion model showed effectiveness in revealing health issues. Based on the study,

				the clinical rotation changed from six to eight hours, three-day per week at a variety of community and acute care settings; whereas, the simulation bridged between the course s and transitioning students to clinical settings.
Teaching-learning methods (Clinical component)	Clinical simulation	Hart, Brannan, Long, Maguire, Brooks, and Robley, 2014	A qualitative study to evaluate a structured baccalaureate nursing curriculum with simulation training	In educating prelicensure BSN students to identify patients experiencing acute deterioration and intervene accordingly, the program incorporated simulation training. Based on the guided reflection session, the 39 female junior and nine female senior students described their own sense of investment in the simulation. The students described high level of integrity and appreciation for teamwork in caring for acute deteriorated patient scenarios. The authors convinced that the structured education curriculum with simulation training is effective in preparing baccalaureate students.
Teaching-learning methods (Interdisciplinary learning activities)	Interdisciplinary clinical learning activities	Reese, Jeffries, and Engum, 2010	A qualitative study describing students' perception toward interdisciplinary clinical activity	Both nursing and medical student groups described positive perception in using simulation to support interdisciplinary collaborative aspects of the simulation clinical component. Students perceived the interdisciplinary activity is helpful for learning to function in real-world situation and may promote patient outcomes including fewer errors.

Appendix L

Informed Consent Form

UNIVERSITY OF ARKANSAS

An Analysis of the Top-ranked Pre-licensure BSN Curriculum

Telephone Interview Informed Consent

The purpose of this research is to examine and compare the nursing curriculum by assessing top-ranked prelicensure baccalaureate programs in the United States.

The telephone interview will focus in your nursing program curriculum design and model for quality improvement. The telephone interview session will take approximately 15 – 20 minutes.

I .....voluntarily agree to participate in the telephone interview part of this research study.

I understand that even if I agree to participate now, I can withdraw at any time or refuse to answer any question without any consequences of any kind.

I understand that I can withdraw permission to use data from my interview within two weeks after the interview, in which case the material will be deleted.

I have had the purpose and nature of the study explained to me in writing and I have had the opportunity to ask questions about the study.

I understand that participation involves clarifying or adding information pertaining to my nursing program's curriculum.

I understand that I will not benefit directly from participating in this research.

I understand that participation in this study will involve no costs or payments.

I agree to my interview being audio-recorded or electronically recorded.

I understand that all information I provide for this study will be treated confidentially.

I understand that in any report on the results of this research my identity will remain anonymous. This will be done by changing my name and disguising any details of my interview which may reveal my identity or the identity of people I speak about.

I understand that disguised extracts from my interview may be quoted in dissertation, conference presentation, published papers, academic journals and books.

I understand that there are no known risks associated with participation in the study.

I understand that signed consent forms (digital/ electronic copy) and original audio recordings will be retained and secured by the researcher with password protected files in electronic format with encrypted folder mode in the researcher's personal laptop hard-drive. The researcher's personal laptop has a password and is stored in a locked cabinet. The data will be retained as per state and federal regulations (a minimum of three years past the completion of the study).

I understand that a transcript of my interview in which all identifying information, if any, has been removed will be retained for three years from the date of the exam board (dissertation defense).

I understand that I am free to contact any of the people involved in the research to seek further clarification and information.

I understand that under freedom of information legalization I am entitled to access the information I have provided at any time while it is in storage as specified above.

I agree that any information obtained from this research may be used in any way thought best for this study.

If you have questions or concerns about your rights as a research participant, please contact Ro Windwalker, the University's Human Subjects Compliance Coordinator, at 479-575-2208 or irb@uark.edu.

_____ Date:_____

Signature of Interviewee

Either digital signature of interviewee on this document or a scan copy of this signed form would be considered as providing consent to participate in the telephone interview.

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Appendix M

University of Arkansas Fort Smith (UAFS) Four-year Prelicensure BSN

The Arkansas State Board of Nursing (ARSBN) has approved the prelicensure BSN program since 2005. This program admitted its first class in Spring 2008. This program was accredited by the CCNE. The parent institution of this program was accredited by the HLC. The parent institution of the target site was categorized as a baccalaureate college with diverse fields (Carnegie Foundation for the Advancement of Teaching [Carnegie], 2011).

The UAFS SON offers a four-year prelicensure BSN curriculum with a total of 120 semester hours including general education, prerequisite, and nursing major courses as presented in Table M.1. After being admitted to the parent institution and completing the prerequisites indicated on the degree plan, students had to meet the program admission requirements for either fall or spring semester. Students are admitted for either fall or spring semester.

Table M.1

An Overview of the UAFS Prelicensure BSN Program Curriculum

Semester	Credits	Semester	Credits
Freshman – 1st semester		Freshman – 2nd semester	
CHEM 1303/1301 Chemical Principles/Lab	4	BIOL 2203/2201 Human Anatomy/Lab	4
PSYC 1163 General Psychology	3	PSYC 2963 Developmental Psychology: A Life Span	3
SPCH 1203 Intro to Speech Communication	3	English Composition requirement	3
Mathematics requirement	3	Social Science requirement	3
English composition requirement	3		
Total credit hours	16	Total credit hours	13

Table M.1 (Cont.)

Semester	Credits	Semester	Credits
Sophomore – 1st semester		Sophomore – 2nd semester	
BIOL 1463/1461 Microbiology & Immunology/Lab	4	NURS 2103 Intro to Professional Nursing	3
BIOL 2213/2211 Human Physiology/Lab	4	HLTH 3103 Pathophysiology	3
Fine Arts requirement	3	NURS 3164 Health Assessment	4
History/Government requirement	3	Humanities requirement	3
Total credit hours	14	Total credit hours	13
Junior – 1st semester		Junior – 2nd semester	
NURS 3113 Nursing Skills	3	NURS 3236 Nursing Care of Women & Children	6
NURS 3227 Foundations of Nursing Care	7	NURS 3337 Nursing Care of the Adult I	7
NUTR 2523 Nutrition	3	STAT 2503 Probability & Statistics I	3
PHAR 3203 General Pharmacology	3		
Total credit hours	16	Total credit hours	16
Senior – 1st semester		Senior – 2nd semester	
HLTH 4103 Research in the Health Sciences	3	NURS 4355 Nursing Care of the Critically Ill Adult	5
NURS 4340 Nursing Care of the Adult II	12	NURS 4364 Leadership in Professional Nursing	4
		NURS 4458 Psychiatric & Community Health Nursing	8
Total credit hours	15	Total credit hours	17

The parent institution's unconditional admission criteria for the first-time freshman included graduation from high school or satisfactory completion of the General Education Development (GED) test, with a score of 19 or higher in all areas of the ACT or an equivalent score on the SAT score (UAFS, n.d.). Applicants who did not meet the unconditional admission criteria could be conditionally admitted to this institution. The conditional admission required the students to complete any necessary developmental courses and 12 semester hours from the specified degree plan with a cumulative GPA of 2.0 for the first 30 semester hours (UAFS, n.d.). The UAFS SON had criteria for competitive admission to the prelicensure BSN program that

included internal and external transfer students. Besides meeting the parent institution's admission requirement, this program admission criteria requires a minimum cumulative GPA of 2.5 for all college level course work including transfer course work and excluding developmental courses, a minimum grade of C in all 43 semester hours of prerequisite courses, and no more than two attempts in any courses listed in the prelicensure nursing curriculum. The UAFS SON selected the prelicensure BSN applicants based on quality points calculated from the prerequisite and any courses on the prelicensure BSN degree plan and the cumulative GPA. The quality points would be weighed 60% and cumulative GPA weighed 40% in this selection system (UAFS, n.d.). Applicants were selected based on the first top academic performance, and they filled the program's limited available seating in every fall and spring semester. With 60 seats available for every semester since Fall 2013, the selected applicants who had the top academic performance and met the admission criteria for this prelicensure BSN program was 55 in Spring 2015 (UAFS, n.d.). Five seats were initially held each semester for returning students. If the five seats were not filled by returning students, the next students in line for admission were accepted into the program.

The UAFS SON had a stated mission that was consistent with the mission of the parent institution which prepared students to succeed in a global world and to contribute in economic development and quality of place (UAFS, n.d.). The UAFS SON faculty utilized the AACN (2008) Essentials to guide and implement this prelicensure BSN program's curriculum and followed the accreditation guidelines. The faculty also implemented competency-based education to assess student achievement of outcomes. The competency-based education was based on the competency outcomes and performance assessment model. The curriculum integrated the ATI in specific content areas throughout the program to enhance student

preparation in the licensure examination and familiarity with the NCLEX-RN content (UAFS, 2018).

In order to progress in this program, students must maintain a grade of C (77%-84.99%) or higher in all courses. Students cannot remain in this program if the student has attempted any courses in the degree plan more than twice. Students who fail or withdraw from a second lab/clinical course were ineligible to continue in the program. Students were required to pass medication calculation test with a 100% score within three attempts in each semester when any clinical course was indicated. If the student failed to meet the requirement for this medication calculation policy after three attempts, the student was dismissed from the program and was ineligible for readmission to this program. This student may continue pursuing other degrees offered by the parent institution.

The course instructor, faculty advisor, and level coordinator are available to offer academic support for students who were having academic challenges. Additionally, the ATI offered review modules in an electronic format which included interactive tutorials and content resources that could be customized to the student learning needs (UAFS, 2018). The parent institution had a counseling center, health center, writing center, and academic center with many services, such as tutoring services and academic coaching.

Based on the ARSBN (n.d.) five fiscal year NCLEX-RN results, the performance of the graduates from this program is presented in Table M.2. These passing rates exceeded the minimum requirement of 75% pass rate on the NCLEX-RN for continued full approval by the ARSBN. The ARSBN (2018) will conduct an on-site survey visit every five years if an educational program fails to maintain a minimum NCLEX-RN passing rate of 75%. However, the UAFS prelicensure BSN results for first-time takers, U.S. educated, showed a declining

pattern in these past couple years as shown in Table M.2 but have exceeded the national average each time.

Table M.2

UAFS BSN Graduates Licensure Pass Rates in 2014 - 2018

Year	Total Applicants	Pass Numbers	Pass Rate	National Pass Rate	Arkansas Prelicensure BSN Average Pass Rate
2015	50	48	96%	87.5%	83.8%
2016	52	49	94.2%	87.8%	90.2%
2017	69	63	91.3%	90%	91.8%
2018	78	72	92.3%	91.57%	94.6%

Although the source sites and the target site nursing programs had the same curricular guideline and accreditation standard and adopted a computerized standardized testing, their graduates' three consecutive year performance in taking the licensure examination for their first-time were different. Comparing to the ARSBN requirement of minimum average NCLEX-RN performance, the source sites' respective boards of nursing required a higher passing rate on the program graduates' minimum average NCLEX-RN performance. For example, the IBON set 95% as one of the nursing program approval requirements.

Other differences between the source sites and target site are presented in Table M.3. MCON located in Iowa was selected to represent the source sites in Table 5.3, because this program and its respective state board of nursing had the highest requirements overall than the other top-ranked nursing programs.

Although few UAFS SON faculty are doctoral-prepared faculty either a Ph.D. or a DNP and predominant master-prepared faculty, Table M.4 showed the program completion rates of the target site above 70%'s, a minimum requirement from the CCNE. In the MASON CCNE self-study indicated having more or equal to 80% graduation rates and less or equal to 20% overall attrition. According to recent personal communication with the key informants from five

of seven top-ranked prelicensure baccalaureate programs, the source sites did not experience any retention issues, which is supported by the national ranking services criteria.

Table M.3

Comparison between a Source Site Representation and the Target Site

	MCON (Representing the Source Sites)	UAFS (Target Site)
Admission Standard	ACT≥28/ACT≥1310	ACT≥19
Prerequisite GPA	GPA≥3.0	GPA≥2.5
Total Credit Hours	128	120
Standardized Testing	ATI	ATI
AACN Curricular Themes Proportion:		
Liberal Education	30.47%	35.83%
Leadership	1.95%	0.83%
Evidence-based Practice	3.52%	0.83%
Patient Care Technology	10.16%	15%
Policy & Environments	2.34%	0.83%
Interprofessional Collaboration	1.56%	0.86%
Population-focused Care	14.06%	17.08%
Professionalism	5.47%	0.83%
Generalist	19.53%	18.89%
Total Clinical Hours	2476.5	1260
Elective Courses	None	None
Supplemental Learning Resources	Peer Tutoring	None
FT Faculty Educational Level	78% Ph.D. or DNP prepared	21% Ph.D. or DNP prepared
Graduates Average Pass Rate (2015-2018)	96.2%, 96.15%, 97.76%, 97.89% (Increasing)	96%,94.2%,91.3%,92.3% (Declining)
State Board Minimum NCLEX Pass Rate	95%	75%

Despite the different Carnegie classification for the source sites and target site, the academic support resources at the source sites and target site are similar. For example, the university-wide academic support resources at the source sites and target site include counseling service for students, tutoring services for math and science courses, writing center, student disability services, advising, and an Office of Academic Support and Retention. As for the

nursing program customized academic support resources, several schools of nursing at the source sites offer peer-tutoring program and tutoring program led by graduate assistants, in addition to the course faculty, level coordinator, and coordinator of student resources. Although the school of nursing at the target site did not have a formal tutoring program for nursing courses, the tutoring services at the university would assist a nursing student who struggles in nursing courses. The tutoring services recommend that junior/senior nursing students who excelled in the area of concern be a tutor paid by the tutoring services.

Table M.4

UAFS Prelicensure BSN Program Five Years Completion Rates

Semester Admitted	First-time Admits	Passed	Retained	Lost	Retention%
Spring 2015	55	29	18	8	85.4%
Fall 2015	55	25	15	15	72.7%
Spring 2016	55	35	13	7	87.2%
Fall 2016	53	27	14	12	77.3%
Spring 2017*	57	38	N/A	N/A	N/A
Fall 2017*	57	41	N/A	N/A	N/A
Spring 2018*	56	37	N/A	N/A	N/A
Fall 2018*	55	48	N/A	N/A	N/A

Note. Asterisks (*) means continues in the program. Source: University of Arkansas Fort Smith (n.d.).

At the target site, nursing students who experience academic challenges were able to reach out to their course faculty, level coordinator, and coordinator of student resources. The admission criteria of the parent institution at the source and target site showed dissimilarities, and probably contributed to the student attributes and applicants to the nursing program at each site. The minimum ACT or SAT scores at the source sites' was an ACT 25 or higher, or SAT of 1200 or higher. The admission criteria of the parent institution at the target site had unconditional admission and required a minimum ACT of 19 or an equivalent score on the SAT. Conditional

admission was offered if applicants did not meet this criterion. These admission criteria of the parent institution at the target site were considered to be reasonable since the state of Arkansas had significantly lower scores than the national public average in the following areas: fourth, eighth, and twelfth grade mathematics; fourth, eighth, and twelfth grade reading; and fourth and eighth grade science; and fourth grade writing (Nation's Report Card, n.d.).

Although UAFS SON was not selected as one of the top-ranked programs in the U.S. by any national college ranking services, the target site had comparable passing rates based on the licensure results for the past three consecutive years, which was one of the objective measures of program outcomes. This phenomenon, NCLEX-RN passing rate, may support what exemplary prescribed curriculum would look like, because the curriculum at the target site was similar to the selected seven nursing programs considered as exemplars.

Despite the difference in the parent institution's admission criteria, the academic progression criteria in the nursing program at the source sites and target site were similar. For three consecutive years, the NCLEX-RN passing rates of graduates at the target site were above the 90^{th} percentile, which was comparable with the NCLEX-RN passing rates at the source sites. Because it is thought that high quality graduates are measured by the NCLEX-RN passing rates, and there was no difference in these scores for the source sites and target site, and each site also offered student academic support resources, had specific student attributes, and the faculty had highly qualified educational backgrounds, there was little improvement needed in the target sites' curriculum.