Baccalaureate Nursing Student and Faculty Views of Effective Teaching

by

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Abstract

This study aimed to determine baccalaureate nursing student and nursing faculty views of effective teaching. Using the Teacher Behavior Checklist (TBC), a psychometrically sound tool, participants were sent an email containing a link to an online survey (Keeley, Smith, & Buskist, 2006). Baccalaureate nursing students (*n*=353) and nursing faculty (*n*=26) were sent the email with a response rate of 25.2% (*n*=89) and 69.2% (*n*=18) respectively. Participants were asked to rank order the top 10 qualities and associated behaviors they perceived as effective to nursing education.

Results of the study found students and faculty agreed on five of the top 10 behaviors identified: (a) knowledgeable about subject matter, (b) approachable/personable, (c) enthusiastic about teaching and about topic, (d) effective communicator, and (e) realistic expectations of students/fair testing and grading. Students and faculty agreed on four of the top 5 qualities/behaviors excluding realistic expectations of students/fair testing and grading. Faculty completed their top 10 identifying: (a) creative and interesting, (b) promotes critical thinking/intellectually stimulating, (c) presents current information, (d) confident, and (e) respectful. Students completed their top 10 identifying: (a) understanding, (b) happy/positive attitude/humorous (c) encourages and cares for students, (d) flexible/open-minded, and (e) strives to be a better teacher. Statistical differences were found in four qualities/behaviors ranked in the top 10: (1) creative and interesting; (2) present current information; (3) promote critical thinking/intellectually stimulating; and (4) understanding.

The findings in this study show strong agreement with previous studies completed using the TBC. In comparison to findings in the original study using the TBC, students agreed on nine of the top 10 qualities/behaviors identified of effective teaching. Faculty agreed on eight of the top 10 qualities/behaviors identified of effective teaching compared to original findings. The results of this study indicate generalizability of TBC use across disciplines and its ability to identify effective qualities/behaviors inherent of master teachers. Further research is needed across several institutions with baccalaureate nursing programs as well as comparison of baccalaureate programs views of effective teaching to that of associate degree nursing programs.

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List of Abbreviations

AACN	American Association of Colleges of Nursing
ADN	Associate Degree in Nursing
ANA	American Nurses Association
BSN	Baccalaureate of Science in Nursing
LPN/LVN	Licensed Practical Nurse/Licensed Vocational Nurse
NLN	National League for Nursing
NLNE	National League of Nursing Education
TBC	Teacher Behavior Checklist

CHAPTER 1

INTRODUCTION

The number of students applying for admission to nursing schools is steadily increasing. According to the American Association of Colleges of Nursing (AACN) (2016a), of the 713 generic baccalaureate nursing programs in the United States (U.S.) and its territories that reported data for 2016-2017, 134,795 qualified applications were offered admission. Unfortunately 64,065 qualified applications were turned away from a generic baccalaureate nursing program (AANC 2016a). In addition, there were 50,598 applications meeting admission criteria that were not offered admission (AACN, 2016a). This is a 40% increase in the number of qualified applications turned away since 2010 (AACN, 2016a). Due to the increased number of applications, nursing schools are attempting to accommodate more students into their programs. To effectively this increasing number of students, a sufficient number of nurse faculty is required. Of the 208 schools reporting reasons for not admitting all qualified applications, 55.8% were due to the insufficient number of faculty (AACN, 2016a).

While there are other reasons that exist as to why schools are unable to accept all of the qualified applicants, a lack of faculty to educate new nurses is significant. Reasons for having an insufficient number of faculty were: “insufficient funds to hire new faculty (60.1%), inability to recruit faculty due to competition for jobs with other marketplaces (69.2%), qualified applicants unavailable in the geographic area (39.9%), faculty retirement 38.9%, and faculty resignation (37.0 %)” (AACN, 2016a, p. 93). In a separate report

specifically regarding faculty vacancies, of the 821 schools that responded, 56.2% had faculty vacancies and 16.2% did not have vacancies, but needed additional faculty (AACN, 2016b). 15.2% of the vacancies were for nurse educators in baccalaureate nursing programs (AACN, 2016b). Also important to this study is the number of students actually graduating from these programs. There was a 3.6% increase in the number of students enrolled in a generic baccalaureate program from 2015-2016 (AACN, 2016a). Unfortunately, there was only a 2.4% increase in the number of graduates from these same programs (AANC, 2016a). A number of reasons exists as to why there is a difference in the number of students enrolled and the number of graduates. Faculty who are ineffective in their teaching could play a role in the decrease in the number of graduates. In order to graduate, students must meet competency standards in didactic and clinical courses. Student competency is related to the effectiveness of faculty teaching the courses.

The AACN (2015) Annual Report found nurses in the academic setting are older than the general nurse population, whose average age is 50. Nurse educators with a doctoral degree are an average of 56.9 years of age (AACN, 2015). As these educators reach the age of retirement or even decide to retire early, programs face losing that wealth of knowledge gained over many years of teaching. The knowledge these professors possess is critical to the continuing education of new faculty. Master teachers provide integral opportunities for novice educators "to receive expert mentoring and guidance as they develop their own expertise" (Hicks & Butkus, 2011, p. 32). However, with the current nursing faculty shortage among universities and colleges, it is necessary to examine the behaviors of master teachers who will soon retire. An important question is how a teacher acquires the qualities that reflect an effective or master teacher.

In order to determine the qualities/behaviors of an effective or master teacher, it is necessary to explore the definition of an effective or master teacher. Buskist, Sikorsky, Buckley, & Saville (2002) provided three approaches to determining what entails a 'master teacher' which included common themes from books written by master teachers, qualities of award-winning teachers, and student perceptions of master teachers. Three common themes, knowledge, personality, and classroom management skills, were found in regards to books written by master teachers. When reviewing qualities of award-winning teachers, awards given such as National Professor of the Year and Award for Distinguished Teaching in Psychology were examined and categories determined that cataloged the award winners. Lastly, the simple review of student evaluations of teacher performance provides information regarding students' desire for teachers to "present material both clearly and enthusiastically…and are warm, understanding, and concerned for them as individuals" (Buskist et al., 2002, p. 31). Another approach to determining a master teacher is to determine what constitutes quality teaching. Berliner (2005) discusses this in two parts saying that a quality teacher is one that is both good and effective. To be good, a teacher upholds what is expected of the teacher. To be effective, a teacher is able to reach achievement goals, meaning students are learning what they are expected to learn (Berliner, 2005).

Statement of the Problem

There has been little research conducted on the experiences of nursing students and faculty, and their perceptions of effective teaching. While students complete evaluations of faculty on a regular basis, these evaluations have not been studied to determine the effective qualities/behaviors of nursing faculty. Understanding nursing faculty and student views of effective teaching will help to facilitate and improve faculty development and student

achievement. The understanding of both faculty and student views will provide guidance to nursing education programs and their preparation of future educators, while also providing evidence to current faculty to incorporate into their practice.

Purpose of the Study

This study aimed to determine the relationship between those qualities valued by nursing faculty and those valued by baccalaureate nursing students. The study also aimed to determine if there was a relationship between the findings of the original Teacher Behavior Checklist findings and this study. The study used data collected from nursing faculty and baccalaureate nursing students at a Southeastern U.S. land-grant, public university. The study was conducted during spring 2017 with faculty and students asked to complete an on-line survey. The survey asked participants to rank the top 10 of 28 possible teacher qualities for effective teaching from their own perspective (Buskist et al., 2002).

Research Questions

1. What are the qualities/behaviors valued by nursing faculty?
2. What are the qualities/behaviors valued by baccalaureate nursing students?
3. What is the relationship between those qualities/behaviors valued by nursing faculty and those valued by nursing students?
4. What is the relationship between the findings of the original Teacher Behavior Checklist and the findings in this study?

Significance of the Study

A better understanding of how nursing students and nursing faculty view effective teaching will provide information into what constitutes effective teaching in the nursing domain. With a shortage of nursing faculty in the near future, novice nurse faculty can

disseminate the information and use it to develop effective teaching behaviors within themselves. Through effective teaching it can be assumed there will be positive outcomes on student achievement as well.

Research Limitations

Because the study was conducted in a single Southeastern U.S. land-grant, public university, there is a risk of not obtaining enough participants. The size of the nursing school within the university determined the participant pool. The survey tool, Teacher Behavior Checklist (TBC; Buskist et al., 2002), along with the survey method may present as a limitation to the study. The online survey required participants to rank number qualities of effective teaching based on participant view of importance. The method of rank numbering items is different than using a more traditional ranking method such as the Likert scale. As such, this could present a limitation in the number of participants completing the survey without problems. The survey also does not allow participants to identify other elements of teaching excellence that they may perceive as effective teaching. Other studies have used the survey successfully so this may be a minimal limitation. Since other studies have used the survey tool without modification, it is crucial to continue using it as designed in order to use the results and conclusions of such studies as comparative. The TBC has been found to be a psychometrically sound tool so making any changes to it would require new validity and reliability testing to be completed, which is not necessary for this study (Keely, Smith & Buskist, 2006).

Definition of Terms

Definition of the following terms used in this study follow. These are provided to offer clarity of terminology used throughout the study.

1. Baccalaureate nursing program: a traditional 4-year program at a college or university, including liberal arts education, and professional education and training in nursing; intended for high-school graduates with no prior nursing experience (AACN, 2017).
2. Millennial: individual born between 1982-2000.
3. Teacher Behavior Checklist (TBC): 28-item list of qualities and behaviors designed by Buskist et al. (2002) used to determine qualities/behaviors inherent to effective teaching.

Chapter 2

Literature Review

The number of applicants for admission to nursing schools is steadily increasing with a growth of three and a half times the number of qualified applicants turned away since 2003. The increase in nursing students requires an increase in faculty as well. In an AACN survey, nursing schools identified an insufficient number of faculty as the primary and most important reason for not accepting all qualified applicants (AACN, 2008). With such a shortage among faculty, it is of utmost importance that new faculty possess the qualities inherent to effective teachers. Some of the most effective faculty with the greatest knowledge are those about to retire, known as master teachers. It was necessary to determine the qualities these 'master' faculty possess in order to successfully engage and ensure success in a nursing program.

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Research Questions

1. What are the qualities/behaviors valued by nursing faculty?
2. What are the qualities/behaviors valued by baccalaureate nursing students?
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4. What is the relationship between the findings of the original Teacher Behavior Checklist and the findings in this study?

History of Nursing Education

The history of nursing is not limited to simply chronological events, but rather the impact and influence these events have had on the nursing profession. Past events not only impacted the profession at its current time in history, but continue to impact the profession to this day. The role of the nurse has evolved over the years from caregiver to deaconess to the 'common' woman to our current term nurse (Egenes, 2018). The comprehension of this development provides a basis for nursing education.

Primitive Nursing

In prehistoric times, the caregiver did not choose his or her profession, but rather the profession chose them. Typically, this role was assigned to females due to the nurturing of their children. It was assumed this nurturing would also play a role in caring for the sick and injured. One can also find instances in which the role was predominantly male referred to as "medicine men, shamans, or other male tribe members" (Egenes, 2018, p. 4). Caregivers gained knowledge from previous generations through auditory and visual learning. As the caregiver began to have more and more positive outcomes, he or she was considered a specialist, establishing a practice of nursing care (Egenes, 2018).

Into the early Christian era, nurses began forming more organized groups with principles of charity, service to others and selflessness, and aligning themselves with the church (Egenes, 2018). It is here that nurses became known as a deaconess'. The deaconess' "were often Roman matrons or widows with some educational background who were selected by the church's bishops to visit and care for the sick in their homes" (Egenes, 2018, p. 4). Most often care was given in the patient's home with the hospital only being visited by those who had been ostracized, were destitute, or had no family nearby (Egenes, 2018).

Modern Europe

The Protestant Reformation began and patients were cared for by a 'common' woman. This woman fell into the role by chance of being lower class, too old or too ill, and unable to find other work (Egenes, 2018). The conditions during this time were extremely poor in regards to nursing care. A set of British social reformers began advocating for groupings of religious women to staff the hospitals. In 1840, a group known as the 'Protestant Sisters of Charity' received training to be nurses, but only through observation of patients at two hospitals (Egenes, 2018). Other religious groups received more formal training, but it still lacked in rigor from a nursing standpoint. One group in Germany was provided a more official training program in which they received their main instruction in nursing while also having religious instruction and provision of social services. This group lived and worked in the Deaconess Home and Hospital at Kaiserswerth, Germany (Egenes, 2018). It is this school that would later be visited by Florence Nightingale, commonly referred to as the founder of professional nursing.

Florence Nightingale

Florence Nightingale was expected to marry within her upper class status and raise a family; however, she made the radical decision that her purpose was to dedicate her life to the service of humanity (Egenes, 2018). She initially visited the German home and hospital for a short two-week period, but returned for an additional three months to learn rudimentary nursing patient care, work with current deaconess's, and observe the means of instruction used in nursing. Following this education, she was selected as superintendent of a hospital in England. While working here, she continued to educate herself through trips to observe hospital work in Paris and volunteer during a cholera epidemic at a hospital in Middlesex (Egenes, 2018).

During the Crimean War, Nightingale was outraged at the death rate of British troops and the absence of nurses for this army (Egenes, 2018). She fought for herself and a group of other ladies to travel and care for those sick and wounded. Upon arrival she cleaned the barracks and hospital to clear the dirt she felt was the true cause of disease. By thoroughly recording her care and applying her education of statistics from her father, she was able to find the number of deaths dramatically decrease. It is here where the groundwork for evidence-based practice in nursing was founded (Egenes, 2018).

Upon return home, she received a trust fund from the British people who signaled her a heroine (Egenes, 2018). She used this to fund the Nightingale School of Nursing at St. Thomas' Hospital. The school provided education for professional nurses through theoretical and clinical experiences guided by a curriculum allowing students to learn in a variety of aspects of nursing (Egenes, 2018). Nightingale educated not only nurses, but also physicians and other health officials. She educated on importance of suitable conditions in both hospitals and homes and teaching patients how to improve their own well-being (Bastable & Alt, 2014).

Professional Nursing in the United States

Nineteenth century.

Approximately five years following the Crimean War, at the time of the Civil War in the U.S., the term nurse was quite vague in its interpretation. There were no educationally trained nurses or schools at this time and a nurse could have been the wife of an injured officer, a volunteer, or a representative of the Catholic community working in a hospital caring for the military. The only knowledge they had of nursing was from caring for their loved ones and the knowledge they gained with each patient. However, it is these nurses that changed the idea of women working outside the home and were influential in founding nurse training schools in the U.S. Following the Civil War came a period of heavy immigration resulting in crowded living conditions tailed by the spread of disease (Egenes, 2018).

This increase in the spread of disease triggered social reformers and physicians to advocate for formal nursing education in order to provide safe nursing care. The first school of nursing, Nurse Training School of Women's Hospital of Philadelphia, was founded in 1872 by a largely female group of physicians (Egenes, 2018). The school had a curriculum, instructors, practice equipment, library, and clinical experiences similar to the Nightingale School of Nursing. Another school opened in Boston the same year, but physician support of nursing education was lacking. However, three more nurse training schools opened in 1873 due to the determination of lay women, not physicians (Egenes, 2018).

The number of nurse training schools grew rapidly over the next decade (Egenes, 2018). Unfortunately, most schools were dependent on the hospital financially and hospital needs overshadowed educational needs. In addition, hospitals began paying student nurses to do the work of a graduate nurse for a much cheaper price. However, this resulted in inefficient

education and training without proper supervision. Upon graduation a limited number of new graduate nurses were hired to work in hospitals with many taking jobs at homes of those who could afford personal care. Referred to now as a *private duty nurse,* they were not only responsible for caring for the sick, but also chores and meal preparation resulting in harsh working conditions (Egenes, 2018).

Nurses' Associated Alumnae of the United States and Canada formed towards the end of the 19th century with the goal of educating nurses to obtain licensure (Egenes, 2018). Up to this point, there was an increase in the number of nurses; however, the number who received formal education was only 10%, compared to the other 90% working as nurses, but with little to no formal education (Egenes, 2018). This group is now known as the American Nurses Association (ANA) with each state having its own association within the larger, national group. In addition, the American Society of Superintendents of Training Schools of Nursing, was formed in an effort to provide standards in nursing education. At the time, each training school was its own entity, educating through its own standards and curriculum. This group became known as the National League of Nursing Education (NLNE) in 1918 and is now known as the National League for Nursing (NLN) (Bastable & Alt, 2014).

Twentieth century.

The year 1918 had a massive impact on nursing education. The NLNE deemed health teaching as a major function of the role of nurses (Bastable & Alt, 2014). This new idea of nurses teaching patients about their health and health promotion was important to the future of nursing education. In addition, there was a need for many more educated nurses leading Vassar College to develop a 12-week camp (Egenes, 2018). The camp taught basic science and nursing skills. Once completed, students were appointed to various nurse training schools to

complete their education. In one summer, "432 women from 115 colleges and representing 41 states" participated resulting in tremendous interest in nursing across the U.S. with many of the graduates becoming leaders in nursing education in the decades to follow (Egenes, 2018, p. 19). The Army School of Nursing, also founded in 1918, was built on organization, supervised clinical experiences in a variety of settings, and high standards of education. World War I and II provided the profession of nursing a positive representation and distinguished level of respect (Egenes, 2018).

Many agencies and educators felt the intellectual rigor of nursing education in the early 20th century was lacking. In 1923, the Goldman Report provided recommendations for educational standards with a principal focus on education, not patient care (Egenes, 2018). In addition, it was recommended nursing education should take place at the university level with those serving as educators obtaining advanced degrees. The Burgess Report in 1928 urged schools to have admission criteria along with a focus on education, not patient care. A third report in 1948, The Future of Nursing, again emphasized the quality of the program, advanced degree educators, and prudence of sites for clinical experiences. While there was an increase in the number of students attending college in general following World War II, the growth of baccalaureate nursing programs was quite slow with most students attending hospital-based diploma programs. These programs did adhere to the pressures of having a standardized curriculum and quality program, but rather still focused on hospital needs rather than educational needs (Egenes, 2018).

In 1951, the associate degree in nursing (ADN) was established as an avenue to educate more nurses in a shorter period of time with a focused scope of practice at the bedside only (Egenes, 2018). Upon an effective five-year test period, these programs had produced multiple

technically proficient nurses resulting in a rise in the number of ADN programs over the next few decades. The number of nurses graduating with an ADN far exceeded the number of baccalaureate and diploma graduates. The ANA stepped in at this point publishing the Educational Preparation for Nurse Practitioners and Assistants to Nurses (ANA Position Paper). It reiterated the idea that professional nurses should obtain at a minimum a baccalaureate degree, while technical nurses should obtain an associate degree. Unfortunately at the beginning of the 1960's only 14% of students were enrolled in a baccalaureate program, and only 14 higher education degree programs were available to prepare nurses to become nurse faculty (Egenes, 2018). From a study in 1963, "by the Surgeon General of the U.S. Public Health Service revealed that faculty in all schools of nursing, including baccalaureate programs, lack the minimal educational preparation required for teaching" (Egenes, 2018, p. 24). This and other reports prompted the passing of the Nurse Training Act in 1964 for federal funding. The program review report summarizes the varying types of programs justly stating the unity in all programs is the emphasis on nursing care, the difference lies in the complexity and scope of their outcomes (U.S. Department of Health, Education, and Welfare [U.S. DHEW], 1967). In 1966, of the 1, 225 nursing programs in the U.S., 210 were baccalaureate, 218 were associate, and 797 were diploma (U.S. DHEW, 1967).

The history of nursing education and the multiple advancements made in the type of education and standardization of education is astounding. During this historical period, three different types of nursing education programs developed with a fourth not yet discussed. With this foundation of nursing education, it is necessary to examine each of the varying types of educational programs and their associated degrees to grasp a better understanding of differences in education and abilities once considered a licensed nurse.

Undergraduate Nursing Education Programs

Practical/Vocational Nurse Education

The first nurses considered as Licensed Practical Nurse/Licensed Vocational Nurses (LPN/LVN) came from a school in New York in 1892 (Scheckel, 2018). This type of program grew significantly as reports indicated its positivity. A report in 1948 by Lucille Brown, Nursing for the Future, emphasized the importance of LPN/LVN programs which caused an increase in their number. The LPN/LVN practices under the supervision of a registered nurse (RN) and in unity to the state's nurse practice act. The scope of the practice varies from state to state, but typically involves caring for stable patients or those with frequently occurring health problems. In addition, they can collect abnormal data, communicate it to the RN, deliver bedside care, and educate on health promotion. Most of these programs are 12-18 months in length with the graduate then sitting for licensure. Graduates with this degree and licensure can work in a hospital, long-term care setting, clinic, and more. Some may use this degree as stepping-stone to further education, but that is not a requirement (Scheckel, 2018).

Diploma Nursing Education

Originally known as hospital nursing, this program began in the late 19th century as hospital-based nursing education (Scheckel, 2018). As mentioned previously, this educational model involved students working for the hospital while in return receiving education, room, and board. Again, the Goldman Report (1923) and Burgess Report (1928) both served as messages that education should be occurring at the university level, not within the hospital as part of employment (Scheckel, 2018). In 1909, at the University of Minnesota, the first baccalaureate nursing program began. Nevertheless, the program closely resembled a diploma program. Students were required to work at the hospital in addition to the university

curriculum. Expanding on the work of the NLNE, efforts by this organization continued in to the late 1930's. Their goal was to standardize the curriculum and decrease the number of hours students were to work in the hospital. This type of program is scientifically based but placed its emphasis on learning the technical aspects of the profession (U.S. DHEW, 1967). While these programs flourished until the middle of the 19th century, there was an eventual decline relating to the rapid changes in healthcare and the required knowledge base for nurses (Scheckel, 2018). In 2014, the NLN reported that of the 1,869 total programs in the U.S., only 67, or 3.5%, were diploma programs (NLN, 2014). These programs are still functioning due to their ability to provide hospitals with needed nurses and, provide students an accessible program that allows them to obtain a nursing degree in a relatively short time period.

Associate Degree Nursing Education

Directly following World War II, a shortage of nurses occurred and associate degree nursing programs began. The Ginzberg Report of 1949 reported that nurses could have a similar education in a shorter period of time and more economically through an associate degree program (Scheckel, 2018). The biggest difference in associate programs and baccalaureate programs, besides the amount of time, was that associate degree nurses did not have the professional skill and ability to reason like their counterparts did (U.S. DHEW, 1967). Graduates of this program had both technical and skill knowledge rooted in an understanding of scientific principles (U.S. DHEW, 1967). At the same time, others believed these programs focused on learning rather than service to healthcare and the public allowing them to be more proficient bedside nurses (Scheckel, 2018). Numerous studies have been conducted to determine differences in the associate and baccalaureate nurses. However, until the year 2000, these studies did not produce statistically significant differences between the two types causing

people to believe the education provided in either program still had nurses performing similarly in practice. Studies conducted since the year 2000, have shown a difference in the preparation of baccalaureate and associate nurses with the baccalaureate nurse able to fill a more complex role such as leadership and research for evidence-based practice due to the differences in program curriculum (Scheckel, 2018). In the year 2014, 1,092, approximately 58%, associate of 1869 total programs were associate degree programs (NLN, 2014). Important to note is the feasibility of ADN as entry-level degree programs. Graduates can pursue a baccalaureate degree while working as a nurse (Scheckel, 2018).

Baccalaureate Degree Nursing Education

Florence Nightingale believed in a sound education that embodied not only technical skills, but also the theoretical basis for which nurses should practice. She felt this knowledge should come from an understanding of anatomy and physiology, chemistry, nutrition, and professionalism mixed with the observation and guidance of experienced nurses (Scheckel, 2018). Unfortunately, many found this type of education was too much, unrealistic, and did not provide a service to the hospital, resulting in a larger number of diploma educated nurses. With the founding of the first baccalaureate school of nursing at the University of Minnesota a window opened to begin the movement of replacing diploma education with baccalaureate education.

One notable program was established at Teachers College, Columbia University in 1917 offering four years of education along with a year of specializing. However, this year of specialization had students focused on public health, teaching, administration and clinical specialties. While this did double the number of baccalaureate nurses by the 1930's who could fill those particular positions, it did not help the nursing shortage occurring in the hospitals

(Scheckel, 2018). Unfortunately, the development of baccalaureate curricula was problematic. The Brown Report in 1948 helped define expectations for baccalaureate nursing programs by stating it needed to have both liberal and technical training, should be conferred as a Bachelor of Science degree, and produce nurses ready for intricate clinical situations (Scheckel, 2018). While this increased support for the baccalaureate degree into the 1960's and ANA providing its support with their position paper, there were still those questioning whether or not *all* nurses really needed to have that much education. Many felt it was necessary to gather much more research about the skills and responsibilities necessary to provide quality patient care (Scheckel, 2018). Only one in eight nurses graduated with a baccalaureate nursing degree in 1964 (U.S. DHEW, 1967). Since 1966, the number of baccalaureate nursing programs has grown from 202 to 710 in 2014 (U.S. DHEW, 1967; NLN, 2014). The research stakeholders asked for has since been completed showing a clear difference in an associate and baccalaureate nurse. Those with baccalaureate degrees are able to contribute to enhancing patient outcomes and declining mortality rates and are favored by hospital administration over their counterpart (Scheckel, 2018).

It is important to note that the baccalaureate program information does not discount the education of a practical, diploma, or associate degree program. It does however show the increase in ability and critical thinking of baccalaureate nurses. All nurses are encouraged to further their education in order to gain advanced knowledge and serve as change agents whether in the hospital, community, or educational setting.

Groccia's Model for Understanding Teaching and Learning

In order to be an effective educator, it is necessary to understand how teaching and learning occurs. Nursing faculty are being urged to evaluate their current practices in order to

ensure they are using evidence-based practices to best prepare students (Scheckel, 2018). Groccia developed the Model for Understanding University Teaching and Learning (Groccia, 2012). The use of a model allows one to communicate understanding in order make a difficult concept easier to grasp. Faculty use models to understand variables that are both interconnected and dependent. Groccia's model has seven interconnected variables: learning outcomes, instructional processes, course content, teacher and student characteristics, learning process, and learning context (Groccia, 2012). Learning outcomes is at the bottom serving as the base for all other variables. Instructional process lies in the center of the model showing teaching and learning behaviors, techniques, and methods (Groccia, 2012). The five variables at the top are preliminary variables that must be studied and understood prior to the establishment of applicable learning outcomes.

Learning outcomes are what faculty expect students will take away from learning experiences (Groccia, 2012). These can be both short-term and long-term and should include an assessment to determine if learning outcomes were met. The assessment can come in varying forms, but must be determined prior to the course and the specific learning experience within the course (Groccia, 2012). Learning outcomes govern teaching effectiveness. The faculty variable necessitates faculty know who they are as a person and what they bring to the learning experience. Both teacher and student understanding of oneself related to age, gender, academic background, learning style, rapport and enthusiasm is important to maximize strengths and minimize weaknesses in order to improve teaching and learning (Groccia, 2012). Faculty should be aware and plan learning activities that are appropriate to students' skills, interests, and needs (Groccia, 2012).

In order to enhance teaching and learning, it is important to be knowledgeable of the learning process (Groccia, 2012). The evidence on human learning and its application to enriching teaching provides a basis for following the teaching and learning process. The process then affects the learning context, the situation in which learning occurs (Groccia, 2012). This includes not only the physical characteristics of the space, chairs, room size, and technology, but also the institution in which the learning is occurring such as the administration, values and goals of the department, course evaluation, learner selections, and cultural and diversity effects (Groccia, 2012).

The next variable, course content, is crucial in the design and delivery of effective teaching (Groccia, 2012). Therrell and Dunneback (2015) note faculty know what their course specific goals are and how to accomplish these goals but do not understand what students want or need in order to accomplish the same specific course goals. The difficulty level, organization of, accuracy, and purpose of the content should be matched with the learners, learning outcomes, and knowledge level of faculty teaching the course (Groccia, 2012).

Each variable, instructor, learner, learning process, learning context and content, comes together forming the instructional processes or pedagogy (Groccia, 2012). Groccia (2012) states

> How the content is taught, the choice of one teaching method over another, should be made after consideration of desired learning outcomes, a careful review of the evidence on the effectiveness of different teaching approaches, the prior knowledge and present needs of learners, the expertise of instructors, and the limits or advantages presented by the classroom context (p. 11).

The model is essential in the process of teaching and learning in order to ensure faculty take advantage of and incorporate a universal understanding of the variables in the learning process (Groccia, 2012). Teaching and learning is a challenging and cherished experience that deserves attention and thought from both the faculty and student perspective (Therrell & Dunneback, 2015). With an understanding of how teaching and learning occurs at the university level, it is also important to understand why educators feel called to teach their profession rather than practice it.

Called to Teach

Nursing faculty do not usually begin their teaching career actually teaching. Graduates of nursing school most often begin their career practicing nursing. The nurse then make a decision at some point to teach others the profession. All nurses have teaching experience as it relates to educating patients, family, and the public. This aspect of educating could be the initial experience calling them to expand their teaching. Others find when they orient a new nurse or serve as a preceptor to a student nurse it sparks an interest they want to further explore. The key factor is that the individual has the passion and call to teach others. Buskist, Benson, & Sikorski (2005) state those who believe themselves called to teach find it to be richly rewarding. This decision prompts the nurse to pursue graduate education to understand the teaching and learning process. Unfortunately, upon graduation one is not immediately considered a master or effective teacher. This process takes time occurring over many years with failures and accomplishments throughout, but with the continued inner drive to overcome challenges to become a master or effective teacher. The drive to teach is fueled each time the teacher stands in front of a class with the power to influence student's lives positively in that moment or 40 years later (Buskist et al., 2005). Buskist et al. (2005) provide four elements

necessary to teaching including: content first; making the subject matter relevant; facilitating critical thinking; and passing the torch.

Content first is the idea of passing subject information to students (Buskist et al., 2005). This is the simplest form of teaching and the reason most students enroll in a course. Students want to gain the content information known to the teacher, but at the students' level of understanding. The setting in which the content is conveyed to the student can vary but most important is that the teacher conveys it effectively (Buskist et al., 2005). The teacher then needs to be able to make the information being taught relevant to the learner. The application of material in a real-world setting allows students to be more engaged and participative in their learning (Buskist et al., 2005). This also permits students to examine stereotypical assumptions and determine their own thoughts regarding the content. Once the student judges the content relevant and is engaged, the teacher can then add the element of critical thinking (Buskist et al., 2005). Critical thinking is extremely important because it takes the student from a knowledge and understanding level of statistics and facts, to having the ability to apply, appraise, evaluate, create and internally reflect on the information. When the learner has the ability to think at these higher level thought processes, it is then necessary for the teacher to pass the torch (Buskist et al., 2005). Important to teachers is the ability to influence students to care deeply for a subject in a similar manner as teachers. This care and excitement of the subject lies within the student eventually being awakened causing the student to make the decision to become a teacher, thus this cycle begins again (Buskist et al., 2005).

Millennial Students

Millennials

The millennial student was born between 1982-2000 and along with Generation X make up the largest group of students attending colleges and universities (Elam, Stratton, & Gibson, 2007). This millennial group has a number of positive qualities that include technological savviness, increasing diversity, close personal relationships, and drive to do and achieve (Merritt & Neville, 2002). Millennial students have grown up with technology impacting their lives, unlike previous generations in which it required a variation in thinking. They never experienced life without a computer or mobile phone and many times believed they could not function without this technology, just as one cannot function without eating. This group uses the internet to connect with the world surrounding them, but also as a personal stage to represent themselves. Technology has also played a major role in their education with the ability to use it in the classroom, complete assignments, and view grades (Merritt & Neville, 2002).

The connection to technology has also spurred their desire to embrace change related to diversity. Millennials place less focus on ethnic, racial, and socio-economical differences and focus more on what is fair, practical, and generous (Elam et al., 2007; Merritt & Neville, 2002). They are engaged in service to their community and families; and parents of millennials want to send their children to colleges or universities that focus on diversity (Merritt & Neville, 2002).

Close personal relationships are extremely important to Millennials. Many are extremely close to their parents, relying on them as advocates in the educational setting (Elam et al., 2007). Rather than students taking ownership for their own actions, students seek help

from parents. The parents of Millennials have protected their children from many aspects of life, but this protection has taken on a new meaning (Atkinson, 2004). This generation has been provided an abundance of resources to succeed, and if anything is questioned, the student will defer to their parents for help (Atkinson, 2004). In addition to the relationships with their parents, Millennials find comfort in close relationships with their peers. Some grew up in broken families which resulted in their reliance on and support from peers (Nimon, 2007). Millennials have been taught to continuously perform at higher and higher levels in all aspects of their lives (Atkinson, 2004). They welcomed the next challenge presented to them with optimism and the ability to shape the future. However, when millennials are faced with a problem, they ask for help from parents, coaches, mentors, and experts. This provided millennials with the idea that all challenges could be solved as a team effort. Millennials know there is a team to support them at all times (Atkinson, 2004). Optimistic describes this generation well as they truly believe they will achieve their goals regardless of curriculum and grades received in high school (Reynolds, Stewart, Macdonald, & Sischo, 2006). Great in theory for those who put forth the effort; however, not great to those less serious regarding their abilities and experiences. This thought process is recognized from the ideas of college-for-all and grade inflation (Reynolds et. al., 2006). Atkinson (2004) states factors that affect millennials' optimism as: urge to perform in academic, extra-curricular, sports, and technology use; continual achievement in each of these areas; and ability to use technology whenever needed. All of this was done as a team effort, counting on teammates and expecting activities of this kind continually (Atkinson, 2004).

Millennials have extremely high expectations of themselves. This higher expectation lies both in and out of the classroom. They truly believe they are performing above average in

academics, self-confidence, writing, and achievement (Twenge, 2013). Unfortunately, there is a lack of evidence to show an increase in their performance on standardized tests or other objective assessments signifying students have received higher grades for a lesser amount of work. Millennials believe completing work, whether good or bad, is the same as achieving the learning goals associated with it. In regards to their planning for the future, Twenge (2013) reported "twice as many high school seniors in 2000 (vs. 1976) said they planned to earn a graduate degree; by 2000, fully half of high school seniors aimed for graduate education, and this rose to 59% by 2010" (p. 67). The ambition level of a student from 1976 compared to that of a student from 2000 is significantly different; however, these ambitions do not mean they are willing to work as hard as previous generations (Reynolds et al., 2006). Millennials expect they will be working as a professional by the time they are 30, rather than believe they will have worked hard enough and earned the right to assume a professional role (Twenge, 2013).

Teaching the Millennial

While there are characteristics of the millennial generation that are difficult to understand for faculty, it is implicit that faculty understand ways to reach these students and meet their needs along with the needs of the university. Faculty must communicate expectations clearly, help build confidence and personal reflection, promote an environment of exploration and personal change, and be the facilitator in gaining knowledge (Pardue & Morgan, 2008). The multitasking millennial, one who works on homework while also talking on the phone and searching the internet, has brought new challenges to higher education (Pardue & Morgan, 2008). Faculty question students who engage in online activities (social media, shopping, etc.) during the classroom period and quite often see it as rude and disinterested in what the faculty have to say. It should be clearly communicated with students

what are acceptable behaviors and rules in the classroom at the beginning of the course. Active and engaging activities utilized during class have proven to help these learners by promoting a student-centered environment and allowing group work (Pardue & Morgan, 2008). Offering a wide variety of learning experiences accommodates a wide variety of learners. New approaches to teaching can be risky and make faculty uncomfortable. However, it is important that faculty incorporate new teaching methods in order to meet the needs of the students while also learning best practices to keep them engaged. Faculty can also help students develop the ability to quietly reflect, think critically, express themselves through writing and understand large amounts of information (Pardue & Morgan, 2008).

Optimistic and high-performing millennial student can be caught off guard when arriving to the higher education setting. Millennials expect to experience something similar to high school when in reality is now competing against other students through demanding coursework (Pardue & Morgan, 2008). Atkinson (2004) states the importance of faculty being aware of students entering the higher education setting with some anxiety. Students may not actually have good study skills even though they graduated high school as an "A" student (Atkinson, 2004). Pardue and Morgan (2008) state millennial students must be able to self-examine their true academic capabilities and motivation for learning. Each student has individual talents and style of learning which should be utilized to promote individual needs (Chickering & Gamson, 1987). Students should be supported and encouraged to seek campus resources and mentoring (Pardue & Morgan, 2008).

Millennials grew up with structure, rules, and the continuous supervision of their parents. In this period, ages 18-25, individuals perceive themselves not as adolescents or young adults, and have opportunity for identity explorations (Arnett, 2000). Erikson's Stage

Theory implies the stage of adolescence, identity versus role confusion involves self-centered behaviors with a focus themselves, how they appear to others, and what they will become (Crain, 2011). The young adult stage of intimacy versus isolation focuses on the ability to establish an intimate relationship. Erikson provides warning that it may not be possible for some to establish intimacy if they have not truly found their identity (Crain, 2011). Rather than moving from late adolescence to early adulthood, Arnett (2000) proposes they are experiencing a phase of emerging adulthood. This is a period in which the millennial determines the right major and career path, explores intimate relationships, reassesses values and beliefs, and even engages in risky behavior (Arnett, 2000). Faculty play a major role in this period of emerging adulthood. Faculty should provide students with consistent, constructive feedback to aid in student learning. Faculty need to be supportive of students, but provide clear expectations and a purpose, promoting independent decision making (Pardue & Morgan, 2008).

Millennial students view the professor as someone who imparts knowledge to them. This is how they perceived high school and graduated with the ability to restate what they have learned. Pardue and Morgan (2008) state higher education confuses the millennial student when they are asked to apply their knowledge to a situation rather than just restate the basic principle. Millennial students move from dualist learners, everything is black and white, to multiplist learners, development of opinions and the idea that there may not be a right answer, during their time in higher education (Perry, 1997). The latter understands the obscurity of learning, becoming able to appraise and evaluate knowledge for themselves. Through the students' ability to question and take responsibility, faculty become guides and content experts that simply facilitate learning (Pardue & Morgan, 2008). While millennial students are

adjusting to the university setting, faculty members are also adjusting in order to meet student and university expectations of effective teacher.

Adult Education

Malcolm Knowles is considered the father of adult education. Knowles (1980) provides characteristics that are necessary to ensure a successful program for adult learners. There are four main assumptions in regards to pedagogy and andragogy. The following provides details of these concepts in relation solely to andragogy. The first assumption is the concept of the learner. Knowles details this assumption with the following characteristics: the learning climate, diagnosis of needs, planning process, conducting learning experiences, and evaluation of learning. The climate in which the adult learns should allow the person to feel at ease and comfortable, taking in to account the type of learner. A typical classroom, rows of desks with the teacher standing at a podium in front, does not facilitate an active learning environment. Rather having tables set in small groups or in a circle facilitates a more open, adult-like atmosphere. The psychological environment is just as important with a sense of respect and support flowing throughout in order to promote freedom of dialogue between the students themselves and between the teacher and students. Each learner should be shown value for the unique individuality they bring to the room. The second characteristic is the 'diagnosis of needs.' The young adult learner is in a period of transition from the traditional practice of teacher given, explicit directions into a more self-directed practice. Transition takes time and should be facilitated by educators. Educators must present the learner with an ideal performance model along with the tools to achieve this (Knowles, 1980). This includes ways to examine their progress and determine gaps in order to continue growing and learning. Olson and Davis (2014) discuss the ambiguity of this transition period talking of the importance of program planners to

be reflective in their own practice, remembering their own transition, and the need to connect with learners in varying practices. The characteristics of 'planning process' and 'conducting learning experiences' are quite similar in that the responsibility for both is mutual between the learners and educator (Knowles, 1980). Important to andragogy is allowing the learner to be a part of the planning process for their learning. The educator should serve as a guide and resource for content information, however the responsibility to truly learn is mutual between both learner and educator. The fifth and final characteristic within the concept of the learner is evaluation of learning. This is not the evaluation a teacher completes of the student, but rather a self-evaluation conducted by the student examining progress. By employing a self-evaluation within adult education, learners are able to determine their own strengths and weaknesses. The educator then acts as a facilitator to help the adult determine ways to improve upon weaknesses and continue to grow (Knowles, 1980). As learners learn to evaluate their progress, understand how competent they are, begin to have a steady effort toward realistic goals, correct their mistakes quickly, and receive encouragement from their instructors, they begin to become more motivated (Wlodkowski, 2003). Essential to this concept is the educator's ability to be reflective in practice whether negative or positive. Self-evaluation is perhaps the most worthwhile resource for continued growth (Svinicki & McKeachie, 2011).

The second assumption is the role of learners' experiences (Knowles, 1980). Experiences of the adult learner are an integral part of the learning process. One characteristic to this assumption is the 'emphasis on experiential techniques' drawing on the learners needs to participate and take an active role in the process of learning. The adult learner will learn much more when asked to participate in case studies, group discussions, simulation, field projects and role-playing. As Wlodkowski (2004) suggests,

> People find learning relevant when it has personal and cultural meaning, allows for their perspective, and reflects their reality. Genuinely relevant learning evokes sincere curiosity. This leads to interest, the emotional nutrient for a positive attitude toward learning and the font of intrinsic motivation. (p. 147)

Educators should also place 'emphasis on practical application' of the concepts they are teaching. Adult learners need to be able to apply what they are learning to their own lives.

The third assumption is adult learners' readiness to learn. The 'timing of learning' is important in adult education in that the program should follow the developmental needs of the adult learner rather than that of the actual institution. When determining the 'grouping of learners,' this is most likely dependent on the topic of education (Knowles, 1980). A class regarding infant resuscitation will have a different set of interests than that of adult resuscitation.

The final assumption is the adult learners' orientation to learning (Knowles, 1980). Within this assumption are some of the most important characteristics of adult education. Orientation of the adult educator is extremely important, as the educator must be attuned to the needs and concerns of learners, and institution in which they teach. Adult educators must 'organize their curriculum' not based on the subject matter but rather the area the adult is seeking education. Adults seeking to have a more active role within their local church may choose to enroll in a lay ministry program that teaches them about parish administration, liturgy and community planning (English, MacDonald, & Connelly, 2006). The design of the learning experiences is set up in a manner to determine what learners are hoping to obtain from a course rather than with predetermined outcomes. Educators can then address these issues along with the planned learning topics. The more the material or topic is specifically relevant to the individual learner, the more the learner will tend to be engaged and challenged with the activity and

learning (Wlodkowski, 2003). Adult learners enroll in educational courses in order to obtain new information; however, it is important to integrate their existing knowledge (Olson & Davis, 2014).

Within Knowles (1980) concepts of andragogy are key characteristics necessary for adult educators. The development of a teaching style also is necessary in order to become an effective educator (Wlodkowski, 2004). In order to develop a teaching style, one must have knowledge of oneself, or knowledge of one's own beliefs, values, and attitudes about the teaching-learning process. What an educator holds as true will guide practice and form an individualized teaching philosophy. Wlodkowski (2004) also encourages the knowledge of content or the ability of the educator

> to identify how content is to be used, acknowledge the value of the content for the learner, recognize the relationship of the group to the content, understand the impact of the physical and psychosocial environment, select appropriate teaching and learning strategies, and be cognizant of the conditions that enhance and those that divert meaningful learning exchanges. (p. 18)

Finally, it is important to have knowledge of methods. Methods are the ways in which educators can enhance the program and specific learning encounters.

An as educator, one is responsible for creating an environment that is conducive to learning and encouraging each participant's own motivations. Creating a motivational learning environment can determine students' comprehension of a topic, and adult learners will be more engaged when they can see application of what they are learning to their job or personal life. Therefore, it is important to create a motivational space where adult learners not only feel comfortable learning, but also motivated to contribute to the course. The course instructor

should seek to create a culturally responsive learning environment in which motivation can thrive (Wlodkowski, 2003).

Effective Teaching

An effective faculty member is sometimes considered a master teacher. However, a teacher can be *effective,* but not yet mastered the art of teaching. Buskist et al. (2002) provide three approaches to determining what entails a 'master teacher' including common themes from books written by master teachers, qualities of award-winning teachers, and student perceptions of master teachers. The themes from books written by master teachers are knowledge, personality and classroom management skills (Buskist et al., 2002). Rossetti and Fox (2009) conducted a similar longitudinal study reviewing goal and philosophy statements of award-winning professors at a single university. The four themes found and considered qualities of award-winning professors were: 1) presence, 2) promotion of learning, 3) teachers as learners, and 4) enthusiasm (Rossetti & Fox, 2009).

Similar to students' perception, faculty believe it is important to be cognizant of current literature and an expert in the content one is teaching (Buskist et al., 2002). Updating material to remain current with their field and even adding new courses allowed teachers to avoid becoming bored or static (Rossetti & Fox, 2009). Rossetti and Fox (2009) emphasize lifelong learning for teachers. Master teachers have the ability to impart knowledge as it is originally learned while complementing it with newer evidence-based knowledge in order to show its evolution (Buskist et al., 2002).

Master teachers share common personality characteristics in their ability to use their personal strengths to their advantage, while altering their teaching style to fit the needs of the learning environment and develop rapport between themselves and students (Buskist et al.,

2002). Rather than the monotonous tone many think of in higher education, master teachers are able to incorporate humor into the classroom along with respect for students and the students respect for them (Buskist et al., 2002). The presence of a master teacher allows interaction with students and development of mutual rapport and respect (Rossetti & Fox, 2009). Important to teachers are qualities of passion, enthusiasm, enjoyment, and love for the subject matter, with teaching as an entity for learning (Rossetti & Fox, 2009). The passion, trust, respect, and caring nature can be noted both in and out of the classroom (Buskist et al., 2002; Rossetti & Fox, 2009).

Lastly, the master teacher has developed good classroom management skills and promotes learning. They are able to problem solve, hold high expectations of students, and help students be successful (Buskist et al., 2002; Rossetti & Fox, 2009). Buskist et al. (2002) describe behaviors of award-winning teachers in addition to those previously stated including the ability to set clear course schedules and grading standards, and availability to students outside of the classroom (Buskist et al., 2002). Research on effective teaching can be found from the perspective of the teacher. Effectiveness of a teacher is measured most commonly by the student's performance in a course. Qualities deemed effective by faculty may not be the same as those deemed effective by students. Exploration of students' ideal teacher and actual teachers follows.

Ideal or Preferred Teacher

It is common to hear the multitude of characteristics in which faculty describe their undergraduate and graduate experiences that shaped their teaching. The characteristics are a mix of positives and negatives with some teachers having more negative than positive and vice versa. What is remembered most are those aspects considered effective and impactful on one's teaching. Epting, Zinn, Buskist, and Buskist (2004) note that identification of student

perspectives of an ideal teacher can aid in further understanding students' beliefs and interaction with the learning environment. Epting et al. (2004) studied how students' description of their ideal professor compared to their encounters with the typical professor. Therrell and Dunneback (2015) conducted similar research regarding millennial students' prioritization and thus preferences in helping them to learn. Personal characteristics of teachers were found to be important but characteristics of classroom behavior were paramount (Epting et al., 2004; Therrell & Dunneback, 2015).

The personal characteristics noted were faculty who students knew cared about them, were enthusiastic about the content they were teaching, interacted with students in the classroom and showed a passion for teaching (Therrell & Dunneback, 2015). Students found their ideal teacher to be more casual in the classroom, talk with students informally, and incorporate humor into the classroom (Epting et al., 2004; Therrell & Dunneback, 2015). The simple act of getting to know students names provided the respect students needed. Therrell & Dunneback (2015) state "students said they were more willing to work *with* a professor rather than work *for* a professor" (p. 60). Further emphasizing the importance of being personable, Chickering and Gamson (1987) state their first principle of good practice is to encourage contact between faculty and students. This increases student motivation, involvement, commitment to the course, and ability to reflect on their own values and future (Chickering & Gamson, 1987).

The ideal teacher uses a variety of teaching and assessment methods within a course (Epting et al., 2004). Chickering and Gamson (1987) write "what is taught, after all, is at least as important as how it is taught" (p. 3). Therrell and Dunneback (2015) found the top three responses for incorporating active learning were: 1) hands on, interactive labs, or other experiential activities; 2) class discussion involving questions and answers; and 3) case studies

involving problem-solving exercises. In particular, students preferred class discussions that held rigor and relevance with the teacher facilitating the discussion (Therrell & Dunneback, 2015). The teacher should encourage discussion, written reflection including the connection to past experiences, and application of course content (Chickering & Gamson 1987).

Students expect to be treated fairly and equally both in and out of the classroom. Epting et al. (2004) reported students felt strongly about the ideal teacher taking academic honesty seriously by fully investigating and resolving all issues (Epting et al., 2004). Students want to be required to adhere to high expectations (Chickering & Gamson, 1987). In addition, students expect faculty to hold themselves to similar high expectations (Chickering & Gamson, 1987). This idea may require extra work on the part of the faculty member, but these expectations are what faculty and students should be held to on a daily, weekly, semester, and year-long basis.

Student Perspective

In a phenomenographic study, students were asked their perspective on effective teaching by teachers who had not previously been acknowledged for their excellence in teaching (Allan, Clarke, & Jopling, (2009). The top positive and highest regarded statement provided for effective teachers was the teacher's ability to demonstrate excellent knowledge of their subject (Allan et al., 2009). Students felt teachers who held an excellent knowledge base and incorporation of relevant information into the course were quite effective (Allan et al., 2009). Buskist et al. (2005) states "relevance has the effect of making the class interesting, the subject matter useful and the students more likely to attend class and participate in discussions" (p. 115). Similarly, Therrell and Dunneback (2015) found 76% of their participants ideally preferred a real-world connection in class and 44% felt they were more likely to be engaged when the content taught correlated to their specific career goals. Yair (2008) writes the teacher's personal

relationship with students allows the teacher the ability to use relevant material and examples in the class in order to bridge the age and experience gap. Yair's (2008) qualitative study focused on retrospective accounts of key educational experiences specifically its context, feelings during and after the experience, and long term effects of the experience. A sound knowledge base from which to teach along with the application of evidence-based research provides faculty the opportunity to present relevant content. However, the manner in which the content is delivered is equally as important.

The manner in which content is taught can be the determining variable of effectiveness. The ability of faculty to understand the various learning styles and needs of students is important and respected by students. Rather than teaching in a manner that suits faculty, faculty should teach in a manner that suits students. Students value the teacher's ability to include group activities and encourage discussion in the classroom (Allan et al., 2009). Methods of group work, discussion, active learning, and web-based learning have all been found to increase the effectiveness of faculty teaching (Allan et al., 2009; Parpala, Lindblom-Ylänne, & Rytkönen, 2011). Svinicki and McKeachie (2011) note the importance of actively involving the student during the time in which they are processing information being taught, rather than the student listening passively to the teacher. The student will understand and store content to long-term memory when they are able to actively do something with it (Svinicki & McKeachie, 2011). Chickering and Gamson (1987) noted the importance of students' ability to talk, write, relate, and apply their learning in the classroom. Group work tied for the second most common category mentioned by students as effective teaching methods in Parpala et al.'s (2011) study of student perceptions of good teaching. The instructional process variable, the method used to teach, is in the middle of Groccia's model connecting the five preliminary variables and learning

outcomes (Groccia, 2012). Without this connecting variable, there is a breakdown in the teaching and learning process causing the teaching to not be truly effective.

The approachability of the teacher can be interpreted in varying ways and is commonly referred to as an effective behavior (Allan et al., 2009). One interpretation was the ability of faculty to help students believe they could succeed (Allan et al., 2009). The simple act of believing in students and supporting them in their learning is significant to the student. Another interpretation is that the student can easily ask the teacher questions both in and out of class (Allan et al., 2009). Similar to descriptions of the ideal teacher, Yair (2008) found students felt the personal relationship with the teacher was key to their experiences, which relates back to the first principle of good practice noted by Chickering and Gamson (1987). The personal relationship allowed students to relate to teachers and feel an openness and sincerity in conversations (Yair, 2008). Students want to feel comfortable, not afraid, asking questions of the teacher. Time management was also mentioned within approachability. Students reported that teachers who constantly seem rushed to finish a class, go to a meeting, etc. were less approachable (Allan et al., 2009). Significant to students was the idea that the teacher had or made time for students to hear concerns and actually help students (Allan et al., 2009). Teachers who clearly make the effort to help students understand assignments and want students to do well in a course are considered effective teachers.

Faculty who showed students respect were found to be more effective teachers (Allan et al., 2009). Respect was defined in various ways across studies. One way was the ability to increase motivation, inspire, and listen to student opinions without ridicule (Allan et al., 2009; Parpala et al., 2011). Yair (2008) attributed the ability to increase motivation and engage the learner with the personal relationship students had with faculty. There is a large amount of

research on the importance of motivation in regards to the student-teacher relationship. Sviniki and McKeachie (2011) suggest ways in which teachers can spark motivation within the classroom such as: providing opportunities for choice and control; arousing curiosity, providing challenges and offering choices; and creating a class that promotes mastery of material. In addition, trust should be developed between students and teachers allowing students to know the teacher will not humiliate or hurt the student (Yair, 2008).

Rapport

Many of the previously described personal characteristics and even others describe the concept of student-teacher rapport. The Oxford English Dictionary defines rapport as an agreeable relationship in which the individuals involved have a mutual understanding and the ability to communicate their feelings or ideas (Rapport, n.d.). The ability to establish a caring, supportive learning environment is key to educating students (Benson, Cohen, & Buskist, 2005). Similarly, Frisby and Martin (2010) determined the ability of the teacher to create a welcoming and comfortable environment with freedom to interact, creates both an enhanced student-teacher and student-student relationship. Benson et al. (2005) provide evidence of the relationship of rapport and student attitudes, attending and listening in class, studying, and behaviors that contributed to establishing rapport. The perception of instructor rapport is consistent in its critical role of the classroom environment (Micari & Pazos, 2012). Students had positive feelings regarding the teacher and subject matter, and increased engagement in positive academic behaviors when student-teacher rapport was established (Benson et al., 2005). Further, the establishment of student-teacher rapport clearly indicated the students' probability of taking a second class from the teacher, appreciating the subject matter, enjoying the teacher, and utilizing teacher office hours (Benson et al., 2005).

The establishment of the teacher-student relationship positively correlated to a higher student final grade as well as increased student confidence in their ability within the course (Micari & Pazos, 2012). Variables correlating to a higher student final grade were "the student looking up to the professor, feeling comfortable approaching the professor and feeling that the professor respects the students" (Micari & Pazos, 2012). These are similar to top qualities associated with student-teacher rapport in Benson et al.'s (2005) study which, in order, were "encouraging, open-mindedness, creative, interesting, accessible, happy, having a 'good' personality, promoting class discussion, approachability, concern for students, and fairness" (p.238). Findings indicated teacher-student rapport is comprised of both immediacy and foreseeing valuable student results (Wilson et al., 2010; Ryan, 2014). Many of these qualities were described previously in student descriptions of the ideal and effective teacher. It can be difficult to determine what specific qualities/behaviors constitute an effective teacher; however, each teacher brings unique characteristics along with a varied learning environment to a course. A look into effective teaching in nursing education follows to determine if there are discipline specific behaviors noted to be effective. What can be determined is that there are some common qualities/behaviors evident of those considered truly effective or master teachers.

Nursing Perspective

The baccalaureate nurse is prepared for practice unlike other undergraduate nurses. Baccalaureate nursing education distinctly produces a nurse who is grounded in theoretical knowledge, practical application, evidence-based practice, and the ability to be a successful leader (Amos, 2017). However, in order to produce this type of nurse it is essential to be educated by effective faculty. The NLN (2005) challenged nurse educators to examine the effectiveness of their current practices to ensure faculty are teaching in environments of

"collaboration, understanding, mutual trust, respect, equality, and acceptance of difference" (p. 4).

Schaefer and Zygmont (2003) found nursing faculty acknowledged the importance of and used student-centered vocabulary, but taught in a teacher-centered format. Gardner (2014) noted the complexity of teaching, stating that to be an effective teacher in any specialty it is important to have knowledge about one's discipline, varied teaching sills, certain personal qualities and relationships with students, and pedagogic skills. Hicks and Butkus (2011) state an expert nurse educator is one who knows oneself and the students, is able to teach as second nature allowing a focus on relationships with students, and uses judgment to meet the needs of students. Expert educators view teaching as a way of being rather than as a way of doing with four distinct ways of being as empiric knowing, ethical knowing, aesthetic knowing, and personal knowledge (Hicks & Butkus, 2011).

Empiric knowing implies that the knowledge of master teachers about nursing education comes from the research of other disciplines because there is a lack of pedagogical research available related to nursing education (Hicks & Butkus, 2011). Continued research into the development of empiric knowledge will help to create and disseminate a knowledge base for nursing education. The expert nurse educator's knowledge is developed and nurtured over the years by increasing knowledge in an attempt to improve oneself and the field of nursing (Hicks & Butkus, 2011). Further, expert nurse educators are highly skilled in their practice of nursing and are able to verbalize and demonstrate tasks at the learners' level of knowledge while knowing what the student can already do, allowing the educator to provide guidance and direction (Pratt, Boll, & Collins, 2007). Similar to effective teaching in other disciplines, undergraduate nursing students need to be able to see the relevancy of the content in order to

become engaged in the topic (Crookes, Crookes, & Walsh, 2013). Pratt et al., (2007) state the "primary responsibility of nurse educators is to represent the content accurately and efficiently" (p. 51). Empiric knowing relates similarly to the idea of effective teachers being content masters in their field with the ability to pass on their knowledge in a relevant and applicable manner.

Ethical knowing encompasses integrity, confidentiality, behavior, privacy, professionalism and timeliness (Hicks & Butkus, 2011). Methods of both verbal and nonverbal communication are important as experts should be able to express, elaborate, and draw on their knowledge in order to relay concepts. The use of humor, energy, eye contact, enthusiasm and expressions are also important (Gardner, 2014; Hicks & Butkus, 2011). Rather than just teach students, expert teacher's model what they are teaching in order to convey concepts and improve student performance (Hicks & Butkus, 2011). Ethical knowing allows teachers to create a learning environment based on trust and respect.

Aesthetic knowing takes on a more complicated process and is the necessity of educators to connect and motivate students through their interactions with them (Hicks & Butkus, 2011). The expert nurse educator holds students accountable for course goals without lowering standards, while at the same time helping students attain competence in their learning (Pratt et al., 2007). In order to connect with students, it is necessary to show students care and appreciation and ensure students understand that self-esteem and self-concept are not at risk in the learning environment. Similarly to Chickering and Gamson's (1987) first principle of good practice, open dialogue between student and teacher allows for both academic and emotional support, feedback, and re-direction of the student (Pratt et al., 2007).

Experts display professionalism through their continued efforts to stay current in their field by committing to lifelong learning practices (Hicks & Butkus, 2011; Pratt et al, 2007; Stein,

Fujaisaki, & Davis, 2011). Not only do experts have a passion for teaching and sharing their knowledge, but also for learning in order to achieve mastery. Expert teachers recalled developing their teaching style with a teacher-oriented approach, but quickly finding the interactive, student-centered approach to be more effective (Gardner, 2014). The additional benefit of interactive, student-centered, technology driven techniques helps in retention, motivation, and participation thus linking theory and practice (Crookes, et al., 2013). Stein et al. (2011) noted both pharmacy and nursing educators found facilitation of active learning such as discussion, case studies, and critical thinking with evaluation and feedback as effective. This method of teaching ensures a collaborative and safe learning environment while developing reasoning and explanations on their own rather than relying on the teacher (Pratt et al., 2007).

The characteristic that sets expert educators apart from others is the continual feedback they receive regarding their teaching (Hicks & Butkus, 2011). Participants in Gardner's (2014) study would change their teaching style to fit the needs of the students based on student feedback. They determined the effectiveness of their teaching through student evaluations but also through grades, student participation, and attitudes of students. Feedback can also come from peer evaluation, journaling, research, and collaborative assessment and allows for improvements to be made to expect educator's practices (Hicks & Butkus, 2011). Personal knowledge development ensures educators are reflective in practice, biases, philosophies and assumptions.

Research in nursing education regarding effective teaching behaviors is minimal with the bulk of information coming from studies regarding faculty views. There is a lack of evidence currently regarding effective teaching behaviors of nursing faculty from both the student and faculty perspective. It should be noted that only literature regarding effective teaching in the

didactic setting was reviewed. There were multiple studies found noting effective teaching qualities of clinical nurse educators, but these individuals taught solely in the clinical setting, not the didactic setting. A smaller number of studies were found to have included nursing educators and/or students within a larger university study and none solely from a nursing student's perspective.

Teacher Behavior Checklist

Through research on elements of master teaching, Buskist et al. (2002), there were 40 qualities found across three approaches: master teachers view of master teaching, qualities of award-winning teachers, and student perceptions of master teachers. Five qualities overlapped between master teacher's view of master teaching and qualities of award-winning teachers. Only one quality, passion/enthusiasm, emerged across all three approaches (Buskist et al., 2002). This common quality is a personal characteristic that any educator can incorporate if they enjoy the act of teaching. Further looking into personal qualities of effective teachers, the first phase of development occurred for the TBC.

In Phase I, Buskist et al. (2002) surveyed undergraduates (n=114) asking them to list three characteristics they perceived to be essential for college or university master teachers. From this survey, 47 characteristics were identified and then presented to a different sample of undergraduate students (n=184). Students were asked to identify three specific behaviors reflective of the qualities with an example provided for assistance. Buskist et al. (2002) found instances where behaviors listed for one quality overlapped with those listed for another. The pairing down of qualities resulted in 28 qualities with corresponding behaviors (Buskist et al., 2002).

In Phase II, undergraduate students (*n*=916) and Auburn University faculty (*n*=118) members were asked to select the top 10 qualities/behaviors from the list of 28 (Buskist et al., 2002). Consensus was found among gender in both student and faculty participants. Analysis between students and faculty found agreement on six of 10 behaviors; however, the other four behaviors were markedly different with faculty focusing on classroom aspects (effective communication, prepared, current, and critical thinking) and students focused on their relationship with the teacher (understanding, happy/positive/humorous, encouraging, and flexible) (Buskist et al., 2002). The six qualities common to both students and faculty included: (a) realistic expectations/fairness, (b) knowledgeableness, (c) approachable/personable, (d) respectful, (e) creative/interesting, and (f) enthusiasm (Buskist et al., 2002). These findings correlate with the three approaches mentioned previously. There were 12 qualities that overlapped with master teachers view of master teaching, four with qualities of award-winning teachers, and five with student evaluations, providing evidence that incorporation of certain qualities/behaviors can help educators become more effective (Buskist et al., 2002).

Psychometric Properties of the TBC

To determine the validity and reliability of the TBC, Keeley, Smith, & Buskist (2006) revised the TBC to an evaluative tool to measure teaching. In the first study, the tool had an instruction set and Likert-type scale added to it. The tool was completed by introductory psychology students (*n*=313). The two-factor analysis in Study 1 produced two sub-scales within the TBC. The first sub-scale, caring and supporting, consisted of items 1, 7, 8, 10, 13, 16, 18, 19, 20, 22, 23, 25, and 28. The second sub-scale, professional competency and communication skills, consisted of items 2, 3, 4, 6, 11, 12, 14, 15, 21, 24, and 27. The two subscales had a correlation of .73 (Keeley et al., 2006). The remaining four items (5, 9, 17, and

26) were not used. Study I confirmed a high internal reliability of the TBC. Keeley et al., (2006) completed Study II in an effort to confirm their findings. In this study, data collection occurred mid-semester and end of the semester in order to assess test-re-test reliability. Study II provided an indication of strong test-retest reliability. Keeley et al (2006) determined all 28 items of the TBC had r values of .24 to .64 using the Pearson correlation. Reliability of the caring and supportive sub-scale was .68, $p<.001$; professional competency and communication sub-scale was .72, $p<.001$. The overall reliability of the TBC was .71, $p<.001$. The TBC was found to be a structurally valid and reliable tool in evaluating teaching based on the study's high internal reliability and the test-retest reliability. Teachers can use the targeted teaching behaviors recognized to improve their teaching effectiveness.

Keeley, Christopher, & Buskist (2012) used the TBC to determine perceptions of master teaching among students at a small 4-year liberal arts college and a small liberal arts college in Japan. Surprisingly students from the U.S. and Japan differed on only three qualities in their respective 'top 10' lists. The authors speculate from the study that there could be two universal principles that constitute a master teacher including: "(1) knowledge or technical competence and (2) enthusiasm and interpersonal competence" (Keeley et al., 2012).

TBC Utilization in Research

Students.

Mowrer, Love, and Orem (2004) surveyed undergraduate students (n=313) in a variety of psychology courses. Across the courses, knowledgeable and approachable were in the top 10 desirable qualities. The study hypothesized that varying student types would rate characteristics differently. Their findings did not support this; however, they did support the Buskist et al. (2002) findings with students reporting eight of the 10 of the same qualities. Students in this

study found effective communication and accessible in their top 10, unlike Buskist et al. (2002). In their second study, Mowrer et al. (2004) completed a similar study with a different sample of 134 participants, and asked them to provide demographic information and use the TBC in a Likert type format. Findings were similar to the first study, except the qualities/behaviors of understanding and confident ranked in the top 10. Mowrer et al. (2004) further determined results from Buskist et al. (2002) go beyond the type of student, measurement scale, and university type.

Keeley, Furr, and Buskist (2010) used the TBC at Auburn University (n=142) and Appalachian State University (*n*=184) with students in introductory psychology courses providing ratings using a Likert-type scale (*1=my professor never exhibits this behavior* to *5=my professor always exhibits this behavior*). The authors' purpose was to determine if the TBC could find differences in teacher quality. Students were asked to complete the survey three separate times in order to evaluate their 'worst' professor, 'best' professor, and the professor of the course they had prior in the day or day before. Variability factors assessed were teachers, students, and items along with the convergent validity of the ratings. Variability of student ratings in the two participant groups occurred as a result of teacher differences. While almost no variance was found among student responses, faculty variance accounted for 45% on each of the sub-scales of the TBC. Neither students nor teachers differed much in use of the items. Keeley et al. (2010) determined students rated their 'best' teachers higher than the most recent and the most recent higher than the 'worst'. Keeley et al. (2010) found that the TBC is able to differentiate student perceptions and detect differences among teachers.

Landrum and Stowell (2013) sought to determine if the eight qualities/behaviors agreed upon as effective in two previous studies correlated to one dimension of master teaching, and the

level of agreement students had when viewing the same recorded portions of teaching. The eight qualities/behaviors used were (1) approachable/personable, (2) creative/interesting, (3) encourages/cares for students, (4) enthusiastic about teaching/topic, (5) flexible/open-minded, (6) knowledgeable about subject matter, (7) realistic expectations/fair grading, (8) respectful. The study occurred at two universities with students only viewing recordings of teachers at the opposite university. Landrum and Stowell (2013) found seven of the eight qualities/behaviors to have a strong correlation. Findings indicated that when a master teacher displayed one quality/behavior, there was a higher likelihood of the teacher displaying more of the eight qualities/behaviors. One quality/behavior not found with a high correlation was knowledge and researchers suspected that teachers who displayed a mastery level of content were less likely to transmit their knowledge in an effective manner or vice versa.

Faculty.

Ismail (2014) studied and compared faculty perceptions of the top 10 qualities/behaviors of excellent teaching in both U.S. - and foreign-educated faculty. Findings indicated U.S. - and foreign-educated faculty agreed on eight of the top 10 qualities/behaviors. Participants included U.S.-educated (n=309) and foreign-educated faculty (n=139). The eight qualities/behaviors agreed on were: (1) knowledgeable about subject, (2) enthusiastic about teaching, (3) creative/interesting, (4) promotes critical thinking, (5) effective communicator, (6) approachable/personable, (7) encourages/care for students, and (8) manages class time/punctuality. Foreign-educated faculty valued qualities/behaviors of (a) confident, (b) effective communicator, and (c) encourages and cares for students with foreign-educator more than U.S.-educated, while U.S.-educated faculty valued enthusiastic about teaching more. In addition, Ismail (2014) found statistical differences between the two groups as a whole. Gender

(female U.S.-educated and female foreign-educated; male U.S.-educated and male foreign-educated) and professor rank showed statistical differences as well.

Previously mentioned was the lack of faculty opinion of what constitutes effective teaching. Buskist et al. (2002) studied master teachers' perceptions of master teaching and qualities of award-winning teachers and Ismail (2014) provided an international assessment of faculty perceptions. Keeley, Ismail, and Buskist (2016) furthered this research in an effort to determine master teachers view of excellent teaching using the TBC and comparing the results to that of students and other faculty. Invited participants were those who had won at least one national teaching of psychology awards. Participants (n=50) had an average teaching experience of 21 years with 66% full professors, 14% associate professors, 18% assistant professors and the remaining 2% lecturers. Participants completed the study by answering demographic questions followed by completing the TBC using a 10-point Likert-type scale. The researchers found that participants did not equally value all of the qualities/behaviors inherent of excellent teaching. Three qualities/behaviors (punctuality/manages class time, accessible, and promotes class discussion) found in Keeley et al. (2016) were not consistent compared with the top 10 qualities/behaviors found by Buskist et al. (2002), Schaeffer, Epting, Zinn, and Buskist (2003), Ismail (2014), and Ford (2016). It is unknown the experience level of faculty in other studies compared with the award-winning faculty in Keeley et al. (2016). The study did provide consistency in that a minimum six qualities/behaviors were found in multiple studies of students.

Students and faculty.

Schaeffer et al. (2003) surveyed community college students and faculty using the TBC to determine both views regarding effective teaching. Faculty (n=98) and students (n=231) completing the survey were asked to identify 10 qualities/behaviors most important to master

teaching. Faculty and students agreed on eight of the top 10 qualities/behaviors identified: (a) knowledge, (b) creative and interesting, (c) encouraging and caring, (d) enthusiastic, (e) flexible and open-minded, (f) knowledgeable, (g) realistic expectations/fair, and (h) respectful (Schaeffer et al., 2003). Faculty identified the other two in their top 10 from a technical standpoint, whereas students chose qualities related to the student-teacher relationship. Findings from Schaeffer et al. (2003) and Buskist et al. (2002) indicated agreement on six of the top 10 qualities/behaviors inherent of effective teaching. Students in both studies agreed on all of the top 10 qualities/behaviors while faculty in both groups agreed on eight of the top 10 qualities/behaviors. Rankings for a quality/behavior on faculty and student results could be found within one or two rankings of the other.

Ford (2016) used the TBC to determine the qualities/behaviors of effective teaching by student pharmacists and pharmacy faculty. Participants (faculty *n*=211, students *n*=213) completed demographic questions along with indicating the top 10 qualities/behaviors effective to teaching in pharmacy education. Agreement of six of the top 10 behaviors of faculty and students were: (a) knowledgeable about subject matter, (b) effective communicator (c) approachable/personable, (d) enthusiastic about teaching and the topic, (e) realistic expectations of students/fair testing and grading, and (f) confident. This correlated with previous studies of effective teaching qualities/behaviors using the TBC. Demographic information provided that faculty across rank agreed on seven of 10 qualities/behaviors and level of student learners agreed on eight of the 10. Of significance was the difference in importance faculty and students placed on promoting critical thinking, with faculty valuing it more than students.

International.

Keeley, Christopher, and Buskist (2012) compared student responses from a small, 4-year liberal arts college in the U.S. to those of a small liberal arts college in Japan (Miyazaki International College). U.S. students (n=231) completed the survey online while Japanese students (n=111) completed a hard copy form. Participants ranked the 28 qualities using a Likert-type scale (*1=never exhibits this quality* to *5=frequently exhibits this quality*). Students from both liberal arts colleges agreed on seven of the top 10 behaviors (knowledgeable, confident, approachable/personable, enthusiastic, effective communicator, prepared, good listener). U.S. students included accessible, respectful, and intellectually stimulating in their top 10, whereas Japanese students included creative and interesting, strives to be a better teacher, and humble.

Keeley et al. (2012) examined the generalizability of Buskist et al. (2002) findings from a large, research intensive university (Auburn University) to findings at a 4-year small liberal arts college (Albion College), Schaeffer et al. (2003) study utilizing community colleges, and the recent findings with Japanese students. Among the three types of universities, students agreed on four of the top 10 qualities/behaviors (knowledgeable, approachable/personal, respectful, and enthusiastic) inherent to effective teaching. Notable is that students at both liberal arts colleges identified confident, effective communicator, prepared and good listener as characteristics of master teachers while students at the research university and community college identified qualities/behaviors of testing/grading, creative and interesting, happy/positive/humorous, encouraging, flexible, and understanding.

Jõemma (2012) used the TBC to understand student perceptions of effective teaching at an Estonian university, focusing specifically on differences in views of master teaching by

participant age and academic discipline. Participants (*n*=679) were from multiple public universities with an age range 19-54 years. For study comparison two age groups, (1) 23 and younger and (2) 24 and older, were made based on the idea that most students completed their studies around age 23. There were five academic disciplines identified for comparison: (a) education sciences (*n*=110), (b) applied social sciences (*n*=248), (c) humanities and pure social sciences (*n*=98), (d) natural sciences (*n*=68), and (f) technologies (*n*=154).

The TBC went through extensive translation practices. A pilot study was conducted to offer students and faculty the opportunity to make comments and add characteristics if something was missing from translation; however, all 28 remained on the survey when administered. A Likert-type scale (*1=totally unimportant* to *5=very important*) was used for participants to indicate the importance of all 28 items to effective teaching. Lastly, they were asked to select the top 10 qualities/behaviors of a master teacher. The overall rank of the top 10 qualities/behaviors identified to effective teaching in order were: (1) knowledgeable, (2) enthusiastic, (3) provides constructive feedback, (4) approachable/personable, (5) creative/interesting, (6) professional, (7) realistic expectations/fair, (8) presents current information, (9) prepared, and (10) flexible/open-minded. The group of younger students (23 and younger) valued characteristics of interpersonal skills, care and support while their counterpart identified characteristics of professional skills to be more important. Statistical differences among academic disciplines were also noted in 13 qualities and behaviors with several instances of difference occurring between education studies and technologies. Liu et al. (2016) determined Estonian students identified qualities/behaviors of knowledgeable about subject matter and classroom instruction skills as more important than interpersonal skills, care and support.

Liu, Keeley, and Buskist (2015) studied the broader application of the TBC using Chinese participants at a large university and comparing the results to Keeley et al.'s (2012) study. Participants (*n*=115) were mostly male, had a mean age of 21.82, and were currently enrolled in a psychology-related course. The TBC was completed in the same manner as Keeley et al (2012) study using a 5-item Likert-type scale (*1=never exhibits this quality* to *5=frequently exhibits this quality*). They found participants among the three countries, China, Japan, and the United States, had only three qualities/behaviors in common: prepared, sensitive and persistent, and understanding. Other qualities/behaviors were identified that overlapped between the two countries. Chinese students were found to value the quality/behavior of technologically competent more than both American and Japanese students (Liu et al., 2015). Liu et al. (2015) also found the Chinese students "value traditional hierarchical teacher roles and structure….less interested in the interpersonal factors of teaching than that of the Japanese students" (p. 85). The Chinese students put less value in interpersonal qualities with more value on qualities/behaviors of authoritative, professional, respectful, establishing goals, promoting discussion, and promoting critical thinking.

Liu, Keeley, and Buskist (2016) completed research using the TBC at an eastern China university to determine differences in perception across academic disciplines. The participant (*n*=348) academic breakdown was psychology (*n*=115), education (*n*=94) and chemical engineering (*n*=139) with a mean age of 21.82 years. Similar to previous studies, the TBC was used with a Likert-type scale (*1=never exhibits this quality* to *5=frequently exhibits this quality*) for students to rate all 28 qualities/behaviors regarding master teaching. Results indicated agreement on five of the top 10 qualities/behaviors associated with master teaching (respectful, knowledgeable, confident, strives to be a better teacher, and realistic expectations). Significant

differences between disciplines were also present: 15 between psychology and chemical engineering (authoritative, confident, enthusiastic, establishes goals, flexible/open-minded, happy/positive attitude/humorous, humble, prepared, presents current information, professional, punctuality/manages class time, realistic expectations/fair testing and grading, respectful, sensitive and persistent, and strives to be a better teacher); seven between education and chemical engineering (authoritative, establishes goals, humble, prepared, professional, punctuality/manages class time, and sensitive and persistent); and one between psychology and education (approachable/personable). The number of statistical differences further emphasize the importance of consideration of discipline when reviewing students' evaluation of teaching (Liu et al., 2016). Many universities and colleges have standardized student teacher evaluations, but could consider incorporating culture context and discipline specific context.

Limitations of the TBC

The TBC has been used in multiple studies to determine student and faculty perceptions of effective teaching. It is clear from the literature there are similarities across age, discipline, university setting, and internationality. Liu et al. (2015) recommend further research regarding the effects of nationality and culture on effective teaching qualities/behaviors. While some studies have included graduate level programs, the majority were restricted to undergraduate programs. Further research that also includes graduate students would determine the generalizability of results to undergraduate and graduate programs within and across disciplines. A large portion of the studies completed to date have focused on samples from within the academic discipline of psychology. Research using the TBC needs to be conducted across a wider discipline range in order to understand its reliability as a tool among numerous academic programs. Additionally, further investigation using the TBC at an increased number of various

types of colleges (liberal arts, research intensive, private, etc.) would provide additional evidence of similarities and differences of teacher qualities/behaviors across these settings.

Keeley et al., (2006) note that the TBC consists of qualities/behaviors identified by student input. Some but not all qualities have shown empirical grounding. Further research is encouraged regarding the accuracy of the TBC to detect slighter differences among teachers. Keeley et al. (2012) suggest continued research using the TBC as it predicts qualities/behaviors of master teachers and the subsequent learning outcomes of courses taught by these master teachers. Qualities/behaviors deemed effective to teaching should in essence correlate with higher performance of students which provides meaningfulness to effective teaching. In order to address the mentioned limitations, modification of the TBC may be necessary to capture information accurately.

Future of Master Teaching

Learning is a lifelong pursuit for many individuals. For learning to occur and be effective, it is necessary for faculty to be knowledgeable of the learning process. Variables in the learning process connect in order for teaching and learning to be successful. Faculty feel called to teach for multiple reasons; however, those faculty who teach out of enjoyment, passion for the subject matter, and the reward of student success are what is needed in higher education. Educators must be able to provide students with content in a manner they can understand while making it relevant to them. Educators should push students to examine what they learn in order to apply and reflect on it. This ability to critically think takes time to develop, but when achieved, allows the student to develop excitement and care about the content similar to the educator. Influencing students in this manner has been found to be extremely rewarding to the educator (Benson et al., 2005).

The millennial student is an adult, but with a different set of characteristics than those of generations past. Millennials are technologically savvy, embrace diversity in the world, enjoy close relationships with family and peers, prefer working in groups, have high expectations of themselves, and believe that with effort, they have earned the right to work in a professional role. These characteristics can be challenging in the higher education setting. Knowledge of Knowles' (1980) basic assumptions for pedagogy and andragogy provide faculty the ability to reach the millennial adult learner. It is necessary to understand the learner, the learner's experiences, readiness to learn, orientation to learn, and motivation for learning. In order for faculty to understand these aspects of the learner, understanding of personal beliefs and values regarding the teaching-learning process, must first occur.

A foundational basis for teaching is necessary in order for faculty to become master and effective educators. Research has been conducted for years regarding effective education. Common to master teachers is the knowledge they possess, their personality, and management of the classroom. This sequence is unique in its ability to combine the educators' exceptional content knowledge, enthusiasm, care, and pedagogical knowledge. Common characteristics of master teachers have surfaced from years of research including: knowledge of subject, relevance of information, current information, active involvement in learning, approachability, encouragement, trust, respect, and rapport (Allan et al., 2009; Benson et al., 2005; Buskist et al., 2005; Parpala et al., 2011; Sviniki & McKeachie, 2011; Therrell & Dunneback, 2015; Yair, 2008).

Buskist et al., (2002) researched effective teaching subsequently developing the TBC as a tool for determining qualities/behaviors of effective teaching. The TBC is a psychometrically sound tool in its ability to measure effective teaching. Two sub-scales within the TBC allow for

differentiation between qualities/behaviors identified as caring and supportive or professional competency and communication. Research using the TBC has been conducted in a variety of academic settings (students, faculty, research universities, liberal arts colleges, internationally, and across disciplines). While each study has found a different set a qualities/behaviors as effective, there are noticeable trends. Studies specific to students perspectives show the value of a faculty member's knowledge of subject matter, enthusiasm, approachable/personable, realistic expectations, respectful, and encourages/cares (Buskist et al., 2002; Ford, 2016; Mowrer et al., 2004; Schaefer et al., 2003). Faculty perspectives show the value in the qualities/behaviors of knowledgeable of subject matter, approachable/personable, creative/interesting, enthusiastic, and promotes critical thinking (Buskist, et al., 2002; Ford, 2016; Ismail, 2014; Schaeffer et al., 2003).

The TBC has been used internationally with success however the literature included shows only one quality/behavior (knowledgeable about subject matter) identified as effective in teaching across participant samples from China, Estonia, Japan, and the U.S. (Jõemma, 2013; Keeley et al., 2012: Liu, 2016). Psychology has been the academic discipline studied most commonly with a small number of studies using participants from disciplines including: chemical engineering, education, pharmacy, applied social sciences (business, law, journalism, architecture, social work), humanities and pure social sciences (geography, history, performing arts, philosophy, psychology, religion), and natural sciences (physics, chemistry, mathematics, biology) and technologies (computer science, medicine, veterinary, and agriculture) (Buskist et al., 2002; Ford, 2016; Jõemma, 2013; Keeley et al., 2010; Keeley et al, 2012; Landrum & Stowell, 2013; Liu et al., 2015; Liu et al., 2016; Mowrer et al., 2004; Schaeffer et al, 2003). Continued research regarding master teachers and the effective qualities/behaviors inherent to them is necessary. The qualities/behaviors from the current literature provides a basis for higher

education programs to include within their educational-focused curriculum. Incorporation of TBC research into graduate education programs would prove to be beneficial not only to graduates but to the administration that hires the graduates. Graduates given the knowledge and application of qualities/behaviors effective in and out of the classroom allow them to enter the classroom with an advantage in their ability to apply the qualities/behaviors known to be effective to teaching. New graduate educators are not fully equipped with these qualities/behaviors and must recognize the need to have knowledge, personality, and classroom management skills in order to become a master teacher (Buskist et al., 2002).

Future of Nursing Education

Literature related to nursing education and effective teaching was not as robust concerning effective teaching in the didactic setting. Literature is available more widely regarding effective teaching in the clinical setting (hospital, outpatient health, community health). While the qualities/behaviors necessary for effective teaching in the clinical setting are most likely similar, the context of practical experience and student-teacher ratio adds a layer of complexity quite different than the didactic setting. National organizations such as the NLN and AACN provide standards from which nursing programs should frame their education while providing best-practices for educating nursing students. Even the NLN sought help from nurse educators to evaluate the effectiveness of their teaching with the urge to use strategies such a collaboration, mutual trust, respect, equality, and accepted differences (NLN, 2005). To date, there has been no research using the TBC regarding effective teaching in nursing education. The few studies available show findings with similarities such as: student-centered, knowledge of content, continued learning to stay current, variety of pedagogical practices, certain personal qualities, and continual feedback (Gardner, 2014; Hicks & Butkus, 2011; Pratt et al., 2007;

Schaefer & Zygmont, 2003; Stein, et al., 2011). Pedagogical practices used by nursing educators are commonly adapted from research of other disciplines indicating a need for further research to create and disseminate practices specific to nursing education. Personal qualities of nurse educators identified as effective in teaching pertain to integrity, professionalism, humor, enthusiasm, motivation, trust, care and appreciation (Gardner 2014; Hicks & Butkus, 2011; Pratt et al., 2007; Crookes et al., 2013; Stein et al., 2011).

Nursing application numbers are increasing rapidly; however, the number of faculty available to educate students has not seen the same rapid growth. The increasing age of nursing faculty indicates there will be a surge in retirement of nurse educators in the next 5-10 years. The retirement of these educators could negatively affect the success of nursing programs. However, as the NLN (2005) urged educators to reflect on the effectiveness of their practices, it is also necessary for graduate nursing programs to evaluate their programs and their ability to produce a nurse educator with at least some qualities inherent of effective teaching. Entering the nurse educator workforce with knowledge of content, personality traits, and classroom management skills helpful to effective teaching is important to success of nursing programs.

Chapter 3

Methods

The number of applications to nursing schools has steadily risen over recent years. While the number of nursing schools has increased, the number of faculty teaching in the schools has not seen the same increase. With a shortage of nursing faculty, it is important that nursing schools hire faculty who possess the qualities inherent of effective teachers. In order to effectively educate nursing students, it is necessary to have effective nurse educators. Many faculty considered highly effective are those soon retiring. It is necessary to determine the qualities/behaviors of these nursing faculty in order to educate future nurse educators, while also engaging and ensuring success of a nursing program.

Purpose of the Study

The purpose of this study was to determine the relationship between those qualities valued by nursing faculty and those valued by baccalaureate nursing students and to determine if there was a relationship between the findings of the original Teacher Behavior Checklist and this study. The study used data collected from nursing faculty and baccalaureate nursing students at a Southeastern U.S. land-grant, public university. The study occurred during spring 2017 academic semester with nursing faculty and students asked to complete an on-line survey. Survey participants were asked to rank the top 10 of 28 possible qualities/behaviors they perceived as effective teaching in nursing education. Additional demographic questions were asked of both nursing faculty and students.

Research Questions

1. What are the qualities/behaviors valued by nursing faculty?
2. What are the qualities/behaviors valued by baccalaureate nursing students?
3. What is the relationship between those qualities/behaviors valued by nursing faculty and those valued by nursing students?
4. What is the relationship between the findings of the original Teacher Behavior Checklist and the findings in this study?

Research Design

This study used a quantitative, non-experimental design, focused on identifying teaching qualities/behaviors deemed effective by students and faculty in a baccalaureate nursing program. Participants were asked to rank order the top 10 qualities/behaviors from the TBC's list of 28. The goal was to compare responses of baccalaureate nursing students and nursing faculty. Participants were recruited from a Southeastern U.S. land-grant, public university.

Instrument

The survey instrument was developed from the Teacher Behavior Checklist (TBC) (Appendix A). The TBC is a 28-item tool used to identify qualities/behaviors of effective teachers. Two subscales comprise the TBC: caring and supportive (items 1, 7, 8, 13, 16, 18, 19, 20, 22, 23, 25, and 28); and professional competency and communication skills (items 2, 3, 4, 6, 11, 12, 14, 15, 21, 24, and 27). Studies have found the TBC a psychometrically sound tool with high internal reliability and strong test-retest reliability (Keeley et al., 2006). Keeley et al. (2006) determined *r* values for all 28 items on the TBC between .24 to .64 ($p<.001$ for 19 items). The caring and supportive subscale had a reliability rating of .68 ($p<.001$), professional

competency and communication subscale rating of .72 ($p<.001$) and coefficient for the total survey of .71 ($p<.001$) (Keeley et al., 2006).

Survey Instrument

Two instruments were developed for this study. The first was developed for faculty use with a total of six questions. The first question asked faculty to rank order the 10 qualities/behaviors they identified as most important to highly effective teaching. The last five questions asked faculty to indicate faculty rank, total years of teaching experience, gender, age, and race/ethnicity (see Appendix C). The TBC was used as originally designed by Buskist et al. (2002).

The second instrument was developed for undergraduate student use with a total of 5 questions. The first question asked students to rank order the 10 qualities/behaviors they identified as most important to highly effective teaching. The last 4 questions asked students to indicate their current semester in the professional nursing program, gender, age, and race/ethnicity (see Appendix D).

Participants

This study utilized a convenience sample of faculty and students currently employed and enrolled, respectively, in the spring 2017 academic semester in the school of nursing at this public university. Inclusion criteria were full-time faculty teaching in the school of nursing and baccalaureate nursing students enrolled in the professional nursing program. Due to FERPA concerns and privacy issues, the principal investigator worked with the Auburn University School of Nursing Student Services Office to help ensure anonymity of participants. This office administered the survey to both faculty and students. Following permission from the Office of Institutional Review Board (IRB), an email was sent to the School of Nursing Student Services

Office containing the information email and link to the survey. The survey was housed in Qualtrics, an online survey platform used at this university. The researcher was unaware of faculty and student email addresses and identifiable information.

Procedures and Data Collection

The research was approved by the IRB at the university it was conducted (IRB#16-504 EX 1701) (see Appendix E). The School of Nursing Student Services office distributed the email containing the information letter and survey link to all faculty and students in the School of Nursing. Once the participant accessed the link, the participant was taken to the Qualtrics platform where the information letter appeared again. After reviewing the letter, if participants continued into the survey, consent was assumed and the first question began. The participant had the option to exit the survey at any time. The link was active for 6 weeks with two reminder emails sent within the time frame. Data remained anonymous at all times and was stored on a secure server at this university with only the principal investigator having access.

Data Analysis

Data collected over the six-week time period provided limited demographic information and identification of the top 10 qualities/behaviors participants perceived as most effective in nursing education. Data analysis was conducted using statistical software, SPSS 24.0.

To answer Research Questions One and Two, nursing faculty and nursing students were asked to identify the top 10 behaviors and associated qualities from a list of 28 they perceived most effective to nursing education. Participants were asked to rank order the qualities with one being the most effective. Responses were analyzed to identify similarities and differences across variables. Descriptive statistics were analyzed to determine frequency and percentages of responses.

To answer Research Question Three, nursing faculty and nursing students' responses were compared. Descriptive statistics were calculated to determine the frequency of responses for all items. The sum of frequencies of the top ten qualities/behaviors was used to compare the rankings between nursing faculty and nursing students. The total was then sorted from highest to lowest and compared. An independent Chi-square test was conducted to compare nursing faculty and nursing students' mean rankings of the most effective qualities/behaviors to nursing education. The independent Chi-square test was appropriate for its ability to evaluate the likelihood an event occurs more frequently in one variable than another (e.g., nursing faculty and nursing students) or between categories (e.g. gender). The test verified if there was a statistically significant difference between nursing faculty and nursing students' rank of the top ten behaviors most effective in nursing education. A significance level of 0.05 was used.

To answer Research Question 4, responses from this study were compared with those from previous studies using the TBC. The sum of frequencies of the top ten qualities/behaviors was used to compare the rankings between nursing faculty and nursing students with those of previous studies using the TBC.

Limitations of the Method

The use of an online survey was advantageous with the ease of distribution via email and participant ability to access the survey within the email. One limitation was the low response rate for nursing student participants. The nursing student response rate for ranking of the top 10 behaviors and qualities was 25.2% and 24.4% for the demographic questions. Previous studies with high response rates used a face-to-face survey environment (Buskist et al., 2002; Schaeffer et al., 2003).

A second limitation was the small sample population available at this university. The small sample size can affect the level of certainty in this study due to a wider margin of error. In addition, to achieve a smaller effect size, the difference between groups observed, it is necessary to increase the sample population. Opening the survey across several institutions would have increased the sample size and possibly reduced the effect size of the analysis.

Summary

This chapter outlined the design and procedures for the collection of data in order to answer the proposed research questions. The sample of participants included nursing students and nursing faculty from a Southeastern U.S. land-grant, public university. The instrument used in the study was the TBC with demographic questions asked specific of the participant population. Analysis of the data along with further information regarding results of the study are included in Chapter 4.

Chapter 4

Findings

The number of applications to schools of nursing has increased vastly over the past 10 years. This increase in applications has caused an increase in the number of nursing faculty needed to teach at schools of nursing. Most nursing faculty begin their careers practicing nursing, later realizing they want to give back to younger generations by helping educate them for a career they love. Nurse educators receive advanced practice degrees in a number of settings such as a Nurse Practitioner, Clinical Nurse Specialist, Certified Registered Nurse Anesthetists, Nurse Educator, and many others. While the Nurse Educator degree is specific to nursing education, most graduates of these programs do not graduate with the ability to immediately walk in to a classroom and teach in a manner considered effective. Also, nurses with any type of advanced practice degree can decide to become an educator leaving many of them without any knowledge of effective pedagogical practices at all. In order to have an effective nursing program, it is necessary to have nursing faculty who are effective teachers, so that students can learn necessary concepts in order to be successful in their nursing practice. This chapter discusses the analysis of the proposed research study and outlines the study findings.

Purpose of the Study

This study aimed to determine baccalaureate nursing students and nursing faculty perceptions of qualities/behaviors considered effective to nurse educators. In addition, the study was designed to examine if there was a relationship between the findings of the original Teacher

Behavior Checklist and this study. The study used data collected from nursing faculty and baccalaureate nursing students at a Southeastern U.S. land-grant, public university. Data was collected during the spring 2017 academic semester with nursing faculty and baccalaureate nursing students asked to complete an on-line survey. The survey asked participants to rank the top 10 of 28 possible teacher qualities/behaviors they perceived as effective in nursing education.

Research Questions

1. What are the qualities/behaviors valued by nursing faculty?
2. What are the qualities/behaviors valued by baccalaureate nursing students?
3. What is the relationship between those qualities/behaviors valued by nursing faculty and those valued by nursing students?
4. What is the relationship between the findings of the original Teacher Behavior Checklist and the findings in this study?

Instrument

The Teacher Behavior Checklist (TBC) was the survey instrument utilized in this study. This instrument asked baccalaureate nursing students and nursing faculty to identify the top 10 of 28 qualities/behaviors they perceived as effective in nursing education. The TBC has two subscales; caring and supportive and professional competency and communication skills. The TBC is a psychometrically sound tool with high internal reliability and strong test-retest reliability (Keeley et al., 2006).

Participant Demographics

Participants in this study included 89 baccalaureate nursing students and 18 nursing faculty. Nursing students were enrolled in one of five semesters of the professional nursing program. Faculty were employees in the school of nursing at the university.

Faculty Sample

Faculty employed at a Southeastern U.S. land-grant, public university were invited to participate in this study. In total, 26 faculty were emailed regarding participation with 18 (69.2%) completing the survey. The average years of teaching experience was 12. The majority of respondents were female (88.9%) and Caucasian (94.4%) with a mean age of 50.06. The rank of faculty members included: Assistant Clinical Professor (55.6%), Associate Clinical Professor (5.6%), Clinical Professor (5.6%), Assistant Professor (5.6%), Associate Professor (11.1%), and Professor (16.7%) (Table 4.1). At this university there are two tracks in which faculty can be employed: tenure and clinical. It is required to have a doctoral degree to hold a tenure track position (Assistant Professor, Associate Professor, or Professor). Clinical track faculty must have a minimum of a master's degree with a doctoral degree being preferred. Faculty in this study were divided into the two tracks to determine differences between them. The average age of tenure track faculty from the participant set was 61 years. In comparison, the AACN (2015) reported the average age of doctorally-prepared professors was 56.9. While this study is representative of schools of nursing in the United States, the tenure track age average was slightly higher.

Student Sample

Students from a Southeastern U.S. land-grant, public university enrolled in the baccalaureate professional nursing program participated in this study. Request for participation was sent via email through the School of Nursing Student Services Office, remaining anonymous at all times. There were 353 students who received the survey with 131 participants beginning the survey. There were 89 (25.2%) participants who completed the survey in regards to the ranking of qualities/behaviors; however, only 86 (24.4%) of these

provided demographic information (Table 4.1). The majority of the 86 respondents were female (90.7%) and Caucasian (91.9%), with a median age of 21.09 years. The AACN (2017) national report on enrollment found 86.4% of those enrolled were female and of Caucasian/White ethnicity (67.7%). This study had a higher proportion of Caucasian/White students compared to the national demographics, and a slightly higher percentage of females. Participants in this study were distributed across the five semesters of the program (1st semester [31.4%], 2nd semester [16.3%], 3rd semester [1.2%], 4th semester [29.1%], and 5th semester [22.1%]).

Table 4.1

Demographic Breakdown of Participant Sample

		Faculty (*n*=18)	Students (*n*=86)
Sex	Male	2 (11.1%)	8 (9.3%)
	Female	16 (88.9%)	78 (90.7%)
Age	*M (SD)*	50.06 (14.88)	21.09 (1.37)
	Range	28~66	19~30
Ethnicity	Caucasian/White	17 (94.4%)	79 (91.9%)
	African American	1 (5.6%)	2 (2.3%)
	Hispanic/Latino	---	3 (3.5%)
	Asian	---	1 (1.2%)
	American Indian or Alaska Native	---	1 (1.2%)
Rank	Assistant Clinical Professor	10 (55.6%)	---
	Associate Clinical Professor	1 (5.6%)	---
	Clinical Professor	1 (5.6%)	---
	Assistant Professor	1 (5.6%)	---
	Associate Professor	2 (11.1%)	---
	Professor	3 (16.7%)	---
Experience	*M (SD)*	12.17 (11.26)	---
Semester	1st Semester	---	27 (31.4%)
	2nd Semester	---	14 (16.3%)
	3rd Semester	---	1 (1.2%)
	4th Semester	---	25 (29.1%)
	5th Semester	---	19 (22.1%)

Data Analysis

In order to understand the study findings, data were analyzed to examine faculty and students responses both individually and collectively. An independent Chi-square test was conducted to compare nursing faculty and nursing students' mean rankings of the most effective qualities/behaviors to nursing education. The following sections outline the findings from this study.

Research Question One

On the 28-item TBC, faculty identified the following qualities/behaviors indicative of effective nurse educators in rank order (Table 4.2):

1. Knowledgeable about subject matter (94.4%)
2. Approachable/personable (77.78%)
3. Creative and interesting (72.22%)
4. Enthusiastic about teaching and about topic (72.22%)
5. Effective communicator (61.1%)
6. Promotes critical thinking/Intellectually stimulating (50.00%)
7. Presents current information (50.00%)
8. Realistic expectations of students/fair testing and grading (50.00%)
9. Confident (44.44%)
10. Respectful (38.89%)

There was a significant difference in years of experience comparison within the top 10 qualities/behaviors, however no other differences among demographic characteristics existed. Instructors with 20 or less years of experience value the quality of approachable/personable

($\chi^2(2, n=18) = 8.45$, $p = .02$, Cramér's $V = .69$) more than those with greater than 20 years of experience (Table 4.2).

Table 4.2

TBC Breakdown by Faculty Years of Experience

Teacher Behavior	Total Responses	0-10 (*n*=10)	11-20 (*n*=4)	>20 (*n*=4)	$\chi^2(df=2)$	*p*	Cramer's *V*
Knowledgeable about subject matter	17	10	3	4	3.71	.16	.45
Approachable/personable	14	9	4	1	8.45	**.02**	.69
Creative and interesting	13	7	2	4	2.55	.28	.38
Enthusiastic about teaching and about topic	13	8	3	2	1.30	.52	.27
Effective communicator	11	6	2	3	0.54	.76	.17
Promotes critical thinking/Intellectually stimulating	9	5	2	2	0.00	1.00	.00
Presents current information	9	5	2	2	0.00	1.00	.00
Realistic expectations of students/fair testing and grading	9	4	2	3	1.40	.50	.28
Confident	8	6	1	1	2.21	.33	.35
Respectful	7	4	1	2	0.54	.76	.17
Accessible	7	4	2	2	0.54	.76	.17
Encourages and Cares for Students	6	4	2	0	2.70	.26	.39
Prepared	6	4	2	0	2.70	.26	.39
Professional	6	2	1	3	4.05	.13	.47
Provides Constructive Feedback	6	2	1	3	4.05	.13	.47
Humble	5	4	1	0	2.30	.32	.36
Authoritative	4	2	1	1	0.06	.97	.06
Flexible/Open-Minded	4	1	2	1	2.67	.26	.39
Happy/Positive Attitude/Humorous	4	3	1	0	1.51	.47	.32
Promotes Class Discussion	4	2	1	1	0.06	.97	.06
Establishes Daily and Academic Term Goals	3	1	1	1	0.72	.70	.20
Strives to Be a Better Teacher	3	1	1	1	0.72	.70	.20
Good Listener	2	2	0	0	1.80	.41	.32
Punctuality/Manages Class Time	2	1	0	1	1.29	.52	.27
Rapport	2	2	0	0	1.80	.41	.32
Sensitive and Persistent	2	1	0	1	1.29	.52	.27
Technologically Competent	2	0	1	1	2.81	.25	.40
Understanding	2	0	1	1	2.81	.25	.40

Research Question Two

Students identified the top 10 behaviors/qualities they perceived to be most effective among nursing educators in rank order as (Table 4.3):

1. Knowledgeable about subject matter (77.53%)
2. Approachable/personable (76.40%)
3. Realistic expectations of students/Fair testing and grading (71.79%)
4. Effective communicator (52.81%)
5. Enthusiastic about teaching and about topic (52.81%)
6. Understanding (48.31%)
7. Happy/Positive attitude/Humorous (47.19%)
8. Encourages and cares for students (44.94%)
9. Flexible/Open-minded (43.82%)
10. Strives to be a better Teacher (40.45%)

There were statistically significant associations between qualities/behaviors and the demographic characteristics of gender, age, and ethnicity. Within gender (Table 4.3), it was found female students valued effective communication ($\chi^2(1, n=86) = 6.32$, $p = .01$, Cramér's $V = .27$) with faculty more than the male student did. In regards to age (Table 4.4) the more traditional aged student, age 19-23, valued knowledge about subject matter ($\chi^2(1, n=89) = 7.21$, $p = .007$, Cramér's $V = .29$) more than the non-traditional aged student, age 24 and older. In regards to ethnicity (Table 4.5), Caucasian/White students valued effective communication ($\chi^2(1, n=88) = 4.87$, $p = .03$, Cramér's $V = .23$) and knowledge about subject matter ($\chi^2(1, n=88) = 4.9$, $p = .03$, Cramér's $V = .24$), more than the Others group.

Table 4.3

TBC Breakdown by Student Gender

Teacher Behavior	Total Responses	Male (*n*=8)	Female (*n*=78)	χ^2 (*df*=1)	*p*	Cramer's *V*
Knowledgeable about Subject Matter	69	7	62	0.29	.59	.06
Approachable/Personable	67	6	61	0.04	.84	.02
Realistic Expectations of Students/Fair Testing and Grading	63	7	56	0.91	.34	.10
Effective Communicator	47	1	46	6.32	**.01**	.27
Enthusiastic about Teaching and about Topic	47	6	41	1.74	.23	.13
Understanding	42	4	38	0.01	.95	.01
Happy/Positive Attitude/Humorous	41	4	37	0.02	.89	.02
Encourages and Cares for Students	39	5	34	1.05	.31	.11
Flexible/Open-Minded	38	1	37	3.59	.06	.20
Strives to be a Better Teacher	35	2	33	0.90	.34	.10
Sensitive and Persistent	35	3	32	0.04	.85	.02
Creative and Interesting	32	2	30	0.56	.45	.08
Prepared	32	3	29	0.00	1.00	.00
Rapport	31	5	26	2.68	.10	.18
Accessible	29	1	28	1.78	.18	.14
Confident	28	4	24	1.22	.27	.12
Provides Constructive Feedback	25	0	25	3.62	.06	.21
Punctuality/Manages Class Time	24	2	22	0.04	.85	.02
Respectful	24	3	21	0.40	.53	.07
Promotes Critical Thinking/Intellectually Stimulating	21	3	18	0.82	.37	.10
Presents Current Information	17	1	16	0.29	.59	.06
Technologically Competent	17	3	14	1.75	.19	.14
Humble	16	1	15	0.22	.64	.05
Good Listener	10	1	9	0.01	.94	.01
Authoritative	9	2	7	1.99	.16	.15
Establishes Daily and Academic Term Goals	8	1	7	0.11	.74	.04
Professional	8	2	6	2.58	.11	.17
Promotes Class Discussion	6	0	6	0.66	.42	.09

Table 4.4

TBC Breakdown by Student Age

Teacher Behavior	Total Responses	19-23 (*n*=83)	24+ (*n*=6)	χ^2 (*df*=1)	*p*	Cramer's *V*
Knowledgeable about Subject Matter	69	67	2	7.21	**.007**	.29
Approachable/Personable	68	65	3	2.49	.12	.17
Realistic Expectations of Students/Fair Testing and Grading	64	61	3	1.53	.22	.13
Effective Communicator	47	44	3	0.02	.89	.02
Enthusiastic about Teaching and about Topic	47	46	1	3.37	.07	.20
Understanding	43	42	1	2.58	.11	.17
Happy/Positive Attitude/Humorous	42	41	1	2.41	.12	.16
Encourages and Cares for Students	40	39	1	2.08	.15	.15
Flexible/Open-Minded	39	37	2	0.29	.59	.06
Strives to Be a Better Teacher	36	32	4	1.84	.18	.14
Sensitive and Persistent	36	34	2	0.14	.71	.04
Creative and Interesting	32	30	2	0.02	.89	.02
Prepared	32	29	3	0.55	.46	.08
Rapport	31	31	0	3.44	.06	.20
Accessible	30	29	1	0.84	.36	.10
Confident	28	27	1	0.65	.42	.09
Provides Constructive Feedback	25	25	0	2.51	.11	.17
Respectful	25	24	1	0.42	.52	.07
Punctuality/Manages Class Time	24	22	2	0.13	.72	.04
Promotes Critical Thinking/Intellectually Stimulating	21	19	2	0.34	.56	.06
Presents Current Information	17	16	1	0.03	.88	.02
Technologically Competent	17	16	1	0.03	.88	.02
Humble	16	16	0	1.41	.24	.13
Good Listener	10	10	0	0.81	.37	.10
Authoritative	9	8	1	0.30	.58	.06
Establishes Daily and Academic Term Goals	8	8	0	0.64	.43	.08
Professional	8	8	0	0.64	.43	.08
Promotes Class Discussion	8	4	2	7.24	**.007**	.29

Table 4.5

TBC Breakdown by Student Ethnicity

Teacher Behavior	Total Responses	Others (n=10)	Caucasian (n=78)	χ^2 (df=1)	p	Cramer's V
Knowledgeable about Subject Matter	69	5	64	4.9	**.03**	.24
Approachable/Personable	68	8	60	0.08	.78	.03
Realistic Expectations of Students/Fair Testing and Grading	64	7	57	0.02	.89	.02
Effective Communicator	47	2	45	4.87	**.03**	.23
Enthusiastic about Teaching and about Topic	47	3	44	2.35	.13	.16
Understanding	43	4	39	0.31	.58	.06
Happy/Positive Attitude/Humorous	42	6	36	0.74	.39	.09
Encourages and Cares for Students	40	3	37	1.02	.31	.11
Flexible/Open-Minded	39	6	33	1.20	.27	.12
Strives to Be a Better Teacher	36	2	34	1.96	.16	.15
Sensitive and Persistent	36	3	33	0.51	.48	.08
Creative and Interesting	32	2	30	1.25	.26	.12
Prepared	32	3	29	0.17	.68	.04
Rapport	31	3	28	0.12	.73	.04
Accessible	30	3	27	0.07	.79	.03
Confident	28	4	24	0.38	.54	.07
Provides Constructive Feedback	25	2	23	0.67	.55	.06
Respectful	25	3	22	0.02	.89	.02
Punctuality/Manages Class Time	24	3	21	0.05	.82	.02
Promotes Critical Thinking/Intellectually Stimulating	21	0	21	3.48	.06	.20
Presents Current Information	17	1	16	0.60	.44	.08
Technologically Competent	17	2	15	0.01	.94	.01
Humble	16	1	15	0.49	.49	.07
Good Listener	10	1	9	0.02	.90	.01
Authoritative	9	1	8	0.00	.99	.001
Establishes Daily and Academic Term Goals	8	0	8	1.11	.29	.11
Professional	8	1	7	0.01	.91	.01
Promotes Class Discussion	6	1	5	0.19	.66	.05

Research Question Three

Table 4.6 outlines the comparison of faculty and students rankings of the top 10 perceived qualities/behaviors effective in nursing education. Responses between faculty and students were consistent for five of the 10 behaviors (knowledgeable about subject matter; approachable/personable; enthusiastic about teaching and about topic; effective communicator; and realistic expectations of students/fair testing and grading). Faculty and students agreed that (1) knowledgeable about subject matter and (2) approachable/personable were the top two qualities perceived as effective in nursing education. In addition, the groups also agreed on two other qualities/behaviors in the top five; (1) enthusiastic about teaching and about topic, and (2) effective communicator. There were no commonalities in the rankings for the last five behaviors. Students ranked in order (6) understanding, (7) happy/positive attitude/humorous, (8) encourages and cares for students, (9) flexible/open-minded, and (10) strives to be a better teacher as the last five of their top 10 (Table 4.6). Faculty completed their top 10 rankings with (6) promotes critical thinking/intellectually stimulating, (7) presents current information, (8) realistic expectations of students/fair testing and grading, (9) confident, and (10) accessible (Table 4.6).

An independent Chi-square test showed statistically significant differences in four qualities/behaviors that faculty and students ranked in their top 10 (Table 4.7). Faculty ranked the quality/behavior of creative and interesting ($\chi^2(1, n=107) = 8.08$, $p = .004$, Cramér's $V = .28$) as their third highest with a statistically significant difference found for this quality/behavior. Faculty value their ability to experiment with teaching methods and use technology to support and enhance their lectures (Buskist, et al., 2002). They also value the opportunity to provide relevant and personal examples during lectures to make content seem

more realistic to students (Buskist et al., 2002). Half of faculty participants believe it is important to present current information (χ^2(, n=107) = 7.77, p = .005, Cramér's V = .27) that is relevant to the content being taught, however only 19% of students found this to be important.

Table 4.6

TBC Total Responses Faculty vs. Students

Teacher Behavior	Faculty n=18	Ranking		Students n=89
		Faculty	Student	
Knowledgeable about Subject Matter	17	1	1	69
Approachable/Personable	14	2	2	68
Realistic Expectations of Students/Fair Testing and Grading	9	8	3	64
Effective Communicator	11	5	4	47
Enthusiastic about Teaching and about Topic	13	4	5	47
Understanding	2		6	43
Happy/Positive Attitude/Humorous	4		7	42
Encourages and Cares for Students	6		8	40
Flexible/Open-Minded	4		9	39
Strives to Be a Better Teacher	3		10	36
Sensitive and Persistent	2			36
Creative and Interesting	13	3		32
Prepared	6			32
Rapport	2			31
Accessible	7			30
Confident	8	9		28
Respectful	7	10		25
Provides Constructive Feedback	6			25
Punctuality/Manages Class Time	2			24
Promotes Critical Thinking/Intellectually Stimulating	9	6		21
Presents Current Information	9	7		17
Technologically Competent	2			17
Humble	5			16
Good Listener	2			10
Authoritative	4			9
Professional	6			8
Establishes Daily and Academic Term Goals	3			8
Promotes Class Discussion	4			6

Table 4.7

TBC Overall Comparison of Faculty vs. Students

Teacher Behavior	Faculty (*n*=18)	Students (*n*=89)	χ^2 (*df*=1)	*p*	Cramer's *V*
Accessible	7	30	0.18	.67	.04
Approachable/Personable	14	68	.02	.90	.01
Authoritative	4	9	2.06	.15	.14
Confident	8	28	1.13	.29	.10
Creative and Interesting	13	32	8.08	**.004**	.28
Effective Communicator	11	47	0.42	.52	.06
Encourages and Cares for Students	6	40	0.82	.36	.09
Enthusiastic about Teaching and about Topic	13	47	2.29	.13	.15
Establishes Daily and Academic Term Goals	3	8	0.96	.33	.10
Flexible/Open-Minded	4	39	2.91	.09	.17
Good Listener	2	10	0.00	.99	.001
Happy/Positive Attitude/Humorous	4	42	3.81	.051	.19
Humble	5	16	0.91	.34	.09
Knowledgeable about Subject Matter	17	69	2.72	.10	.16
Prepared	6	32	0.05	.83	.02
Presents Current Information	9	17	7.77	**.005**	.27
Professional	6	8	7.80	**.005**	.27
Promotes Class Discussion	4	6	4.23	**.04**	.20
Promotes Critical Thinking/Intellectually Stimulating	9	21	5.17	**.02**	.22
Provides Constructive Feedback	6	25	0.20	.66	.04
Punctuality/Manages Class Time	2	24	2.05	.15	.14
Rapport	2	31	3.95	**.047**	.17
Realistic Expectations of Students/Fair Testing and Grading	9	64	3.32	.07	.18
Respectful	7	25	0.83	.36	.09
Sensitive and Persistent	2	36	5.63	**.02**	.23
Strives to Be a Better Teacher	3	36	3.66	.06	.19
Technologically Competent	2	17	0.65	.42	.08
Understanding	2	43	8.50	**.004**	.28

For half of the faculty participants it was important to promote critical thinking/intellectually stimulating ($\chi^2(1, n=107) = 5.17$, $p = .02$, Cramér's $V = .22$) during class, while only 23.6% of students value it. Behaviors associated with this quality are asking thoughtful questions in class and holding group discussions/activities (Buskist et al., 2002).

Lastly, 48% of student participants value a professor's ability to be understanding ($\chi^2(1, n=107) = 8.50$, $p = .004$, Cramér's $V = .28$) in a course. Students feel faculty should accept legitimate excuses for missing class, be available before and after class for questions, take time working with students, and not get frustrated or lose their temper with students (Buskist et al., 2002). Only 11.1% of faculty valued the quality of understanding.

Research Question Four

Faculty

The faculty participants in this study ($n=18$) comprised 15.25% of the original study ($n=118$). Faculty in Buskist et al., (2002) were employees at Auburn University and chosen at random from a university telephone directory. A gender comparison showed Buskist et al. (2002) had a slightly larger male faculty participant group with almost one-quarter of the faculty participants, compared to the only 11.1% of male faculty participants in this study. It is not known the department each participant primarily taught in to know if or how many psychology or nursing specific faculty participated.

Comparison of this study's findings and the original findings from Buskist et al., (2002) reveal strong similarities by both nursing faculty and nursing students. Table 4.8 details the findings from nursing faculty in this study and faculty in Buskist et al.'s (2002) study. Nine of the top 10 behaviors were similar between the studies. Three of the top five were similar with knowledgeable about subject matter ranked as the top quality of effective educators in both

studies. The faculty in this study identified confident to complete their top 10 qualities/behaviors.

Table 4.8

TBC Faculty Comparison with Original Study

Teacher Behavior	Noll (2017) *n*=18			Buskist et al. (2002) *n*=118		
	n	%	rank	*n*	%	rank
Knowledgeable	17	94	1	107	91	1
Approachable	14	78	2	62	53	5
Creative and Interesting	13	72	3	58	49	8
Enthusiasm	13	72	4	86	73	2
Effective Communicator	11	61	5	61	52	6
Promotes Critical Thinking	9	50	6	75	64	3
Presents Current Information	9	50	7	55	47	9
Realistic	9	50	8	55	47	9
Confident	8	44	9	34	29	17
Respectful	7	39	10	59	50	7

Students

The student participants in this study (*n*=89) only comprised 9.72% of the original study (*n*=916). Students in Buskist et al. (2002) study were enrolled in an introduction to psychology course with an almost even distribution of gender (female=503; male=413) and the majority freshman or sophomores (freshman/sophomores=717; juniors/seniors=199). Students in this study were enrolled the professional nursing program which required completion of all core courses prior to beginning the program. This warrants the argument that most students in this study were juniors and seniors.

Students in this study also identified with the results of Buskist et al. (2002) study. Table 4.9 provides the findings from nursing students in this study and findings from students in Buskist et al.'s (2002) study. Eight of the top 10 and three of the top five behaviors were similar between the studies. Students in this study identified effective communicator and strives to be a better teacher as qualities/behaviors effective in nursing education.

Table 4.9

TBC Student Comparison with Original Study

Teacher Behavior	Noll (2017) *n*=89			Buskist et al. (2002) *n*=916		
	n	%	rank	*n*	%	rank
Knowledgeable	69	78	1	558	61	2
Approachable	68	76	2	543	59	4
Realistic	64	72	3	587	64	1
Effective Communicator	47	53	4	323	35	15
Enthusiasm	47	53	5	448	49	10
Understanding	43	48	6	554	60	3
Happy/Positive/Humorous	42	47	7	453	49	7
Encourages/Cares	40	45	8	452	49	8
Flexible	39	44	9	450	49	9
Strives to be a better teacher	36	40	10	268	29	17

Summary of Results

Overall, nursing faculty and students chose five of the same qualities/behaviors from their top 10 identified. Both groups chose (a) knowledgeable about subject matter, (b) approachable/personable, (c) enthusiastic about teaching and about topic, (d) effective communicator, and (e) realistic expectations of students/fair testing and grading. Significant differences were found for the qualities of (a) creative/interesting ($\chi^2(1, n=107) = 8.08$, $p = .004$, Cramér's $V = .28$), (b) presents current information ($\chi^2(, n=107) = 7.77$, $p = .005$, Cramér's $V = .27$), (c) promotes critical thinking ($\chi^2(1, n=107) = 5.17$, $p = .02$, Cramér's $V = .22$), and (d) understanding ($\chi^2(1, n=107) = 8.50$, $p = .004$, Cramér's $V = .28$).

Analysis of data in the faculty group found a significant difference among years of experience for the quality and behavior of approachable/personable ($\chi^2(2, n=18) = 8.45$, $p = .02$, Cramér's $V = .69$). There were no differences among faculty gender and ethnicity noted. On the 10 items faculty selected as effective qualities/behaviors of nurse educators, four were within the professional competency and communication skills sub-scale with another four within the caring and supportive sub-scale.

Analysis of the student group found significant differences among gender, age, and ethnicity. Female students were found to value effective communication ($\chi^2(1, n=86) = 6.32, p = .01$, Cramér's $V = .27$) more than their male counterparts. Students aged 19-23 (traditional students) valued the quality of knowledgeable about subject matter ($\chi^2(1, n=89) = 7.21, p = .007$, Cramér's $V = .29$) more than the non-traditional (24+) aged student. In addition, Caucasian/White students value effective communication ($\chi^2(1, n=88) = 4.87, p = .03$, Cramér's $V = .23$) more than other ethnicities combined. Lastly it is noted that the student group chose six of their top 10 qualities from the caring and supportive sub-scale and the remaining four from the professional competence and communication skills sub-scale.

Chapter 5

Discussion

This study assessed baccalaureate nursing student and nursing faculty views of effective teaching qualities/behaviors, both individually and comparatively. The study also examined compared current study findings with the original study using the Teacher Behavior Checklist (TBC). Chapter 1 provided an introduction, statement of the problem, purpose of the study, research questions, significance of the study, and research limitations. Chapter 2 gave a detailed but focused literature review. This review explored the history of nursing education, Groccia's Model for Understanding Teaching and Learning, effective teaching, and the Teacher Behavior Checklist's applicability to determine effective teaching practices inherent to higher education.

Chapter 3 provided an outline of the research design, instrument, participants, data collection procedures, and data analysis. This study was proposed to answer the following research questions:

1. What are the qualities/behaviors valued by nursing faculty?
2. What are the qualities/behaviors valued by baccalaureate nursing students?
3. What is the relationship between those qualities/behaviors valued by nursing faculty and those valued by nursing students?
4. What is the relationship between the findings of the original Teacher Behavior Checklist and the findings in this study?

Chapter 4 presented the findings along with an explanation of how data were analyzed. Its focus was on describing the role of the instrument, participant demographics and data analyses. The data analysis examined the overall rankings of qualities/behaviors perceived by nursing students as well as nursing faculty. The analysis also provided comparison of the rankings between nursing students and nursing faculty, along with a comparison of this study's rankings with the results of the original study with the TBC. Chapter 5 provides a summary of the overall study as well as study limitations and recommendations for future research.

Summary of Results

Of the 26 faculty who were sent an invitational email to participate in the study, 18 (69.2%) completed the survey with a mean age of 50.06 and the majority being female (88.9%) and Caucasian (94.4%). Rank of the participants included clinical and tenure track: Assistant Clinical Professor (55.6%), Associate Clinical Professor (5.6%), Clinical Professor (5.6%); tenure track: Assistant Professor (5.6%), Associate Professor (11.1%), and Professor (16.7%). The six tenure track faculty had a mean age of 61, which is slightly higher than the national average.

In total, 353 students were sent an invitational email for participation in the study with 89 (25.2%) completing the survey, but only 86 (24.4%) responding to the demographic questions. The majority of student participants were female (90.7%) and Caucasian (91.9) with a median age of 21.09 years. Compared to the national average of the number of female nursing students, 67.7%, this study's percentage of female nursing students is moderately higher. Lastly, participants classified themselves according to one of the five semesters of the professional nursing program: 1st semester (31.4%); 2nd semester (16.3%), 3rd semester (1.2%), 4th semester (29.1%), and 5th semester (22.1%).

To answer research question one, faculty ranked their top 10 of 28 qualities/behaviors they perceived effective to nursing education. Participants rank order of their top 10 were: (1) knowledgeable about subject matter, (2) approachable/personable, (3) creative and interesting, (4) enthusiastic about teaching and about topic, (5) effective communicator, (6) promotes critical thinking/intellectually stimulating, (7) presents current information, (8) realistic expectations of students/fair testing and grading, (9) confident, and (10) respectful. Only one significant difference was found in the quality of approachable/personable between faculty with 20 or less years of experiences and faculty with more than 20 years of experience.

To answer research question two, students ranked their top 10 of 28 qualities/behaviors they perceived effective to nursing education. Students rank order of their top 10 were: (1) knowledgeable about subject matter, (2) approachable/personable, (3) realistic expectations of students/fair testing and grading, (4) effective communicator, (5) enthusiastic about teaching and about topic, (6) understanding, (7) happy/positive attitude/humorous, (8) encourages and cares for students, (9) flexible/open-minded, and (10) strives to be a better teacher. The independent Chi-square test revealed significant differences were in gender, age, and ethnicity. Female participants valued effective communication ($\chi^2(1, n=86) = 6.32$, $p = .01$, Cramér's $V = .27$) more than their male counterparts. Students ages 19-23 valued knowledgeable about subject matter ($\chi^2(1, n=89) = 7.21$, $p = .007$, Cramér's $V = .29$) more than students aged 24 and older. Caucasian/White students valued effective communication ($\chi^2(1, n=88) = 4.87$, $p = .03$, Cramér's $V = .23$) and knowledgeable about subject matter ($\chi^2(1, n=88) = 4.9$, $p = .03$, Cramér's $V = .24$) more than Other ethnicities.

To answer research question three, a comparison of faculty and student rankings of their perceived top 10 of 28 qualities/behaviors was completed. Faculty and students agreed on five

of the 10 behaviors perceived as effective in nursing education. Both groups ranked knowledgeable about subject matter as the top quality and approachable/personable as their second highest quality. The comparison also found faculty and students agreed on two other qualities/behaviors in their top five which were enthusiastic about teaching and topic and effective communicator. The independent Chi-square test found four significant differences between the groups chosen top 10 qualities/behaviors. Significant differences were found for the qualities of (a) creative and interesting ($\chi^2(1, n=107) = 8.08$, $p = .004$, Cramér's $V = .28$), (b) presenting current information ($\chi^2(, n=107) = 7.77$, $p = .005$, Cramér's $V = .27$), (c) promoting critical thinking/intellectually stimulating ($\chi^2(1, n=107) = 5.17$, $p = .02$, Cramér's $V = .22$), and (d) understanding ($\chi^2(1, n=107) = 8.50$, $p = .004$, Cramér's $V = .28$).

To answer research question four, the findings from this study were compared to the findings from the original study using the TBC. Strong similarities were found between the two studies. Specifically, nursing faculty and faculty from Buskist et al. (2002) agreed on nine of the top 10 qualities/behaviors as effective to teaching. Nursing faculty in this study identified the quality of confident in their top 10. Students also agreed on eight of the top 10 qualities/behaviors as effective to teaching. Students in this study identified (a) effective communicator and (b) strives to be a better teacher in their top 10.

Discussion

Research using the TBC has sought to identify the top qualities/behaviors related to effective teaching. This study has attempted to further the research to determine the commonalities and differences between nursing faculty and nursing students in a baccalaureate nursing program. This study found additional consistency in correlation with previously conducted studies on the TBC.

Faculty Comparisons among Studies

Most of the studies completed using the TBC use both faculty and students as participants but have been limited to undergraduate psychology courses. Recently research with the TBC has expanded to other academic disciplines and university settings. These studies show consistency among teaching qualities/behaviors identified as effective teaching. A comparison (Table 5.1) shows the top 10 qualities chosen from four studies with faculty findings. Findings from Ford's (2016) pharmacy focused study, Ismail's (2014) U.S. – and foreign-educated faculty study, Schaeffer et al.'s (2003) community college study, Buskist et al.'s (2002) research intensive university study, and this study show faculty agreed on five of the top 10 qualities/behaviors: (a) knowledgeable, (b) enthusiastic, (c) approachable/personable, (d) creative/interesting, and (e) promotes critical thinking. These findings indicate there is a strong similarity among faculty across disciplines regarding the qualities/behaviors inherent to effective teaching. The number one quality/behavior identified in all of the studies, including the current study, was knowledgeable. Faculty who do not have a pure understanding of the content they are teaching cannot relay information to students in an effective manner. While it is evident faculty share common ideas as to what effective teaching looks like, not all qualities are the same in the top 10 across all of the studies due to variance among faculty. There is not a specific set of qualities/behaviors considered effective. Faculty typically have a core set of qualities/behaviors considered applicable to any learning environment; however, faculty also know there are circumstances when certain qualities/behaviors are more or less appropriate. Faculty share similar goals in their ability to provide students a positive learning experience in order for teaching to be effective.

Table 5.1

Comparison of Faculty across Studies

Noll (2017)	Ford (2016)	Ismail (2014)		Schaeffer et al. (2003)	Buskist et al. (2002)
		U.S. Faculty	Foreign Faculty		
Knowledgeable	Knowledgeable	Knowledgeable	Knowledgeable	Knowledgeable	Knowledgeable
Approachable/ Personable	Enthusiastic	Enthusiastic	Enthusiastic	Enthusiastic	Enthusiastic
Creative/Interesting	Promotes Critical Thinking	Creative/Interesting	Effective Communicator	Promotes Critical Thinking	Promotes Critical Thinking
Enthusiastic	Effective Communicator	Promotes Critical Thinking	Promotes Critical Thinking	Respectful	Prepared
Effective Communicator	Strives to be a Better Teacher	Effective Communicator	Creative/Interesting	Strives to be a Better Teacher	Approachable/ Personable
Promotes Critical Thinking	Approachable/ Personable	Approachable/ Personable	Approachable/ Personable	Approachable/ Personable	Effective Communicator
Presents Current Information	Prepared	Encourages/Cares	Encourages/Cares	Realistic Expectations	Respectful
Realistic Expectations	Respectful	Manages Class Time	Confident	Creative/Interesting	Creative/Interesting
Confident	Confident	Accessible	Accessible	Flexible	Presents Current Information
Respectful	Creative/Interesting	Promotes Discussion	Manages Class Time	Encourages/Cares	Realistic Expectations

Student Comparisons among Studies

Studies measuring student perspectives in the United States show that across disciplines there are qualities/behaviors essential to effective teaching as perceived by students. A comparison of findings from Ford (2016), Mowrer et al. (2004), Schaeffer et al. (2003), Buskist et al. (2002), and the current study indicate students agreed on five of the top 10 qualities/behaviors of effective teaching (Table 5.2). These qualities/behaviors include: (a) knowledgeable, (b) approachable, (c) realistic expectations/fair, (d) enthusiastic, and (e) encourages/cares. In addition, the international application of the TBC shows the significance of knowledgeable as an effective teaching behavior as it was the only consistent behavior identified in the 10 comparative studies (Table 5.3). In this study, students identified six qualities/behaviors on the caring and supportive sub-scale and four on the professional competency and communication skills. Across the 10 studies, the mean score on the caring and supportive sub-scale was 4.08 qualities/behaviors identified and on the professional competency and communication sub-scale was 5.08 qualities/behaviors. Overall, within the 10 studies, students choose behaviors associated with effective teaching in the professional competency and communication skills, however the other is not far behind.

Table 5.2

Comparison of Student Responses in the U.S.

Noll (2017)	Ford (2016)	Mowrer et al. (2004)		Schaeffer et al. (2003)	Buskist et al. (2002)
		Study 1	Study 2		
Knowledgeable	Knowledgeable	Approachable	Knowledgeable	Knowledgeable	Realistic
Approachable	Effective Communicator	Knowledgeable	Approachable	Approachable	Knowledgeable
Realistic	Realistic	Enthusiasm	Respectful	Realistic	Understanding
Effective Communicator	Approachable	Realistic	Realistic	Respectful	Approachable
Enthusiastic	Enthusiasm	Encourages/ Cares	Confident	Creative/ Interesting	Respectful
Understanding	Respectful	Creative/ Interesting	Effective Communicator	Happy/Positive/ Humorous	Creative/ Interesting
Happy/Positive/ Humorous	Confident	Accessible	Creative/ Interesting	Enthusiasm	Happy/Positive/ Humorous
Encourages/ Cares	Encourages/ Cares	Effective Communicator	Enthusiasm	Encourages/ Cares	Encourages/ Cares
Flexible	Understanding	Flexible	Understanding	Flexible	Flexible
Strives to be Better	Accessible	Respectful	Encourages/ Cares	Understanding	Enthusiasm

Table 5.3

Comparison of Student Responses Internationally

Noll (2017)	Liu et al. (2016)			Jõemma (2013)	Keeley et al. (2012)	
	Psychology	Education	Chemical Engineering		Japanese	American
Knowledgeable	Respectful	Respectful	Respectful	Knowledgeable	Approachable	Accessible
Approachable	Knowledgeable	Approachable	Prepared	Enthusiasm	Humble	Knowledgeable
Realistic	Confident	Knowledgeable	Confident	Constructive Feedback	Confident	Confident
Effective Communicator	Prepared	Understanding	Strives to be Better	Approachable	Good Listener	Approachable
Enthusiastic	Understanding	Confident	Enthusiasm	Creative/ Interesting	Creative/ Interesting	Respectful
Understanding	Strives to be Better	Realistic	Knowledgeable	Professional	Effective Communicator	Enthusiasm
Happy/Positive/ Humorous	Technical Competency	Strives to be Better	Realistic	Realistic	Knowledgeable	Effective Communicator
Encourages/ Cares	Realistic	Effective Communicator	Establish goals	Current Information	Prepared	Prepared
Flexible	Creative/ Interesting	Flexible	Punctuality	Prepared	Enthusiasm	Good Listener
Strives to be Better	Effective Communicator	Accessible	Flexible	Flexible	Strives to be Better	Critical Thinking

Comparison within Health Professions

Specific to health professions, a comparison of Ford (2016) and the current study provide relevant information to effective teaching practices. Table 5.4 shows students enrolled in professional health programs, nursing and pharmacy, agreed on seven of the top 10 qualities/behaviors. These qualities/behaviors include: (a) knowledgeable about subject matter, (b) approachable, (c) realistic, (d) effective communicator, (e) enthusiastic, (f) understanding, and (g) encourages/cares. The top five behaviors identified by students in both studies were the same, although the rank ordering was different (knowledgeable about subject matter, approachable, realistic, effective communicator, and enthusiastic). Table 5.5 shows the comparison of nursing and pharmacy faculty identified top 10 qualities/behaviors of effective teaching. Faculty similarly identified eight of the top 10 qualities/behaviors of effective teaching. These include: (a) knowledgeable , (b) approachable, (c) creative/interesting, (d) enthusiastic, (e) effective communicator, (f) promotes critical thinking, (g) confident, and (h) respectful. Of the top five, only three were similar (knowledgeable, enthusiastic, and effective communicator). These comparisons indicate that similarity among health professional students and faculty may be present. When comparing the student and faculty findings of both studies, there were four common qualities/behaviors identified within the top five rankings. The quality/behavior of knowledgeable was ranked as number one across all four groups of participants. Additionally, the qualities/behaviors of (a) approachable, (b) effective communicator, and (c) enthusiastic were identified.

Table 5.4

Student Comparison of Health Professions

Students	
Noll (2017)	Ford (2016)
Knowledgeable	Knowledgeable
Approachable	Effective Communicator
Realistic	Realistic
Effective Communicator	Approachable
Enthusiastic	Enthusiastic
Understanding	Respectful
Happy/Positive/ Humorous	Confident
Encourages/ Cares	Encourages/ Cares
Flexible	Understanding
Strives to be Better	Accessible

Table 5.5

Faculty Comparison of Health Professions

Faculty	
Noll (2017)	Ford (2016)
Knowledgeable	Knowledgeable
Approachable	Enthusiastic
Creative/Interesting	Promotes Critical Thinking
Enthusiastic	Effective Communicator
Effective Communicator	Strives to be a Better Teacher
Promotes Critical Thinking	Approachable
Presents Current Information	Prepared
Realistic	Respectful
Confident	Confident
Respectful	Creative/Interesting

Implications

With the growing number of applications, the shortage of nurse educators now and in the future, and the need to provide high quality education in order to prepare nurses, it is evident qualities/behaviors of effective faculty must be passed down from master teachers, but more importantly should be taught in graduate nursing education programs. Students and faculty agreed on five of the top 10 qualities/behaviors necessary to effective education: (a) knowledgeable about subject matter; (b) approachable/personable; (c) enthusiastic about teaching and about topic; (d) effective communicator; and (e) realistic expectations/fair. More importantly, faculty and students agreed knowledgeable and approachable/personable were the top two qualities/behaviors necessary. Students and faculty expect content to be delivered in a clear, relevant, current, applicable, and expert format. Students and faculty also believe certain personal traits are necessary to effective education. The student-teacher relationship should be one of ease, open to questions and conversations, with respect provided when responding. Students identified qualities/behaviors on the caring and supportive sub-scale, whereas faculty identified with qualities/behaviors on the professional competency/communication sub-scale. While the difference in number was not large, it still should be investigated in order to find a common ground in an effort for faculty to provide effective teaching to students. The literature regarding effective teaching in nursing education supports the qualities and behaviors identified as effective in this study. Hicks and Butkus (2011) mention the four ways of being, expected of nurse educators: (a) empiric knowing (content master able to pass knowledge in a relevant and applicable manner; (b) ethical knowing (integrity, privacy, express, elaborate, use of humor, eye contact, and enthusiasm); (c) aesthetic knowing (show care and appreciation, hold

students accountable to goals of the course); and (d) personal knowing (reflective in practice, biases, philosophies, and assumptions, promoting health student-teacher relationship).

Limitations

The small size of the school of nursing presented a limitation to this study. Only 26 faculty were identified as possible participants with 16 (69.2%) completing the survey. The student sample was larger with 353 student surveys sent out, but only 89 (25.2%) students completed the TBC portion and only 86 (24.4%) completed both the TBC and demographic questions. A larger response rate may have been obtained if the survey had been given in a face-to-face classroom as other studies have done. Participants were asked to rank order the qualities/behaviors they perceived necessary to effective teaching. This method is different than a simpler Likert-type scale. There was also no option for faculty or students to identify other elements of effective teaching.

Recommendations for Further Research

Further research using the TBC with a larger sample size is necessary to determine if faculty and students at other baccalaureate schools of nursing identify similar qualities/behaviors of effective teaching. Use of the TBC to determine similarities and differences of baccalaureate nursing programs compared to associate degree programs would provide information to help distinguish the differences in the types of learners and faculty at the two different settings. There was a lack of information gained from this study regarding the differences in students perceptions of qualities/behaviors effective based on their semester in the program due to a lack of responses across all five semesters. The complexity of a professional nursing program required time for student adjustment. The ability to discern which qualities/behaviors are most effective based on semester or level in the program could

facilitate learning in a more effective manner. A longitudinal study examining the use of effective teaching behaviors and student achievement in baccalaureate programs would provide stronger evidence to the importance of incorporating qualities/behaviors of effective teaching into practice. Research from multiple baccalaureate programs would provide substantial evidence to incorporate in graduate nursing education degree programs as well as faculty development programs. The nursing education degree program is designed to prepare nurses for education in a variety of learning environments. Further investigation of similarities of effective teaching across the health professions is also important in order to provide faculty in this arena a basic understanding of effective teaching practices. Providing these students the ability to identify and adopt known effective qualities/behaviors would allow nursing educators to begin their teaching careers with proven strategies rather than through the typical trial and error that currently occurs in many educational settings.

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Appendix A

Teacher Behavior Checklist

	1	*Accessible* (Posts office hours, gives out phone number, and e-mail information)
	2	*Approachable/Personable* (Smiles, greets students, initiates conversations, invites questions, responds respectfully to student comments)
	3	*Authoritative* (Establishes clear course rules; maintains classroom order; speaks in a loud, strong voice)
	4	*Confident* (Speaks clearly, makes eye contact, and answers questions correctly)
	5	*Creative and Interesting* (Experiments with teaching methods; uses technological devices to support and enhance lectures; uses interesting, relevant, and personal examples; not monotone)
	6	*Effective Communicator* (Speaks clearly/loudly; uses precise English; gives clear, compelling examples)
	7	*Encourages and Cares for Students* (Provides praise for good student work, helps students who need it, offers bonus points and extra credit, and knows student names)
	8	*Enthusiastic about Teaching and about Topic* (Smiles during class, prepares interesting class activities, uses gestures and expressions of emotion to emphasize important points, and arrives on time for class)
	9	*Establishes Daily and Academic Term Goals* (Prepares/follows the syllabus and has goals for each class)
	10	*Flexible/Open-Minded* (Changes calendar of course events when necessary, will meet at hours outside of office hours, pays attention to students when they state their opinions, accepts criticism from others, and allows students to do make-up work when appropriate)
	11	*Good Listener* (Doesn't interrupt students while they are talking, maintains eye contact, and asks questions about points that students are making)
	12	*Happy/Positive Attitude/Humorous* (Tells jokes and funny stories, laughs with students)
	13	*Humble* (Admits mistakes, never brags, and doesn't take credit for others' successes)
	14	*Knowledgeable About Subject Matter* (Easily answers students' questions, does not read straight from the book or notes, and uses clear and understandable examples)
	15	*Prepared* (Brings necessary materials to class, is never late for class, provides outlines of class discussion)
	16	*Presents Current Information* (Relates topic to current, real-life situations; uses recent videos, magazines, and newspapers to demonstrate points; talks about current topics; uses new or recent texts)
	17	*Professional* (Dresses nicely [neat and clean shoes, slacks, blouses, dresses, shirts, ties] and no profanity)
	18	*Promotes Class Discussion* (Asks controversial or challenging questions during class, gives points for class participation, involves students in group activities during class)
	19	*Promotes Critical Thinking/Intellectually Stimulating* (Asks thoughtful questions during class, uses essay questions on tests and quizzes, assigns homework, and holds group discussions/activities)
	20	*Provides Constructive Feedback* (Writes comments on returned work, answers students' questions, and gives advice on test-taking)
	21	*Punctuality/Manages Class Time* (Arrives to class on time/early, dismisses class on time, presents relevant materials in class, leaves time for questions, keeps appointments, returns work in a timely way)
	22	*Rapport* (Makes class laugh through jokes and funny stories, initiates and maintains class discussions, knows student names, interacts with students before and after class)
	23	*Realistic Expectations of Students/Fair Testing and Grading* (Covers material to be tested during class, writes relevant test questions, does not overload students with reading, teaches at an appropriate level for the majority of students in the course, curves grades when appropriate)
	24	*Respectful* (Does not humiliate or embarrass students in class, is polite to students [says thank you and please, etc.], does not interrupt students while they are talking, does not talk down to students)
	25	*Sensitive and Persistent* (Makes sure students understand material before moving to new material, holds extra study sessions, repeats information when necessary, asks questions to check student understanding)
	26	*Strives to Be a Better Teacher* (Requests feedback on his/her teaching ability from students, continues learning [attends workshops, etc. on teaching], and uses new teaching methods)
	27	*Technologically Competent* (Knows now to use a computer, knows how to use e-mail with students, knows how to use overheads during class, has a Web page for classes)
	28	*Understanding* (Accepts legitimate excuses for missing class or coursework, is available before/after class to answer questions, does not lose temper at students, takes extra time to discuss difficult concepts)

Appendix B

Information Letter

INFORMATION LETTER
for a Research Study entitled
"Baccalaureate Nursing Student and Faculty Views of Effective Teaching"

You are invited to participate in a dissertation research study to assess the preferred teaching behaviors of student nurses and Nursing faculty. Undergraduate baccalaureate nursing students in the Southeastern United States have been selected to participate in this study.

This study is being conducted by Kelley Noll, doctoral student, in the Auburn University Department of Education Foundations, Leadership, and Technology under the direction of Dr. Maria Witte, professor of Adult Education at Auburn University. You have been selected as a possible participant because you are a faculty member or student at a university in the Southeastern United States and are 19 years of age or older.

The survey asks you to identify the top 10 qualities and behaviors from a list of 28, related to teaching behaviors of faculty. There are also a few demographic questions at the end of the survey. Your total time commitment will be approximately 5 minutes.

There are no risks or discomfort associated with participating in this survey. Participation is completely voluntary and no compensation will be offered.

Any data obtained in connection with this study will remain anonymous. You will not be asked to provide any identifying information (i.e., your name). Information collected through your participation may be published in professional journals and/or presented at professional meetings.

If you change your mind about participating, you can withdraw at any time by closing your browser window. Your decision about whether or not to participate or to stop participating will not jeopardize your future relations with Auburn University, the Department of Education Foundations, Leadership, and Technology, or the College of Education.

If you have questions about this project, please contact Kelley Noll by phone at 334.742.3385 or kelleynoll@auburn.edu.

If you have any questions about your rights as a participant, you may contact the Auburn University Office of Human Subjects Research or the Institutional Review Board by phone 334.844.5966 or email at hsubjec@auburn.edu or IRBChair@auburn.edu.

HAVING READ THE INFORMATION ABOVE, YOU MUST DECIDE IF YOU WANT TO PARTICIPATE IN THIS RESEARCH PROJECT. IF YOU DECIDE TO PARTICIPATE, PLEASE CLICK ON THE LINK BELOW. YOU MAY PRINT A COPY OF THIS LETTER TO KEEP.

Appendix C

Faculty Survey Instrument

Default Question Block

(NOTE: DO NOT AGREE TO PARTICIPATE UNLESS IRB APPROVAL INFORMATION WITH CURRENT DATES HAS BEEN ADDED TO THIS DOCUMENT.)

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The survey asks you to identify the top 10 qualities and behaviors from a list of 28, related to teaching behaviors of faculty. There are also a few demographic questions at the end of the survey. Your total time commitment will be approximately 5 minutes.

There are no risks or discomfort associated with participating in this survey. Participation is completely voluntary and no compensation will be offered.

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_____

Investigator Date

The Auburn University Institutional Review Board has approved this document for use from _____ to _____. Protocol # _____

Below are listed 28 teacher qualities and corresponding behaviors.

Please choose ten (10) qualities/behaviors that you believe are most important to highly effective teaching in nursing faculty. Place the numbers 1, 2, 3, 4, 5, 6, 7, 8, 9, 10 in the box to the left of the quality with number '1' being the most effective.

☐ *Accessible* (Posts office hours, gives out phone number, and e-mail information)

☐ *Approachable/Personable* (Smiles, greets students, initiates conversations, invites questions, responds respectfully to student comments)

☐ *Authoritative* (Establishes clear course rules; maintains classroom order; speaks in a loud, strong voice)

☐ *Confident* (Speaks clearly, makes eye contact, and answers questions correctly)

☐ *Creative and Interesting* (Experiments with teaching methods, uses technological devices to support and enhance lectures; uses interesting, relevant, and personal examples; not monotone)

☐ *Effective Communicator* (Speaks clearly/loudly; uses precise English; gives clear, compelling examples)

☐ *Encourages and Care for Students* (Provides praise for good student work, helps students who need it, offers bonus points and extra credit, and knows student names)

☐ *Enthusiastic about Teaching and about Topic* (Smiles during class, prepares interesting class activities, uses gestures and expressions of emotion to emphasize important points, and arrives on time for class)

☐ *Establishes Daily and Academic Term Goals* (Prepares/follows the syllabus and has goals for each class)

☐ *Flexible/Open-Minded* (Changes calendar of course events when necessary; will meet at hours outside of office hours; pays attention to students when they state their opinions; accepts criticism from others; and allows students to do make-up work when appropriate)

☐ *Good Listener* (Doesn't interrupt students while they are talking; maintains eye contact; and asks questions about points that students are making)

☐ *Happy/Positive Attitude/Humorous* (Tells jokes and funny stories; laughs with students)

☐ *Humble* (Admits mistakes; never brags; doesn't take credit for others' successes)

☐ *Knowledgeable About Subject Matter* (Easily answers students' questions; does not read straight from the book or notes; and uses clear and understandable examples)

☐ *Prepared* (Brings necessary materials to class; is never late for class; provides outlines of class discussion

☐ *Presents Current Information* (Relates topic to current, real-life situations; uses recent videos, magazines, and newspapers to demonstrate points; talks about current topics; uses new or recent texts)

☐ *Professional* (Dresses nicely [neat and clean shoes, slacks, blouses, dresses, shirts, ties] and no profanity)

☐ *Promotes Class Discussion* (Asks controversial or challenging questions during class, gives points for class participation, involves students in group activities during class)

☐ *Promotes Critical Thinking/Intellectually Stimulating* (Asks thoughtful questions during class, uses essay questions on tests and quizzes, assigns homework, and holds group discussions/activities)

☐ *Provides Constructive Feedback* (Writes comments on returned work, answers students' questions, and gives advice on test-taking)

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☐ *Realistic Expectations of Students/Fair Testing and Grading* (Covers material to be tested during class, writes relevant test questions, does not overload students with reading, teaches at an appropriate level for the majority of students in the course, curves grades when appropriate)

☐ *Respectful* (Does not humiliate or embarrass students in class, is polite to students [says thank you and please, etc.], does not interrupt students while they are talking, does not talk down to students)

☐ *Sensitive and Persistent* (Makes sure students understand material before moving to new material, holds extra study sessions, repeats information when necessary, asks questions to check student understanding)

☐ *Strives to Be a Better Teacher* (Requests feedback on his/her teaching ability from students, continues learning [attends workshops, etc. on teaching], and uses new teaching methods)

☐ *Technologically Competent* (Knows now to use a computer, knows how to use e-mail with students, knows how to use overheads during class, has a Web page for classes)

☐ *Understanding* (Accepts legitimate excuses for missing class or coursework, is available before/after class to answer questions, does not lose temper at students, takes extra time to discuss difficult concepts)

Please kindly respond to the following demographic questions:

My faculty rank is...

- ○ Assistant Clinical Professor
- ○ Associate Clinical Professor
- ○ Clinical Professor
- ○ Assistant Professor
- ○ Associate Professor
- ○ Professor

- O Other

I have _____ total years of teaching experience.

I am...

- O Male
- O Female

My age in years is...

I identify my race/ethnicity as...

- O Caucasian or White
- O African American or Black
- O Hispanic/Latino
- O Asian
- O American Indian or Alaska Native
- O Native Hawaiian or Other Pacific Islander
- O Other

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Appendix D

Student Survey Instrument

Default Question Block

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There are no risks or discomfort associated with participating in this survey. Participation is completely voluntary and no compensation will be offered.

Any data obtained in connection with this study will remain anonymous. You will not be asked to provide any identifying information (i.e., your name). Information collected through your participation may be published in professional journals and/or presented at professional meetings.

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☐ *Approachable/Personable* (Smiles, greets students, initiates conversations, invites questions, responds respectfully to student comments)

☐ *Authoritative* (Establishes clear course rules; maintains classroom order; speaks in a loud, strong voice)

☐ *Confident* (Speaks clearly, makes eye contact, and answers questions correctly)

☐ *Creative and Interesting* (Experiments with teaching methods, uses technological devices to support and enhance lectures; uses interesting, relevant, and personal examples; not monotone)

☐ *Effective Communicator* (Speaks clearly/loudly; uses precise English; gives clear, compelling examples)

☐ *Encourages and Care for Students* (Provides praise for good student work, helps students who need it, offers bonus points and extra credit, and knows student names)

☐ *Enthusiastic about Teaching and about Topic* (Smiles during class, prepares interesting class activities, uses gestures and expressions of emotion to emphasize important points, and arrives on time for class)

☐ *Establishes Daily and Academic Term Goals* (Prepares/follows the syllabus and has goals for each class)

☐ *Flexible/Open-Minded* (Changes calendar of course events when necessary; will meet at hours outside of office hours; pays attention to students when they state their opinions; accepts criticism from others; and allows students to do make-up work when appropriate)

☐ *Good Listener* (Doesn't interrupt students while they are talking; maintains eye contact; and asks questions about points that students are making)

☐ *Happy/Positive Attitude/Humorous* (Tells jokes and funny stories; laughs with students)

☐ *Humble* (Admits mistakes; never brags; doesn't take credit for others' successes)

☐ *Knowledgeable About Subject Matter* (Easily answers students' questions; does not read straight from the book or notes; and uses clear and understandable examples)

☐ *Prepared* (Brings necessary materials to class; is never late for class; provides outlines of class discussion

☐ *Presents Current Information* (Relates topic to current, real-life situations; uses recent videos, magazines, and newspapers to demonstrate points; talks about current topics; uses new or recent texts)

☐ *Professional* (Dresses nicely [neat and clean shoes, slacks, blouses, dresses, shirts, ties] and no profanity)

☐ *Promotes Class Discussion* (Asks controversial or challenging questions during class, gives points for class participation, involves students in group activities during class)

☐ *Promotes Critical Thinking/Intellectually Stimulating* (Asks thoughtful questions during class, uses essay questions on tests and quizzes, assigns homework, and holds group discussions/activities)

☐ *Provides Constructive Feedback* (Writes comments on returned work, answers students' questions, and gives advice on test-taking)

☐ *Punctuality/Manages Class Time* (Arrives to class on time/early, dismisses class on time, presents relevant materials in class, leaves time for questions, keeps appointments, returns work in a timely way)

☐ *Rapport* (Makes class laugh through jokes and funny stories, initiates and maintains class discussions, knows student names, interacts with students before and after class)

☐ *Realistic Expectations of Students/Fair Testing and Grading* (Covers material to be tested during class, writes relevant test questions, does not overload students with reading, teaches at an appropriate level for the majority of students in the course, curves grades when appropriate)

☐ *Respectful* (Does not humiliate or embarrass students in class, is polite to students [says thank you and please, etc.], does not interrupt students while they are talking, does not talk down to students)

☐ *Sensitive and Persistent* (Makes sure students understand material before moving to new material, holds extra study sessions, repeats information when necessary, asks questions to check student understanding)

☐ *Strives to Be a Better Teacher* (Requests feedback on his/her teaching ability from students, continues learning [attends workshops, etc. on teaching], and uses new teaching methods)

☐ *Technologically Competent* (Knows now to use a computer, knows how to use e-mail with students, knows how to use overheads during class, has a Web page for classes)

☐ *Understanding* (Accepts legitimate excuses for missing class or coursework, is available before/after class to answer questions, does not lose temper at students, takes extra time to discuss difficult concepts)

Please kindly respond to the following demographic questions:

I am currently in...

- ○ 1st semester
- ○ 2nd semester
- ○ 3rd semester
- ○ 4th semester
- ○ 5th semester

I am...

- ○ Male
- ○ Female

My age range is...

I identify my race/ethnicity as...

- ○ Caucasian or White
- ○ African American or Black
- ○ Hispanic/Latino
- ○ Asian
- ○ American Indian or Alaska Native
- ○ Native Hawaiian or Other Pacific Islander
- ○ Other

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Appendix E

IRB Approval Form

AUBURN UNIVERSITY INSTITUTIONAL REVIEW BOARD for RESEARCH INVOLVING HUMAN SUBJECTS

REQUEST FOR EXEMPT CATEGORY RESEARCH

For Information or help completing this form, contact: **THE OFFICE OF RESEARCH COMPLIANCE**, 115 Ramsay Hall
Phone: 334-844-5966 **e-mail:** IRBAdmin@auburn.edu **Web Address:** http://www.auburn.edu/research/vpr/ohs/index.htm

Revised 2/1/2014 **Submit completed form to IRBsubmit@auburn.edu or 115 Ramsay Hall, Auburn University 36849.**

Form must be populated using Adobe Acrobat / Pro 9 or greater standalone program (do not fill out in browser). Hand written forms will not be accepted.

Project activities may not begin until you have received approval from the Auburn University IRB.

1. PROJECT PERSONNEL & TRAINING

PRINCIPAL INVESTIGATOR (PI):

Name Kelley Noll Title _____ Dept./School College of Education

Address 1674 Marie Loop, Auburn, AL 36830 AU Email kmv0011@auburn.edu

Phone 334-742-3385 Dept. Head _____

FACULTY ADVISOR (if applicable):

Name Maria Witte Title Professor Dept./School College of Education

Address 4012 Haley Center, Auburn University, AL 36849

Phone 334-844-3078 AU Email wittemm@auburn.edu

KEY PERSONNEL: List Key Personnel (other than PI and FA). Additional personnel may be listed in an attachment.

Name	Title	Institution	Responsibilities

KEY PERSONNEL TRAINING: Have all Key Personnel completed CITI Human Research Training (including elective modules related to this research) within the last 3 years? ☑ YES ☐ NO

TRAINING CERTIFICATES: Please attach CITI completion certificates for all Key Personnel.

2. PROJECT INFORMATION

Title: Baccalaureate Nursing Student and Faculty Views of Effective Teaching

Source of Funding: ☑ Investigator ☐ Internal ☐ External

List External Agency & Grant Number: _____

List any contractors, sub-contractors, or other entities associate with this project.

N/A

List any other IRBs associated with this project (including those involved with reviewing, deferring, or determinations).

N/A

FOR ORC OFFICE USE ONLY

DATE RE
DATE OF
DATE OF
DATE OF
COMMENTS:

Add this approval information in sentence form to your electronic information letter!

APPROVA
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INTERVA

The Auburn University Institutional Review Board has approved this Document for use from
01/06/2017 to 01/05/2020
Protocol # 16-504 EX 1701

1 of 3

3. PROJECT SUMMARY

a. Does the research involve any special populations?

- ☐ YES ☑ NO Minors (under age 19)
- ☐ YES ☑ NO Pregnant women, fetuses, or any products of conception
- ☐ YES ☑ NO Prisoners or Wards
- ☐ YES ☑ NO Individuals with compromised autonomy and/or decisional capacity

b. Does the research pose more than minimal risk to participants? ☐ YES ☑ NO

Minimal risk means that the probability and magnitude of harm or discomfort anticipated in the research are not greater in and of themselves than those ordinarily encountered in daily life or during the performance of routine physical or psychological examinations or tests. 42 CFR 46.102(i)

c. Does the study involve any of the following?

- ☐ YES ☑ NO Procedures subject to FDA Regulation Ex. Drugs, biological products, medical devices, etc.
- ☐ YES ☑ NO Use of school records of identifiable students or information from instructors about specific students
- ☐ YES ☑ NO Protected health or medical information when there is a direct or indirect link that could identify the participant
- ☐ YES ☑ NO Collection of sensitive aspects of the participant's own behavior, such as illegal conduct, drug use, sexual behavior or use of alcohol
- ☐ YES ☑ NO Deception of participants

If you checked "YES" to any response in Question #3 STOP. It is likely that your study does not meet the "EXEMPT" requirements. Please complete a PROTOCOL FORM for Expedited or Full Board Review.
You may contact IRB Administration for more information. (Phone: 334-844-5966 or Email: IRBAdmin@auburn.edu)

4. PROJECT DESCRIPTION

a. Subject Population (Describe, include age, special population characteristics, etc.)

Baccalaureate students aged 18 or older at Auburn University accepted into the School of Nursing and enrolled in a professional nursing course.

b. Describe, step by step, all procedures and methods that will be used to consent participants.

☐ N/A (Existing data will be used)

An email will be sent inviting individuals to participate in the research study. The email will contain an information letter detailing the study and information regarding the principle investigator and faculty advisor. Those students who chose to follow the link provided in the email to complete the survey will then see the information letter again. Nancy Harrellson in the Auburn University School of Nursing Student Services Office will be available for assistance in administering the survey to help ensure anonymity of participants.

c. **Brief summary of project.** (Include the research question(s) and a brief description of the methodology, including recruitment and how data will be collected and protected.)

The purpose of this study is to determine the relationship between those qualities valued by nursing faculty and those valued by baccalaureate nursing students. The study also aims to determine if there is a relationship between the findings of the original Teacher Behaviors Checklist findings and this study. The study will collect data from nursing faculty and baccalaureate nursing students. The data will be collected via Qualtrics, an electronic questionnaire format. The researcher will have no access to participant personal data, only anonymous data. The total time commitment will be approximately 10 minutes. The research questions are:

1. What are the qualities/behaviors valued by nursing faculty?
2. What are the qualities/behaviors valued by baccalaureate nursing students?
3. What is the relationship between those qualities/behaviors valued by nursing faculty and those valued by nursing students?
4. What is the relationship between the findings of the original Teacher Behaviors Checklist and the findings in this study?

Data will be collected and stored anonymously on a secure server approved by Auburn University with access granted to researchers involved in the study. Information collected may be used in a presentation, professional meeting, and/or published in a professional journal. Data will be analyzed using SPSS software.

d. **Waivers. Check any waivers that apply and describe how the project meets the criteria for the waiver.**

- ☐ **Waiver of Consent (Including existing de-identified data)**
- ☑ **Waiver of Documentation of Consent (Use of Information Letter)**
- ☐ **Waiver of Parental Permission (for college students)**

The information letter will be used in place of the waiver of consent.

e. **Attachments. Please attach Informed Consents, Information Letters, data collection instrument(s), advertisements/recruiting materials, or permission letters/site authorizations as appropriate.**

Signature of Investigator Kelley M Noll Digitally signed by Kelley M Noll DN: cn=Kelley M Noll, o=Auburn University, ou=School of Nursing, emailAddress=kmn0011@auburn.edu, c=US Date: 2016.12.15 09:53:50 -06'00' Date 12/15/16

Signature of Faculty Advisor Maria M. Witte Date Dec 15, 2016

Signature of Department Head Sherida Downer Digitally signed by Sherida Downer Date: 2016.12.19 16:33:04 -06'00' Date