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Predicting Success in First-Year Associate Degree Nursing Students

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Walden University

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Laura J. Hope

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Walden University
2015

Abstract

Predicting Success in First-Year Associate Degree Nursing Students

by

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MSN, Medical University of South Carolina, 2002

BSN, Medical University of South Carolina, 1992

ADN, Florence-Darlington Technical College, 1988

PN, Florence-Darlington Technical College, 1986

Doctoral Study Submitted in Partial Fulfillment

of the Requirements for the Degree of

Doctor of Education

Walden University

December 2015

Abstract

An associate degree of nursing program in the southeastern region of the United States has had significant increases in student attrition over the past few years. Admission requirements did not include an entrance exam, such as the Test of Essential Academic Skills (TEAS), which may be useful in decreasing the deficiencies associated with poor student progression. Guided by the Knowles' theory of adult learning and Bandura's social learning theory, the purpose of this correlation study was to explore the relationship between the TEAS scores and the cumulative grade point average (GPA) of first-year students to determine if success at the completion of students' first year in the nursing program can be predicted from the overall TEAS score and its subsections of reading, math, science, and English. Archival data for 130 nursing students enrolled from 2012 to 2013 were analyzed using stepwise multiple regression. According to the study results, there was a significant correlation of the total TEAS score and student GPA after the first year of nursing school. The first semester GPA was positively related to the TEAS English score and the TEAS science score; however, there was no significant correlation found for TEAS math and reading scores with students' GPA. A 3-day workshop and a student mentoring program were developed to address academic deficiencies of at-risk nursing students, particularly in English and science. Positive social change can occur through improved retention, which will lead to a higher number of nursing graduates eligible to take and pass the National Certification Licensure Exam for Registered Nurses, provide job security for graduates, and improve the present critical shortage of nurses in the United States.

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Section 1: The Problem

Introduction

Many nursing programs are experiencing problems with student attrition during the first year of nursing school. In this study, student attrition is referred to as the number of students who fail to matriculate to the next semester in a nursing program. Some students enter programs of study without the preparation needed to be successful (Bonis, Taft, & Wender, 2007; Davenport, 2007; Flanagan & McCausland, 2007). High student attrition reduces the number of nurses available to take the National Certification Licensure Exam for Registered Nurses (NCLEX-RN) and leads to a reduction in the number of nurses available to enter the job market (NCSBN, 2010).

Students who fail to attain their nursing degree may experience financial burdens, high levels of stress, and feelings of failure that may impact family dynamics. One possible solution to the problem of student attrition could be revising the nursing program admission criteria to include an entrance exam. The Test of Essential Academic Skills (TEAS) is an entrance exam created to determine students' academic level. The purpose of this type of test is to assist in the identification of at-risk students early in the nursing program (TEAS, 2011). Early detection of student weaknesses can lead to enhancement of first-year student outcomes, improvement in student retention throughout the nursing program, and an increase in the number of student graduates who are eligible to sit for the NCLEX-RN (Buchanan & Aiken, 2008; Clark, & Allison-Jones, 2011; Ellenbecker, 2010; Fox & Abrahamson, 2009; Hancock, 2008).

It is important that educators are aware of each student's potential for successful academic performance. Assessing a student's prior knowledge through a validated competency exam can assist the educator to facilitate learning by formulating lesson plans that focus on the specific needs of the individual. According to Caputi (2015), when educators tailor the learning environment to the needs of the learner, outcomes are improved and course failures are decreased.

Definition of the Problem

In an Associate Degree in Nursing (ADN) program at a local college in the Southeastern region of the United States, there is high first-year student attrition. The ADN program was designed to be completed in five semesters if students progressed successfully from one semester to another. Applicants were selected twice a year based on the completion of prerequisite courses and their college grade point average (GPA). The minimal prerequisite GPA requirement was 2.0 or better in math, English, psychology, and biology. Once all of the student information was compiled, an administrative committee met and selected the candidates.

The nursing program admission criteria did not include an entrance exam to measure student competency. An improvement plan needed to be developed to decrease the deficiencies associated with student progression and NCLEX-RN pass rates. Graduating from an accredited nursing program and passing the NCLEX-RN was essential for student nurses to become licensed and function as a registered nurse (RN). If students are unable to pass the NCLEX-RN, the nursing program could be at risk for loss of accreditation by the National Council State Board of Nursing (NCSBN). According to

Higgins (2005), there is a relationship between high attrition rates and decreased passing rates on the NCLEX-RN exam. Administration and faculty investigated various strategies to assist in decreasing the attrition rate. Adopting the TEAS as part of the requirement for entrance into the nursing program may be a way to minimize attrition in the local nursing program.

The TEAS is a standardized nursing entrance exam created and administered by the Assessment Technology Institute (ATI) and used to determine the ability of potential nursing students (ATI, 2012). The TEAS has been adopted and is being used as a tool for student mentoring and remediation, but the administrative team was considering the use of this tool as part of the admission criteria. Benner, Sutphen, Leonard, and Day (2010) noted that it is important to find a process for selection of nursing program applicants who have the greatest probability of success.

The results of the findings generated by the TEAS can provide an analysis of each student applying to the nursing program. This information can again be used to support learning of admitted students by allowing the educator an opportunity to develop individualized plans to promote student success. Sharing the results of the TEAS with the student may enhance his or her learning by providing an indepth overview of what the student may need to master in order to be successful in the nursing program.

Rationale and Purpose

Evidence of the Problem at the Local Level

Approximately 128 nursing applicants are accepted into the ADN program of this college each year. The attrition rate during the spring, summer, and fall of the first year

ranged between 20%-30% (Institutional Data, 2012). The vice president of nursing reported that there was a disparity between the number of students who enter the nursing program and the number of students who successfully completed the first year (personal communication, 2013). The cause of the significant number of students who left the program has not been determined and the amount of program data are limited; however, it appears that students were unprepared for the rigor of an accredited nursing program. Table 1 illustrates the attrition rate of the local ADN program.

Table 1

2010-2013 Average of Student Attrition for ADN Program per Class

Cohort	<i>N</i>	Attrition (%)
Spring 2010	64	41
Fall 2010	64	36
Spring 2011	64	31
Fall 2011	64	26
Spring 2012	64	46
Fall 2012	64	44
Spring 2013	64	48

Note. *N* = the number of students accepted into the ADN Program.

Nursing programs often benchmark students' GPA for acceptance into the program. The department chair of the local school reported that many nursing programs' GPA requirement can range from 2.0 to 3.0, with a benchmark noted to be at 2.5 (personal communication, 2013) Nursing programs may also require an entrance exam specific to the academic discipline. The Accreditation Commission for Education in Nursing (ACEN) is the regulatory body for nursing and has not established any definitive

policies regarding the use of entrance exams as a part of the admission criteria in a nursing program. As a result, admission requirements vary from one nursing program to the next.

Applicants are typically assessed based on student GPA, high school diploma or equivalent, completion of prerequisite courses, and a letter of reference (Brar et al., 2010). Table 2 provides information regarding the courses that potential applicants needed to take prior to submitting an application. The potential student was required to pass each course with a C or greater prior to submitting their application as a potential candidate for entry into the ADN program.

Table 2

ADN Program Requirements for the Application Process

All courses will require a GPA of 2.0 “C” or greater
<ul style="list-style-type: none"> • English 101 • Biology 210 • Psychology 201 • Math 110

Note. Institutional Data, 2012.

Meeting the minimum GPA for program acceptance does not imply that a student was academically prepared for a nursing program. Students who apply to the ADN program often have academic deficiencies reflected in poor writing and computational skills that result in having to take courses multiple times in order to pass. If a student has not mastered basic skills prior to admission into the nursing program, the rigorous nursing curriculum can quickly become overwhelming. Table 3 outlines the courses required each semester during the first year in the local nursing program.

Table 3

ADN Students: First-Year Nursing Courses

ADN Students: First-Year Nursing Courses
Semester 1
<ul style="list-style-type: none"> • NUR 160: Introduction to Nursing (4 credits) • NUR 163: Nursing Across Lifespan I (2 credits) • NUR 170: Nursing Applications (1 credit)
Semester 2
<ul style="list-style-type: none"> • NUR 165: Nursing Concepts & Clinical Practice I (6 credits) • NUR 263: Nursing Across Lifespan II (4 credits) • PHM 115: Drug Calculation I (2 credits) • Biology 211: Anatomy & Physiology II (4 credits)
Semester 3
<ul style="list-style-type: none"> • NUR 265: Nursing Concepts and Clinical Practice II (6 Credits) • Biology 225: Microbiology (4 Credits)

Note. Successful attempt requires a “C” or greater in each class.

It is important to admit nursing students who have the highest chances of being successful and to assist those students who are not at their optimal educational level (Rush et al., 2012; Spector & Echternacht, 2010). Identifying at-risk students before they experience failure is a strategy used in many academic programs (Bondmass, Moonie, & Kowalski, 2008; Rush et al., 2012). Some researchers believe that established entrance requirements set the standards for admission and identify those students who may need additional academic preparation before immersion in a rigorous clinical curriculum (Bondmass et al., 2008; Rush et al., 2012). The admission process in nursing is an important aspect that provides information needed to make informed decisions about

applicants entering the nursing program (Bondmass et al., 2008). Danaher, Bower, and Somasundaram (2008) reported that establishing nursing entrance requirements based on evidence may be the best way to reduce student attrition.

Predicting success for students in any academic program is a challenge, but it is particularly important for students enrolled in nursing. The program is arduous and rigorous. Students may want to be a nurse, but may not be prepared for the commitment of study time to master the nursing curriculum. Poor academic performance is debilitating for the student, and may lead to early recidivism, failure, or dropping out of the program. Even if the nursing student manages to barely pass the courses, the student is required to pass the NCLEX-RN to achieve licensure for nursing practice. ACEN monitors annual outcome data for each accredited nursing program. These data include acceptance rates, attrition rates, graduation rates, and first time pass rates on the NCLEX-RN. Nursing programs that do not meet the minimal standards will lose their accreditation, and graduating students from a non-accredited program may not sit for the NCLEX-RN.

Evidence of the Problem from the Professional Literature

The attrition rate for the ADN program at the local college continues to rise. This problem leads to serious consequences for the students, the nursing program, and the school. According to Seago, Wong, Keane, and Grumbach (2008), student attrition rates in nursing programs are high all over the United States. Higgins (2005) reported that there is a relationship between high attrition rates and decreased passing rates on the NCLEX-RN in many nursing programs. One contributing factor to attrition is that

students often fail to comprehend what it takes to be successful and that contributes to the student dropout rate. These students often drop out or fail out of school and assume marginal jobs that do not meet their basic needs (Monahan et al., 2011). Some students have to take a second or third job, resulting in their inability to return to school (Monahan et al., 2011). Some colleges and universities are being evaluated by the state and federal governments because of the money students owe for incomplete programs of study and excessive time to graduate (Brar et al., 2010; Loftin et al., 2013; Pederson, 2012).

Certain areas of the United States have been adversely affected by high attrition rates in academic programs. According to the National Center for Education Statistics (2011), the southeastern region of the United States has a high rate of illiteracy, unemployment, high school dropout, and chronic illnesses (Andreias et al., 2010; Everett, 2011; Lee, 2012; Raag et al., 2011). Attrition impacts communities, health care dollars, educational institutions, and the state budget (United States Department of Labor, 2011). Students who drop out or who have failed out of school most often end up with minimum wage jobs due to attainment of a lower educational level. Additionally, the local area has an illiteracy rate that ranges between 18% to 45%, and a high school graduation rate of 72% (National Center for Education Statistics, 2011; State Department of Education, 2011). The low literacy, coupled with a low graduation rate, limits the population that nursing programs can use to fill their admission slots (Shulruf, Wang, Zhao, & Baker, 2011). This leads to the necessity for many nursing programs to accept students students who are underprepared or from outside of the local community. These options are not

desirable for they may exacerbate the high attrition rate or provide students who do not remain in the community once graduated.

The unemployment rate for the local county is 8.3%, and for the state, it is 8.1% (State Department of Education, 2011). Table 4 provides statistical data regarding education in the local area and the unemployment rate. High unemployment rates often lead to concerns with basic needs, medical needs, and economics.

Table 4

Local Area Educational Background and Unemployment

Student information	Percentage
• High school or higher	85.5
• Bachelor's degree or higher	29.2
• Graduate or professional degree	11.8
• Unemployment	10.6

Note. Local City Data, 2013.

Empirical data in the literature on admission requirements for nursing programs are lacking (Nicolson, Rourke, & Kanuka, 2010; Scott & Brinson, 2011). Many nursing programs do not have any way of determining a student's educational preparation (Newton, Harris, Pittiglio, & Moore, 2007). According to Kenny (2010), accrediting agencies do not set standards for admission to a nursing program; instead, criteria are established for each nursing program based on the needs of the local area (Kenny, 2010; Newton et al., 2007). Some schools use entrance exams and some do not (Kenny, 2010; Prymachuk, Easton, & Littlewood, 2009). Entrance exams can provide empirical data on student performance in English, math, reading, and science (Kenny, 2010; Prymachuk et al., 2009). This information, along with GPA, can provide a profile of the students'

academic portfolio (Kenny, 2010; Prymachuk et al., 2009) along with the possibility to assist in the development of strategies that can improve student success throughout the curriculum (McGann & Thompson, 2008). Early recognition of academic problems is important to student success and effective problem resolution (Aylward et al., 2011; Douglass, 2012; Fraher et al., 2010; McGann & Thompson, 2008; Newton, 2008; Walker et al., 2011). Identifying the academic problem, developing individualized student achievement plans, and providing immediate assistance to a struggling student is the recipe for a successful outcome for students who may not be adequately prepared for nursing school (McGann & Thompson, 2008).

There are multiple entrance exams available for use in admissions criteria for nursing school (Loftin, Newman, Gilden, Bond, & Dumas, 2013), including the TEAS, but limited data are available concerning best practice. According to Kenny (2010), admission standards lack the empirical evidence regarding the most appropriate methods for selecting applicants to nursing programs. Further research is needed to evaluate the problems that nursing programs have with attrition. There is a gap in service regarding ways to promote successful outcomes for students. Additional research will benefit students and nursing programs by helping nursing educators and administrators to develop strategies to assist underachieving students. Because the admission process should involve the selection of candidates with the greatest probability of success (Brookfield, 2009; Murray, Merriman, & Adamson, 2008; Newton, Smith, & Moore, 2007; Trice & Foster, 2008), those with scores not meeting the benchmark need to be informed so that other career options can be explored. Also, an educational plan can be

implemented based on entrance test scores that will improve the student's chances of success. It is projected that this strategy of an entrance exam and continual mentoring will improve attrition and graduation rates, as well as the number of nurses entering the job market (Aylward et al., 2011; Newton, 2008; Walker et al., 2011).

The purpose of this quantitative study was to determine if the TEAS entrance exam can be used to predict academic success for ADN nursing students at a local school in the southeastern region of the United States. I investigated if there was a relationship between the total score on the TEAS test and student cumulative GPA at the completion of the first year in a nursing program. In addition, scores on the TEAS subsections of reading, math, science, and English were examined to determine their predictive value for student success. The TEAS was correlated with student GPA to determine the value of the tool as a part of the admission criteria for applicants. Adopting an entrance test as a part of the local program preadmission requirement may prove to be a logical step in improving student attrition. According to Bolan and Grainger (2008), the high demand for nurses, problems with attrition rates, and high tuition costs present a challenge to educational institutions to develop an admission process that will enroll applicants with the greatest probability of success. An entrance exam, such as the TEAS, is a viable option to screen new nursing applicants (ATI, 2012). The nursing program will receive data that will assist with student advising and candidate selection (ATI, 2012); the study results will also lead to a detailed plan that will outline opportunities for student improvement prior to entering the nursing program (ATI, 2012).

Definitions

Assessment Technologies Institute, LLC (ATI): A company that developed the TEAS test and other resources to evaluate student progress. The company's primary focus is to work with nursing programs to achieve the best outcome for the student and the nursing program. One of the objectives of this company is to collaborate with nursing programs to provide resource tools to assist with assessment and remediation of nursing students and prepare them for the NCLEX-RN. ATI also offers online practice assessments, academic skills, and resources to accommodate the entry-level students, review modules, DVDs, and questions to assist the student in any level of the nursing program (ATI, 2012). Also provided are services and educational products in medical/surgical nursing, gerontology, mental health, newborn/women's health, pharmacology, and community nursing based on evidence-based practice.

Attrition: The number of students who fail to return to school for a nursing program or are disqualified from completing a nursing program are divided by the number of students who completed the nursing program by a specified period of time (NCSBN, 2013). Each program formulates its own definition of attrition based on regulating guidelines. As a result, the meaning may vary between nursing programs.

National Council Licensure Exam for Registered Nurses (NCLEX-RN): The NCLEX-RN is an exam administered by the state to measure minimum competency in skills, knowledge, and attitudes that are important to meet the physical needs and safety of the public as a registered nurse (Bonis et al., 2007). This is the ultimate goal for all

graduating student nurses to pass the national board exam and become RNs (Bonis et al., 2007).

National Council of State Boards of Nursing (NCSBN): The NCSBN is the organization representing 50 U.S. states and is responsible for ensuring that the candidate for licensure is evaluated to ensure relevant requirements are met to be called a licensed nurse (NCSBN, 2010). The organization's primary objective is to ensure the health, safety, and welfare of the public (NCSBN, 2010).

Retention: The number of students who remain in the program at the end of each semester or completion of the nursing program (NCSBN, 2013). The formula generally used is the number of students completing the program on time divided by the number of students scheduled to complete the program. There is a close relationship between attrition and retention. Some nursing programs may use them interchangeably.

Test of Essential Aptitude Study (TEAS): An aptitude test used by various nursing programs as part of the admission criteria (Newton & Moore, 2010). The test is in place to screen student applicants' level of educational preparation. The test is used to assess incoming students' ability to complete nursing courses. The test is divided into four sections: reading, math, science, and English; it is made up of 170 questions; it takes 3.5 hours to complete and can be completed via computer or paper pencil testing (TEAS Test Breakdown, 2011).

Significance

It is important to reduce student attrition in the ADN program so that students graduate, pass the NCLEX-RN, and enter clinical practice. According to the United

States Government (2011), the Affordable Care Act will provide health care to an additional 32 million people in the United States. Currently, there is a significant nursing shortage across the United States that affects the health of communities (Huntington, Covington, Center, Covington, & Manchikanti, 2011). Based on reports from the American Association of Colleges of Nursing (AACN), the shortage is projected to be greater than 260,000 by 2020 for the RN population alone (AACN, 2009). Without nurses to care for individuals with medical needs, the health of individuals in the United States could be at risk (Huntington et al., 2011).

The local area is in need of nurses to provide care to individuals within the community. According to the United States Department of Labor (2011), the RN educates, administers health care, and provides holistic medical care to individuals, groups, health care facilities, and schools of higher education and adult learning. Within the scope of practice set by the NCSBN, the nurse provides holistic care to individuals of various ages and socioeconomic status (Mason, 2012). A decrease in students completing the nursing program leads to fewer community nurses, resulting in a negative impact on the health care of families, communities, and the United States at large (Duvall & Andrews, 2010; Mason, 2012).

Mason's (2012) study provided information that may assist the local nursing program with making decisions regarding their admission policies. The study benchmarked the first year in the nursing program (first semester, second semester, and third semester) for 2010-2013 cohorts. Because the attrition rate for nursing students is at its highest during the first year of nursing (Carolan & Kruger, 2011), it is more beneficial

to identify the problems during the first year of nursing school rather than when the students graduate and fail to pass the NCLEX-RN. Students who do not master the NCLEX-RN on the first attempt can jeopardize the nursing program's standing with ACEN. A nursing program accreditation is a requirement for graduates to be eligible to take the NCLEX-RN (ACEN, 2013).

The present study was used to evaluate the TEAS as a predictor of academic success as measured by GPA. The relationship of the two variables was assessed to determine if the TEAS should be a part of the admission criteria at the local college. High attrition rates in nursing programs generally occur in the first year of college (Andrew, McGuinness, Reid, & Corcoran, 2009; Carolan & Kruger, 2011; MacKusick & Minick, 2010; O'Brien et al., 2012; Urwin et al., 2010; Whyte, Madigan, & Drinkwater, 2011). The findings of this study may offer some solutions to educators and health care administrators on ways to improve GPA and attrition (Moseley & Mead, 2008).

Research Questions

The research questions that guided this study were used to investigate the relationship between TEAS scores and the cumulative GPA of first-year students to determine if success at the completion of students' first year in the nursing program can be predicted from the overall TEAS and its subsections of reading, math, science, and English. The TEAS was being used to identify those students in need of remediation or student mentoring, but may also be implemented as an entrance exam for admission into the nursing program. To accomplish the purpose of this study, two questions and two alternate and null hypotheses were posed.

RQ1: Is there a positive correlation between nursing students' cumulative GPA and the TEAS test scores?

Ho1: There is no significant positive correlation in the TEAS test and student GPA after the first year of nursing school.

Ha1: There is a significant positive correlation in the TEAS test and student GPA after the first year of nursing school.

RQ2: Can the TEAS total score or subsection scores for reading, math, science, or English predict student success as measured by GPA?

Ho2: The TEAS total score or subsection scores for reading, math, science, or English are not predictive of student success as measured by GPA.

Ha2: The TEAS total score and subsection scores for reading, math, science, and English are significant predictors of student success as measured by first semester GPA.

Evaluating these questions assisted in determining if the score on the TEAS test or subtests could be used as a predictor of nursing students' academic success during the first year of nursing school. The study provided information on the value of using an entrance exam to achieve positive student outcomes.

Review of the Literature

The literature review consists of five sections and is primarily based on scholarly articles that are less than 5 years old. The articles are peer reviewed and supportive of evidence-based practice. The search included Medline, CINAHL, ERIC, and Google Scholar databases. The primary areas of focus were the nursing curriculum, faculty role, student role, and student attrition. All of the following keywords were included in the

literature search: *Entrance exams, nursing programs, first-year NCLEX scores, community colleges' attrition rates, student attrition rate, success factors, recruitment, correlation, nursing shortage, and nursing faculty.*

Theoretical/Conceptual Framework

The theoretical framework for this study was based on two theorists. The first was Knowles' theory of adult learning, and the second was Bandura's (1986) social learning theory (SLT). Knowles and Bandura integrated teaching modalities that impact student-learning outcomes by enhancement of transfer of knowledge. These theorists support the learning styles of adult learners who have had more life experience than younger students who have recently graduated from high school, but who still may not have developed self-directed learning skills (Bednash, 2008; Evans & Stevenson, 2010; Hinshaw, 2001; Myers et al., 2011; Yuen, 2012).

Knowles' adult learning theory is based on the belief that adults are self-directed learners who use past experiences to gain future knowledge (Clapper, 2010). Knowles (1984) believed that adults learn differently from children, and the more proactive the learner is, the richer the learning experience. Myers et al. (2011) claimed that by capturing how individuals learn, interventions can be developed that will generate the best learning outcomes. Educators can enhance the student-learning process by using strategies that empower the students to identify their own learning style (Myers et al., 2011; Slavin, 2006).

Knowles (1984) developed a conceptual basis for adult education and learning based on andragogy, the study of adult learners. It is important for researchers to have an

understanding of adult learners. An educator who has a foundation rich in adult learning principles increases the probability of success regarding educational objectives (Clapper, 2010; Myers et al., 2011). The educator's knowledge of learning needs may assist adult learners in developing their plans based on a collaborative effort between the student and educator (Myers et al., 2011). In the self-directed learning theory, Knowles (1984) encourages educators to empower adult learners to be in charge of their own learning needs. There are six assumptions associated with adult learners that present a unique approach to learning:

1. Adults prefer to use previous experiences in life to direct their learning needs.
2. Adults gain knowledge throughout their lives and use that to build new experiences.
3. Adults can interact with others to prompt an eagerness to learn new concepts.
4. Adults prefer to solve problems rather than be told about subjects to learn.
5. Adults are motivated by their own internal drive rather than external motivators.
6. Adults want to know what factors are important in the learning process (Knowles, 1984).

It is important for students to be active participants in the learning process (Clapper, 2010; Myers et al., 2011). Participation assists in strengthening the learning process and promotes critical thinking skills (Clapper, 2010; Myers et al., 2011). Some educators direct the learning environment to be passive (Clapper, 2010). A passive learning environment is one in which the teacher provides the information that must be

learned to the student. This approach most often leads to a passive learner (Clapper, 2010; Myers et al., 2011). Knowles (1984) believed that passive learners are less likely to be successful because they lack the stimulation that occurs when actively participating in the learning process. In a passive learning environment, students find it difficult to be attentive in class and may rely on memorization to be successful on tests. This approach often leads to a passive learner with poor development of critical thinking skills and who may have difficulty mastering concepts.

The second theorist who provided a foundation for this study is Bandura (1986). Proponents of SLT propose that human behavior is a continuous interaction between cognitive, behavioral, and environmental influences (Bandura, 1986). Most individuals learn through observational learning (modeling), and the information is stored and then guides the action of the individual (Bandura, 1986). According to Bandura (1976), learning depends on the learner and the model, and not all observed behaviors are successful. Factors that contribute to successful outcomes are as follows:

1. Attention: Multiple factors may increase or decrease the observational experience. These factors include distinctiveness, affective valence, complexity, prevalence, and functional value, characteristics (e.g., sensory capacities, perceptual set, arousal level, and past reinforcement).
2. Retention: Remembering priority actions includes symbolic coding, cognitive organization, mental images, and symbolic and motor rehearsal.
3. Reproduction: Reproduction of images includes self-observation and physical capabilities.

4. Motivation: Possessing a good rationale to imitate leads to motivation. This includes the motives (imagined incentives) and seeing/recalling the reinforced model (Bandura, 1976, p. 398).

The local nursing program uses Bandura's SLT, but it is particularly evident in the acute care setting in the nursing students' clinical rotation. Students are scheduled multiple assignments during their clinical rotation. Observation is an important facet of student foundational knowledge and is a requirement when students are paired with a nurse during clinical rotations in specialty areas. Using Bandura's SLT as a component of the organizational framework enhances learning during the first year of nursing school and facilitates future learning opportunities. Nursing programs consider student success to be a primary goal of learning (Kaakinen & Arwood, 2009; Moseley & Mead, 2008). The learning process is multilayered and should be cultivated by colleges from the students' first year until transitioning into the workforce (Clapper, 2010).

Review of Pertinent Literature

The next section is divided into three parts and includes topics related to variables that may affect student attrition. In the first section, I focus on academia and attrition. I then highlight the faculty role in facilitating learning and improving student attrition. The final section provides an overview of factors that may influence the academic success of the college student.

Academia and attrition. Science and math are prerequisites to a nursing program (Newton, 2008; Scott, Keehner Engelke, & Swanson, 2008). Mosley and Mead (2008) sought to predict who will drop out of nursing courses and who will be successful. The

researchers found that those students who performed below level in science experienced a greater difficulty being successful in nursing courses. The findings for math courses were inconclusive for nursing courses.

It is difficult to determine what makes a student successful in nursing. Bridging the gap between entering the program and successful completion is a task that takes much work as shown in Moseley and Mead's (2008) study. According to Fox and Abrahamson (2009), the process for student selection plays a role in student outcome and whether or not they will enroll and complete the program successfully. Entrance exams are in place to assist nursing program leaders to make objective decisions regarding students entering a program of study (Moseley & Mead, 2008). According to Mosley and Mead's findings, there is a positive correlation of success between student performance in science and the first year of nursing school. This relationship has been cited in various literary findings, and some researchers feel that science is the cornerstone of success in program completion (Scott et al., 2008).

Research is important in establishing a benchmark for patterns of success (Hassmiller, 2010; Heroff, 2009). It is important for nursing curricula to demonstrate an in-depth understanding of standards of care outlined by the NCSBN (2010). A major aspect of quality care is having standards in place that promote positive outcomes (Huntington, 2011; Naylor & Kurtzman, 2010). Newton (2008) examined the importance of prerequisite classes to student success in the nursing program. According to Newton (2008), success in math classes are a strong predictor of academic success in a nursing curriculum. The researcher recommended that students be proficient in dosage

calculation prior to entering the nursing curriculum (Newton, 2008). This article supports the need for students to be proficient in math prior to entering a nursing curriculum.

Trice and Foster (2008) examined the interview process as a component of the admission criteria. The purpose of this study was to identify students with a higher probability of being successful in academics. Some researchers and nursing leaders believe that student interviews will assist with student selection and should be a part of the admission criteria (Dante et al., 2011; Rosenberg, Perraud, & Willis, 2007). According to Trice and Foster (2008), including the interview process as part of the entrance requirement helps increase diversity and increase communication between student and faculty.

Davenport (2007) researched companies dedicated to promoting academic success in nursing. One company discussed is the Assessment Technology Institute (ATI) that focuses on a holistic approach to learning and identifies aspects of learning needed to assist in preparing a nursing student for success in nursing school. Opportunities for improvements encompass the student, faculty, curriculum, and the community (Dapremont, 2011; Davenport, 2007). According to Davenport (2007), ATI assists in curriculum improvement, faculty professional development and student comprehension, analysis, and development of a critical thinking process to reduce attrition. While Newton et al. (2009) supported this view, others held different views. For example, Harding (2012) and Lyons (2008) called for the investigation of teaching techniques, including ATI-based ones, towards enhancing safe and effective care delivery and improving student success rates on the NCLEX-RN exam. The ADN program associated with this

study has begun to use ATI as a resource for their program. The program can be used to identify at-risk students and to develop individualized plans to improve attrition.

Eaton and Bean (1995) completed research on the effect of coping behavior on student dropout, social integration and academia. The research was done to evaluate claims presented in a theoretical model that incorporated academic approach, social approach, and social avoidance. The researchers used a questionnaire that referenced Bean's (1985) research on attrition rate. The research was held at a major Midwestern university. The questionnaires were distributed to 534 individuals. Of the questionnaires received, 49% of them were used in the study. Eaton and Bean's (1995) findings supported the hypothesis that there is a positive relationship between student behavior, academia, and social integration.

Faculty role in student attrition. Faculty support is important to student success and is most often a key to recruitment and attrition (Light et al., 2009; Myers et al., 2011; Paulson, 2011). Some students view faculty as parental figures and are most often guided by their feedback (Dapremont, 2011). Students often report feelings of discouragement when faculty support and encouragement are limited, especially African American nursing students (Dapremont, 2011). Most individuals would venture to say that positive and caring behaviors are motivating factors for all students regardless of race or nationality. This article supports the beliefs of the local nursing program that positive student faculty interactions can increase retention of students through collaboration and mutual respect of each other.

The role of the faculty is vital to student success (Baker, 2010; Shelton, 2012; Uyehara et al., 2007). Light, Calkins, Luna, and Drane (2009) used a mixed method approach to research the need for professional development programs for faculty. The objective of professional development courses is to inspire educators to incorporate current trends to teaching and learning while improving teaching strategies for a diverse population. A descriptive model of learning and teaching was used to illustrate the learning relationship between the educator and the learner. The researchers reported positive results when educators were given the opportunity to develop their own repertoire of knowledge. These results can be used to improve student learning and development while improving the attrition rate of students.

Baker (2010) conducted a study on a random sample of nursing programs and their strategies to improve attrition. Participants were surveyed via an online platform and were asked to respond to a questionnaire on the employment and efficacies of attrition strategies assembled from the literature. Of the various methods analyzed by Baker (2010), faculty availability was the most significant. Faculty in undergraduate nursing programs noted that it was important to provide timely feedback on examinations and assessments as well as on clinical performances. The least employed methods were peer student mentoring and organized study groups. The faculty confirmed the use of many of the methods, but rated their use as efficacious only when used for retaining minority-nursing students. Baker's (2010) findings revealed that the highest rated methods were those involving direct interaction between faculty and nursing students.

Poorman, Mastorovich, and Webb (2008) found that faculty who demonstrate caring behavior to students, especially at-risk students, facilitate learning and promote positive student outcomes. In this study, the researchers interviewed thirty nursing faculty members. The researchers asked the educators to discuss a time when assistance was provided to a student who was struggling. The educators were asked to do some self-reflecting and describe what the experience meant to them. They were then asked if they felt that student progress was improved or hindered. At completion of the study, the researchers found that educators had a unique opportunity to assist the learning process by creating a collaborative relationship between the educator and the student. The researchers also found that the collaborative relationship assists in decreasing the gap between student's expectations and faculty expectations regarding the learning process (Poorman et al., 2008).

The type of students entering colleges has changed over the years. One of the demographics in nursing school that has changed in the last 20 years is the return to school of the older adult student. This type of student often brings life experiences that can change the dynamics of the classroom setting (Sifford & McDaniel, 2007). Most nursing programs often see two different demographics; the adult learners and students entering directly from high school (Kenny et al., 2011). Each of these demographic groups brings challenges to nursing program administrators (Kenny et al., 2011). Adult learners are faced with more challenges while pursuing their goal of higher education than are faced by the more traditional nursing program graduate (Kenny et al., 2011). Researchers are divided on the impact of age on academic performance and progression.

Donaldson et al. (2010), Salamonson, Andrew, and Everett (2009), and Vandenhouten (2008), all argued that age significantly influences nursing students' ability to learn and progress. Students who find it difficult to progress may become discouraged and drop out of school. It is important to the student that faculty members demonstrate caring behaviors. For some students, this behavior encourages the student to work harder in school to obtain their objectives. Other researchers such as Ali and Naylor (2009), Dante et al. (2011), Salamonson et al. (2008), and Burger (2003) all maintained that age has no significant impact on nursing students' ability to learn and it does not impact progression. As a result, it does not affect student attrition.

A challenge for some nursing students is balancing school, work, and family life (Monahan et al., 2011). Faculty members find it difficult to lecture due to students' detachment from the topic being discussed and students fluctuating in and out of the class to use the phone. According to Jinkens (2009), many adult learners depend on employment to meet basic needs for food, shelter, clothing, and safety. Management of time between work and school is an element that students find difficult to master (Monahan et al., 2011; Salamonson et al., 2009). Jinkens (2009) observed that employment often takes precedence due to the need to survive. As a result, these students fall behind on their studies and find it difficult to catch up (Salamonson et al., 2009). Key concepts become missing; the student becomes discouraged and often drops out of school due to poor grades or poor attendance in the classroom (Ward-Smith et al., 2012).

Student attrition. It is important for student nurses to remain in school (Pitt et al., 2012). A decrease in the number of students within the first year of college leads to

fewer candidates for nursing degrees (Mosley & Mead, 2008). Heroff (2009) wrote a research article on the relationship between student lack of success and the impact on communities and the workforce. The researcher reported that students who do not pass the NCLEX-RN decrease the number of RNs in the workforce and could potentially compromise accreditation for a nursing program (Heroff, 2009). This information reinforces the need to accept candidates with the best plan for success (Rosenberg et al., 2007). Nursing student candidates will need to prepare themselves for the challenges incurred in a program such as a 2-year nursing program (Uyehara et al., 2007). Students need to create a plan that leaves enough time to learn the information required for a successful outcome in coursework and the clinical setting (Kolb & Kolb, 2009).

Murray et al. (2008) studied the use of the Health Education System, Inc. (HESI) exam as a way of predicting academic success of first-year nursing students entering a nursing curriculum. The researchers used 68 participants from an associate-degree nursing program and 69 students from a baccalaureate program. The HESI test identified academic weaknesses and provided a focused remediation plan to increase student success. Based on the findings by Murray et al. (2008), using the HESI as an entrance exam is a good way to determine a student educational baseline level. In other words, the findings of their study indicated that the HESI is a good predictor of success in students entering a nursing program. The researchers reported that the results showed a significant positive correlation with grades (Murray et al., 2008).

McGann and Thompson (2008) completed a mixed method research study on factors related to students at risk for failure. The researchers used low SAT scores and a

GPA of C in science as the indicator of students at-risk. Some common threads emerged during the interviews. Some of these themes were limited time, heavy course loads, sleep deprivation, test-taking anxiety, and procrastination (McGann & Thompson, 2008). An individual plan for improvement was developed and provided to each student. The plan included student mentoring, coping strategies, time management, and test taking strategies. The students were mentored throughout the program and assistance was given in areas of weaknesses. The results were positive and demonstrated that structured support can positively affect outcomes. The researchers found that the pass rate on the NCLEX-RN increased from 87.76% to 94.81% after initiating a remediation plan.

Implications

Research on the effectiveness of entrance exams as a tool for nursing student attrition is limited. The findings of this study provided information that could encourage other researchers to pursue similar topics. This correlation study provided quantitative data about the relationship between the TEAS test and student GPA during the first year of school. The findings may also provide information that will assist in improving student academic success. Poor student attrition in nursing programs often occurs within the first year of school (Andrew et al., 2008; Andrew et al., 2009; Carolan & Kruger, 2011; Diary et al., 2003; MacKusick & Minick, 2010; O'Brien et al., 2012; Urwin et al., 2010; Whyte et al., 2011). The purpose of this study was to evaluate the relationship between the TEAS test, subsections, and student cumulative GPA at the completion of the first year in a nursing program and to identify if the TEAS entrance exam can be used to predict academic success. The findings could assist in developing ways to reduce student

attrition. The data demonstrated the relationship between the TEAS results and student GPA. If the prediction is positive, the information could be used to promote social change by revising the entrance criteria in the nursing program to include the TEAS test as part of the candidate selection process for students entering the nursing program. If the outcome is not positive, the findings can be used to develop a student mentoring program for at-risk students entering the nursing program.

Summary

This study examined if the TEAS could be used as a predictor of student success in an ADN program located in the southeastern region of the United States. The TEAS scores were correlated with student GPA and a linear regression was used to determine the predictive value for using the TEAS as an entrance exam for the nursing program. It is important to have a comprehensive understanding of all the facets that affect student outcome during the first year and at program completion. Identifying at-risk students is the first step in creating plans to enhance student-learning outcomes, reduce attrition, and improve the retention rate during the first year of college (Walker et al., 2011).

Section 1 included a description of the study, the goals for the study, and a review of the literature. Section 2 focuses on the methodology for the study. The design and approach used for the study were justified. The sampling method, the sample size, data collection, and instrument are discussed. The section includes (a) data analysis; (b) assumptions, scope, and delimitations; and (c) measures to be taken for the protection of participants' rights. Section 2 also contains the results of the study, as well as implications and recommendations for future research.

Section 2: The Methodology

Introduction

Limited and inconsistent research is available regarding predictors of student success in nursing programs. Research is a component of evidence-based practice and is an element for promoting change. This study was used to explore the use of the TEAS as a tool in predicting academic and nonacademic success with ADN students during the first year of school. In this study, I examined the degree of association between the TEAS results and students' GPAs to determine if a relationship exists. A quantitative correlational design and linear regression were used to facilitate this approach. Section 2 includes a description of the research design and approach. This section also includes the setting and sample, instrumentation and materials, data collection and analysis, the findings, assumptions, limitations, scope, and delimitations of the project study.

Research Design and Approach

In this quantitative study, I used a predictive correlation design with retrospective data, which are data from past records, to identify relationships and predictors for academic success in an ADN program. The use of retrospective data can be used in nursing and is relevant to nursing research (Haber & Wood, 2010). A correlation design was favored because it allowed an examination of the relation or pattern between variables (Creswell, 2012). I explored the relationship between variables, not cause and effect relationships. This was not an experimental study, and there were no dependent or independent variables in this study. Rather, the design included a predictor variable and a criterion variable. In this study, the TEAS served as the predictor variable and the GPA at

the end of the first year was the criterion variable. A predictive correlation research design can detail the relationship among variables without the investigator taking any active step to intervene; a prediction study may be used to explore whether a measure taken at one time may predict later results (Lodico et al., 2010). This type of design decreased the chance of bias and improved the validity of the study. In addition to examining the relationships that exist between two or more variables, a correlation design enables a researcher to determine the characteristics of an existing relationship and to generate pertinent hypotheses (Creswell, 2012; Klepstad & Kaasa, 2012). This approach involves a methodical collection of statistical data in numerical form that can be analyzed and evaluated (Östlund, Kidd, Wengström, & Rowa-Dewar, 2011).

A qualitative approach was considered, but ruled out because this approach would not yield the data needed to address the research questions. The study provided quantifiable data to assist the local program with solving the problem of the high attrition rate. According to Östlund et al. (2011), nonexperimental research studies, such as correlation research, are used in quantitative studies to gather objective information. For these stated reasons, it was more logical to use a quantitative approach in this study.

Setting and Sample

Setting

The setting was a public technical college located in the Southeastern region of the United States. The college has a diverse population of students with approximately 56% minorities and 44% Caucasian students (Institutional Data, 2012). Enrollment is between 5,000 to 6,000 students in the spring and fall with a variation during the summer

(Institutional Data, 2012). The nursing program admission criteria do not include ethnicity, economical background, or special affiliations. The technical college has three nursing programs of study. The first program is the ADN program. This program graduates nursing students twice a year during the spring and summer semesters. The second program is the practical nursing (PN) program. This yearlong program graduates nursing students once in August of each year. The third program is a licensed practical nurse (LPN) transitional program. This program accepts LPNs once a year in the fall. Once the transitional class is successfully completed, the students matriculate to the fourth semester and then fifth semester. Students graduate after successful completion of all semesters. This study was limited to the ADN program.

Sampling and Sample Size

The initial target population was 448 ADN students who were accepted into the program during the years of 2010 to 2013. But, because the TEAS scores were not available for the years of 2010 and 2011, the sample size was changed to 130 students. Approval for the retrieval of the preexisting data was obtained from the vice president of the nursing program. The use of a power analysis was not necessary because the study included a sample of archived data for all of the nursing students accepted into the program during the established period.

Instrumentation and Materials

The TEAS

The TEAS was the tool used in this study and was considered the predictor variable. The TEAS is an entrance exam developed by the Assessment and Technology

Institute (ATI) and is used by many nursing programs to measure student academic proficiency (ATI, 2009). The TEAS is a four-option, multiple choice test that consists of 170 questions and comprises interval data (ATI, 2009). The test was developed for nursing programs to measure students' basic skill in English, math, science, and reading. Student scores are established based on the national average and are benchmarked by each nursing program at a proficient level, advanced level, or exemplary level. The benchmark for this local program is a proficient level. Table 5 provides information related to the level of measurement for the TEAS.

Table 5

Level of Measurement for TEAS

Content area	Number of scored questions	Percentage of test
Reading <ul style="list-style-type: none"> • Paragraph Comprehension (19) • Passage Comprehension (23) 	42	28
Mathematics <ul style="list-style-type: none"> • Numbers/Operations (19) • Algebra (4) • Data Interpretation (3) • Measurement (4) 	30	20
Science <ul style="list-style-type: none"> • Human Body Science (11) • Life Science(15) • Earth/Physical Science (14) • Scientific Reasoning (8) 	48	32
English/Language <ul style="list-style-type: none"> • Grammar/Word Meanings (15) • Spelling/Punctuation (9) • Structure (6) 	30	20

Note. ATI, 2009.

Student retention is a topic of discussion for many nursing programs. Making decisions regarding applicant selection is a component of improving the retention rate. The first year in the nursing program was selected because of the poor retention rate for students during that time. It is important to select tools that will provide information needed to make vital decisions about who to accept in the nursing program. The TEAS is a measurement tool designed by ATI to assist in applicant selection. Comprehending the TEAS results assisted in helping the admissions committees make enrollment decisions. Table 6 provides information related to academic preparation and measurement of the TEAS.

Table 6

TEAS Academic Preparedness Categories

TEAS V Academic preparedness categories
1. Exemplary - (90.7%-100%) Indicate a very high level of overall academic preparedness necessary to support learning of nursing-related content.
2. Advanced - (78.0%-90.0%) Indicate a high level of overall academic preparedness necessary to support learning of nursing-related content.
3. Proficient - (58.7%-77.3%) Indicate a moderate level of overall academic preparedness necessary to support learning of nursing-related content.
4. Basic - (41.3%-58.0%) Indicate a low level of overall academic preparedness necessary to support learning of nursing-related content.
5. Developmental - (<41.3%) Indicate a very low level of overall academic preparedness necessary to support learning of nursing-related content.

Note. ATI, 2012.

TEAS validation and reliability. For the validity of the content of the TEAS, a review and evaluation of each of the test items was completed by nursing experts in both education and clinical practice. Faculty are responsible for the suitability and relevance of the content of each test item. According to ATI (2004), the selection of nursing schools was completed for field test to examine the validation of the content, and each of the test items was revised as needed based on the analyses. ATI provided reliability data assessment for each item on the TEAS (ATI, 2008). The reliability of each assessment was calculated using Cronbach's alpha reliability coefficient (ATI, 2004). Cronbach's alpha reliability coefficient's value ranges between 0 and 1, and values below 0.5 are considered unacceptable reliability (Green & Salkind, 2011). The TEAS assessment ranked on Cronbach's alpha reliability coefficients above 0.526, the leadership assessment's lowest alpha value (ATI, 2008).

Student GPA

The student GPA represents the criterion variable. I predicted that this variable would be impacted by the total TEAS score, as well as the four TEAS sub scores of reading, math, science, and English. Student GPAs were gathered from the end of the first year in the nursing program. Student GPA is classified as ratio data.

Data Collection and Analysis

The data collection and analysis process were vital components to the research process. It is important to provide information that is accurate and clear. This study used *post hoc* data collected by the local nursing program in this study; *post hoc* data are

information that have been collected by researcher(s) and have passed through layers of analysis (Shek & Sun, 2010).

Data Collection

Approval for data collection was obtained from the vice president of nursing programs and the Institutional Review Board (IRB) at Walden University prior to the beginning of the data collection process (IRB Number 08-15-14-0075168). Data collection came from archived information of students admitted from years 2012 to 2013. The data collection included the numeric total score of the TEAS results, as well as the scores for each of the four TEAS subsections of reading, math, science, English, and student GPA at the end of the first year in the nursing program.

The TEAS and student GPA had specific collection points. The TEAS collection point was after students were accepted into the nursing program, prior to the beginning of nursing classes. The TEAS scores were comprised of interval data. The information was reflected in either a table or a graph.

The collection point for student GPA was at the end of the first year in the nursing program. The program GPA was used to determine student progression. If a student failed to progress, the student was not allowed to advance. If the student retains academic standing, the student can request to be readmitted into the nursing program the next time the course is offered. The collected information was stored on a spreadsheet and coded to maintain anonymity. All identifying information was deleted. Confidentiality was maintained throughout the process and according to the guidelines of the nursing program

and IRB. All results are stored in a computerized system, which is password protected.

To maintain confidentiality, the password was not shared.

Data Analysis

Descriptive and inferential statistics were used to analyze the data. According to Creswell (2012), using descriptive statistics is a simple way to manage quantifiable data. Stepwise multiple regression was used to determine if the total TEAS score or the scores on any of the four TEAS subtests can predict student success as measured by student GPA at the end of the first year. According to Creswell (2012), multiple regression examines the strength and direction between the criterion and predictor variables and can be used with ratio or continuous data. Significance of the results was accepted at $p \leq 0.05$.

Summary of Findings

The purpose of this quantitative correlation study was to evaluate student success in an associate degree-nursing program located in the southeastern region of the United States. Descriptive statistics were used to evaluate the student's first-semester GPA and first-year GPA. The process described the data being evaluated but did not make a definitive conclusion about the results. Descriptive statistics does not draw conclusions about the hypothesis, but enables the presentation of the data in a more expressive way, thereby allowing for simpler understanding of the data (Green & Salkind, 2011).

The focus was to evaluate two variables to determine if academic success can be predicted during the first year in a nursing program. The number of students from the Spring 2013 cohort (50.8%) and the Fall 2012 cohort (49.2%) were similar.

The variables were the TEAS results prior to entering the nursing program, subsections of the TEAS, and student GPA after the first year in the nursing program. The TEAS results and subsections were correlated with student GPA to determine if a relationship exists. Archival data from 130 students were used for the sample size. In an effort to evaluate the research questions, archived program data were collected and examined. The TEAS scores were obtained from the local program online site of ATI and student GPA from the local program electronic record system. Both systems were secure and password protected. Data were collected on two cohorts of students who attended the nursing program during the Spring 2013 (66 students) and Fall 2012 (64 students).

Table 7 displays the two GPA scores as well as the five TEAS scores. Student GPA scores were $M = 2.83$ and $M = 2.63$ for the first semester and first year, respectively. The TEAS Composite score was $M = 67.44$ and the highest of the four TEAS subscale scores was for TEAS Math. The composite score represents the average of all the combined scores in the subsets.

Table 7

Descriptive Statistics for Selected Variables (N = 130)

Variable	M	SD	Low	High
First-semester GPA	2.83	0.47	2.00	4.00
First-year GPA	2.63	0.43	1.80	3.70
TEAS Reading	71.87	13.39	33.30	100.00
TEAS Math	76.13	13.61	30.00	100.00
TEAS Science	58.93	11.89	29.20	91.70
TEAS English	66.19	12.91	33.30	93.30
TEAS Composite	67.44	10.17	33.30	88.00

Note. SD = Standard deviation.

Answering the Research Questions

Research Question 1 asked, “Is there a positive correlation between nursing students’ cumulative GPA and the TEAS test scores?” Table 8 displays the relevant Pearson correlations between the first-year GPA and the five TEAS scores. The related null hypothesis (H_0) predicted that there is no significant correlation in the TEAS test and student GPA after the first year of nursing school. All five correlations were positive and significant with the strongest correlation being with the TEAS Composite score ($r = .40, p < .001$). This combination of findings provided support to reject the null hypothesis (see Table 8). The accompanying scatterplots for each of these ten correlations are found in Appendix D.

Research Question 2 (RQ2) asked, “Can the TEAS total score or subsection scores for reading, math, science, or English predict student success as measured by first

semester GPA?" and the related null hypothesis (H_0) predicted that the TEAS total score or subsection scores for reading, math, science, or English are not predictive of student success as measured by first semester GPA. Table 8 shows the relevant correlation between the first semester GPA and the five TEAS scores. All five correlations were positive and significant with the strongest correlations being with the TEAS composite score ($r = .38, p < .001$) and the TEAS English score ($r = .38, p < .001$). This combination of findings provided support to reject the null hypothesis (see Table 8).

Table 8

Pearson Correlation for TEAS Scores (N = 130)

Variable	First-semester r value	First-year r value
TEAS Reading	.24 *	.31 **
TEAS Math	.26 *	.26 *
TEAS Science	.34 **	.35 **
TEAS English	.38 **	.37 **
TEAS Composite	.38 **	.40 **

Note. * $p < .005$. ** $p < .001$.

To reduce the redundancy from the highly correlated TEAS scores (multicollinearity), stepwise regression models were created to predict the first-year GPA (Table 9) and the first semester GPA (Table 10) using the five TEAS scores as candidate variables. The model for first-year GPA was significant ($p = .001$) and accounted for 16.0% of the variance in the dependent variable. Table 9 shows that the TEAS composite score was the only included independent variable in the model ($\beta = .40, p = .001$).

Table 9

Stepwise Regression Model Predicting First-Year GPA Based on TEAS Scores (N = 130)

Variable	<i>B</i>	<i>SE</i>	<i>B</i>	<i>P</i>
Intercept	1.47	0.24		.001
TEAS composite	0.02	0.00	.40	.001

B= regression coefficients *SE*= standard error β =beta *p*= standard error

Note. Final model: $F(1, 128) = 24.40, p = .001. R^2 = .160$. Candidate variables = 5.

Table 10 displays the stepwise regression prediction model for first semester GPA based on the five TEAS scores. The final 2-variable model was significant ($p = .001$) and accounted for 17.6% of the variance in the dependent variable. Table 10 shows that first semester GPA was positively correlated with the TEAS English score ($\beta = .28, p = .002$) and the TEAS science score ($\beta = .21, p = .03$). Inspection of the model steps found the first variable included in the model was the TEAS English score, which accounted for 14.3% of the variance in the dependent variable. The second step of the model added the TEAS science score, which was significant ($p = .003$) and accounted for an additional 3.3% of the variance (see Table 10).

Table 10

*Stepwise Regression Model Predicting First Semester GPA Based on TEAS Scores
(N = 130)*

Step	Variable	B	SE	β	P
Step 1 a	Intercept	1.92	0.20		.001
	TEAS English	0.01	0.00	.38	.001
Step 2 b	Intercept	1.67	0.23		.001
	TEAS English	0.01	0.00	.28	.002
	TEAS Science	0.01	0.00	.21	.02

B= regression coefficients *SE*= standard error β =beta *p*= standard error

Note. Step 1 a Model: $F(1, 128) = 21.31, p = .001, R^2 = .143$. Candidate variables = 5.

Step 2 b Model: $F(1, 127) = 5.15, p = .003, \Delta R^2 = .033$.

Final Full Model: $F(2, 127) = 13.57, p = .001, R^2 = .176$.

Outcomes Summary

This study used archival data from 130 nursing students to evaluate the hypothesis that the TEAS entrance exam could be used to predict academic success for ADN nursing students at a college in the Southeastern region of the United States. Hypothesis 1 (first-year GPA and TEAS scores) was accepted (see Table 8). The findings demonstrated that all five correlations were positive and found to be significant with the strongest of the correlations being with the TEAS Composite score ($r = .38, p < .001$) and the TEAS English score ($r = .38, p < .001$). Thus, this group of findings delivered support to reject the null hypothesis. Hypothesis 2 (first-year semester GPA and TEAS scores) was accepted (see Tables 9 and 10). These results are a reflection of a positive correlation and support the belief that a student's scores on the TEAS can predict how well each student will do academically.

The findings provided the local nursing program with information that can be used to impact successful student outcomes. Those who take the TEAS and score on the low end can be placed into remediation classes so that their academic skills can be improved. The findings in this study are supported by previous research that has shown the TEAS scores can predict how well a student will do in a nursing program (Heroff, 2009; Pitt, Powis, Levett-Jones, & Hunter, 2012; Vandenhouten, 2008). Future researchers may consider conducting a qualitative research study to explore the significance of family, income, employment, and how these variables affect student progress. Additional items that should be considered when conducting research are age, race, employment status, marital status, and socioeconomic background.

The research outcomes of this quantitative study demonstrated a significant correlation of GPA and the TEAS. In addition, English and science scores on the subsections of TEAS were significant predictors of success in the ADN program. In other words, if first-year nursing students do poorly in their basic or prerequisite English and science courses, they will struggle in the nursing courses. The empirical data from this research study provided the information needed to develop a deliverable project designed to improve retention during the first year of nursing school. The project is a 3-day workshop and a student mentoring program. The workshop will include information on skill building, English and science remediation, test taking, and clinical instruction. The mentoring program will provide the support students need to help them stay engaged in their academic program to achieve the learning outcomes.

Assumptions, Limitations, Scope, and Delimitations

Assumptions

There were several assumptions in this study. The first assumption was that all applicants accepted into the nursing program had met the admission requirements for candidate selection. The second assumption was that the archived data were reliable and valid. The third assumption was that the data accurately reflected the student's course grades and that progress was based on each student's own abilities.

Limitations

A limitation of this quantitative study was that it is not possible to generalize the study to a larger population due to its level of constraint. Another limitation was that the target population was limited to ADN students at a state technical college located in the Southeastern region of the United States. This sample limited the study and may not be reflective of the state or groups of national nursing students. An additional limitation of this quantitative study was the use of *post hoc* data. This study placed all students in a single group and did not take maturity and work experience into consideration.

Another limitation was the lack of data related to the reasons students fail out or drop out of nursing programs. Lastly, a longitudinal study might have provided information regarding student study habits, family dynamics, and work habits while attending college. Nonacademic factors may constitute some limitations but were not controlled in an *ex post facto* study (Blackman, Hall, & Darmawan, 2007; Boshier & Bowles, 2008; Davenport, 2007).

Scope and Delimitations

The scope and delimitations of this study were limited to a convenience sample of ADN nursing students at a local technical college. The archived data were *post hoc* and obtained from students accepted into the program from years 2012 to 2013. This study did not include any data from other nursing programs.

Measures to Protect Human Subjects

The Institutional Review Board (IRB) is responsible for ensuring that participants in a research study are protected. The study was approved by the local technical college and the IRB prior to data collection. According to Creswell (2012), approval from the IRB ensures that all human subjects and the collected information are protected from illegally and unlawful use by the researcher. This study included the use of archived data from nursing students. All student data were coded for anonymity, entered into a spreadsheet, and entered into a computer system with password protection. The computer was housed in a locked room, and I was the only person working with the data. Raw data were kept in a locked file cabinet and destroyed when the study was completed.

Conclusion

This study examined the predictability of an entrance exam known as the TEAS test with academic success in an associate's degree nursing program. The relationship between the total TEAS score, as well as the scores on the four subtests, and student GPA after the first year of nursing school were explored. This study used a correlation design and multiple regression to assist in answering the research questions and to determine the

statistical significance of the results. Section 3 provides information related to the project that will be developed based on the results of the study.

Section 3: The Project

Introduction

Section 3 includes the proposal for a final project based on the quantitative research findings of this study. In this section, I introduce the project being implemented, the goals and rationale of the project, and a literature review to support the project. Lastly, strategies for implementation, the evaluation process, and the implications for social change are outlined.

Project Description

Based on the findings of this quantitative study, there is a significant correlation between GPA and the TEAS. Using stepwise regression, I identified that poor English and science skills are significant predictors of poor academic performance in the ADN program. Recognizing these areas of weakness provided the data needed to create a plan to improve retention during the first year of nursing school. The project was a 3-day workshop and a student mentoring program concentrating on the research findings. The purpose of the project was to assist at-risk nursing students by removing barriers to academic success in the local area nursing program. Many researchers have focused on the pass rate of the NCLEX-RN. This project study included a focus on the TEAS as a predictor of student success.

Student mentoring was selected because it is a good way to assist struggling students to achieve their goals. Students are entering the nursing program unprepared for the challenges encountered. Students who fail to meet the benchmarks are at a higher risk of dropping out or are failing out due to poor performance. Based on the findings of this

study, as well as those of Wolkowitz and Kelley (2010), the TEAS composite, reading, and science scores are predictive of program success and a good tool to use when selecting candidates for entry into nursing programs.

Mentoring among the nursing students occurs across the globe and ranges from the informal, discretionary activity to a more formal experience where students have direct and self-selected relationships to help each other to be successful. A formal student mentoring program also helps to support and promote nursing professional development among the students (Ehrich, Tennent, & Hansford, 2002). Student mentoring programs help first-year nursing students, who have limited experiences, increase their probability of success. According to Banister and Gennaro (2012), mentoring assists students by facilitating the acquisition of skills and knowledge needed when taking high-stakes tests, such as the licensure exam. Each of these studies demonstrates that mentoring can provide weaker students with the help they need to remain in school.

Mentoring has been found to offer many benefits for students. According to Dorsey and Baker (2004), a mentoring program where the students are advised on the career functions through teaching, role modeling, counseling, friendship, and coaching of the students, will help increase confidence and sense of self-worth leading to improved abilities of the students and performance. It is also important to have student involvement throughout every aspect of the mentoring process. The impact of mentorship on the students is something that can be achieved through the inclusion of nursing students' input in their mentorship (Jokelainen, Turunen, Tossavainen, Jamookeeah, & Coco, 2011).

The project included a 3-day mandatory student workshop for students failing to meet the program benchmark, students with clinical and course absents, and students who verbalize a desire to attend. The workshop will focus on strategies to improve student outcomes in the classroom and the clinical setting. The workshop will be conducted on a Wednesday, Thursday, and Friday of each semester on a designated date after midterm averages are submitted. The location will be the skills lab in the local school. Faculty members, staff, and student volunteers will be recruited to organize and implement this project. The students will be made aware of the workshop at the beginning of the semester and will be given an opportunity to verbalize topics of interest. Topics for the project are based on areas of vulnerability identified in the project study, as well as those outlined by the NCLEX-RN detailed report for the local program. The program is a 5-semester program with the goal of helping students to add skills and promote critical thinking throughout each semester. Assessment will be used for continuous program improvement.

Goals and Rationales

Project Goal

The goal of the project was to develop a 3-day workshop and mentoring program for at-risk nursing students as identified in the project study. The focus was to assist faculty in creating an interactive learning environment that was student centered for the purpose of empowering students to be successful in the classroom, clinical area, and on the NCLEX-RN. The overarching goal was to remediate knowledge deficits, as well as improve student motivation, study habits, testing skills, and classroom retention.

Project Rationale

The student mentoring program was developed to improve retention by assisting at-risk students to acquire the tools needed to be successful. According to Hansman (2002), mentoring supports the students by increasing self-confidence, self-efficacy, and self-assurance. The program will also improve faculty understanding of why students drop out or fail out of school. Students enter the local program with varying problems that could hinder their success (McGann & Thompson, 2008). Faculty involvement is a component of creating a plan that will assist all students in the program (Pitt et al., 2012). Developing effective strategies to promote nursing programs is important to health care. Presently there is a shortage of health care workers (United States Department of Labor, 2011). This project can support the nursing students and the nursing faculty by including strategies to enhance learning, student retention, and faculty development.

In the data analysis in Section 2, I identified a need for some students to have additional assistance to be successful in the nursing program during the first year. This finding has also been supported in previous literature (McGann & Thompson, 2008). Student mentoring can facilitate learning by providing opportunities to refine learning strategies, increase self-confidence, and develop new skills to promote success in academia. Pitt et al. (2012) discussed mentoring as a possible way to remove some of the barriers to successfully completing the nursing degree. Additionally, mentoring programs may help lower attrition and raise the graduation rates in nursing school.

Based on the research findings for this project study, the reason why some students were not able to progress involved academic preparation. Students lacked the

basic skills necessary to be successful in a nursing program. The TEAS provides data that can be used to remediate students in essential skills and leads to advisement strategies that can assist students to achieve successful outcomes in nursing programs. The mentoring workshop was developed to facilitate learning and improve student retention by remediating areas of academic concerns.

Review of the Literature

The literature review is a component of research and planning. Saturation of the literature is important to understand the problem being studied. In the literature review, I selected scholarly articles that were peer reviewed, less than 5 years old, and based on evidence-based practice in nursing education. Building research on best practice is important to the reliability and validity of the project study. Educational and multidisciplinary databases were used to facilitate the literature review. The education databases, ERIC, Sage, Science Direct, ProQuest, Education Research, and Expanded Academic, were used in the search. Search terms used in the databases were *adult learners, nursing, student mentoring, best practice in nursing, evidence-based practice, program outcomes, program planning and outcomes, motivation, professional development, diverse learners, workshop outcome evaluation, learning methodologies, and teaching methodologies*.

Organizing Framework

The organizing framework for the 3-day workshop and the student mentoring program was guided by the constructivism theory. This theory is based on a scientific methodology and an observational approach to learning in the adult population. The

student mentoring program was based on the theories of Bloom (1956) with a focus on the student learner. Bloom introduced ideologies that could be used to assess, plan, implement, and evaluate the mentoring program.

Constructivism theory. Constructivism is based on the belief that learning occurs through meaning and comprehension of life experiences. Merriam, Caffarella, and Baumgartner (2007) argued that most of the adult learning theory is based on constructivism. The constructivist believes in active learning and that true learning is accomplished with critical thinking skills. The local program focuses on the need to continually build upon critical thinking and to encourage active participation in learning. In the study results, I found that students who had lower scores on the reading and science sections of the TEAS also had lower GPA's after the first year in the ADN program. Students who struggle with basic science and reading comprehension lack the skills to be successful in a rigorous nursing program. Active learning may broaden and strengthen knowledge and skills in these college students, enabling them to achieve the learning outcomes of the program and pass the national nursing licensure exam.

Bloom's taxonomy. Bloom's taxonomy (1956) provides the foundation for many educational programs. The taxonomy has been used as a basis for the construction of educational objectives for curricula, lesson plan development, interactive learning, and promoting content comprehension (Knowles et al., 2005; Merriam et al., 2007). The local ADN program's framework is based on Bloom's taxonomy. This approach is also favored by many nursing programs and is one of the frameworks used on a global scale by many academic programs throughout the United States (Knowles et al., 2005;

Merriam et al., 2007). According to Bloom's taxonomy, there are six cognitive levels of learning: remembering, understanding, applying, analyzing, evaluating, and creating. These are important elements to the learning process because they assist in building critical thinking skills for the student. Principles of Bloom's taxonomy can assist the nursing student with comprehension on how to move from basic to complex concepts and promote a higher level of learning. Bloom recommends focusing on critical thinking as a mean of increasing learning during the first year of the curriculum, then advancing to higher levels of cognitive development as the student matriculates through the program. These principles were used as the framework to guide the development of the 3-day workshop. According to Pickard (2007), implementing recommendations supported by Bloom is a factor in developing an educational plan that will assist in student learning. Individualizing an education plan for each student may provide the compass for success in nursing school.

Some researchers believe that Bloom's taxonomy does not encourage imaginative understanding of information. Huitt (2011) believed this is due to the method that Bloom used in structuring learning into levels of learning. Nonetheless, Bloom provided a strategy to build upon what students know and enable them to further their knowledge and skills in an academic program. Huitt (2011) further stated that Bloom's taxonomy also supports the constructivist theory. Constructivism recognizes that students learn when constructing new ideas or concepts based upon their current knowledge (Huitt, 2011). According to Huitt (2011), the focus in learning shifts from the teacher to the students when constructivism is used. Teachers are no longer the experts who give

knowledge to the students, with students waiting for the teacher to fill in their knowledge gaps. Instead, in the constructivist model, the students are urged to be actively involved in their own process of learning. Combining constructivism and Bloom's taxonomy, students can gain structured knowledge, critical thinking, and creativity (Huitt, 2011).

Student mentoring programs. Student mentoring programs are often aimed at improving the academic success among the first-year students of multicultural backgrounds (Abriam-Yago, 2002; Valencia-Go, 2005). According to Abriam-Yago, mentoring supports students by establishing meaningful relationships among peers, faculty members, other stakeholders, and plays a pivotal role in program completion.

According to Bond, Gray, Baxley, Cason, and Denke (2008), and McGann and Thompson (2008), a formal student mentoring process among the nursing students facilitates caring behaviors, promotes learning, and improves critical thinking skills while leading to a reduction in attrition. These researchers also reported that strategies such as journaling, tutorials, and other self-directed activities are used to increase student success (Bond et al., 2008).

A mentoring program provides an opportunity to assist first-year nursing students who have limited life experiences. This is done by enhancing professional development, facilitating interactions between student and faculty, and motivating the learner to be proactive in the learning process (Ehrich, Tennent, & Hansford, 2002). According to Banister and Gennaro (2012), mentoring assists students to acquire the skills and knowledge needed when taking program exams and high-stakes test such as the NCLEX-RN. This is often done by teaching the student how to approach test questions, interpret

the stem of the questions, rule out what is an inappropriate response, and select the best option for the answer. According to Dorsey and Baker (2004), a student mentoring program that includes advisement on the career functions through teaching, role modeling, and coaching encourages the students to gain confidence and sense of self-worth. These acquired attributes often enhance learning by encouraging positive performances.

Horton, Polek, and Hardie (2012) conducted a study with a cohort in an ADN program to explore the effect of three program measures: a self-directed approach, computerized approach, remediation approach, entrance exam scores, and selected grades from the course. After the pass rates dropped from 91% to 82%, the ADN program reviewed their curriculum and made changes based on the results. These changes included remediation as program requirements. The implementation of the remediation program was found to be significantly positive, resulting in an improved pass rate for the NCLEX-RN.

Sifford and McDaniel (2007) conducted research on a group of senior nursing students and their performance on the exit exam before and after remediation. The nursing students were a part of a mandatory remediation program that provided two credit hours for the course. The results of the students who retested revealed a significant difference, $t(46) = -5.228, p < .001$ and demonstrated that the students' performance significantly improved after remediation. Based on the 47 students who took the remediation course, 18 (38.3%) obtained a passing score after the remediation course.

Pennington and Spurlock (2010) conducted research on multiple methodological problems associated with literature research involving education. The first problem identified was with the research design. The researchers reported that the design used to evaluate the efficacy of the remediation process does not offer a test of reliability. Secondly, since interventions were cross-domain, it is not likely that the research could ascertain which intervention provided the most important effect on outcomes when taking the NCLEX-RN. It is the belief of the researchers that assessment methods and interventions could influence the pass rates of students taking the exit exam on the first attempt. The researchers found that developing a remediation plan and developing a curriculum policy could increase the pass rate of nursing students.

Workshops. Including workshops in program planning is a good way to educate nursing students and improve performances. According to McKeachie and Svinicki (2006), incorporating workshops into a program encourages sharing of ideas, provides emotional support, and motivates most learners. During a workshop, discussions can lead to peer-to-peer learning, comprehension of program structure, and improved knowledge. McLeod, (2008), reported that workshops that are planned in conjunction with learning strategies that are based on best practice improves skill acquisition, and facilitates experiential learning through the process of comprehension, application, synthesis, and analysis.

It is important for nursing faculty to seek and participate in professional development opportunities. These opportunities provide continued education, enhancement of teaching styles, and promote effective teaching strategies for the students

based on the need of the cohort. According to research by Danielson (2011), teaching is based on a constructivist view and is the framework for learning. Additionally, the researcher reported that teaching is based on four domains that include planning, preparation, classroom environment, and student instruction (Danielson, 2012). Faculty should be provided with the professional training required to educate students and transfer that knowledge to the classroom and clinical setting. Avalos' (2011) research discussed the importance of faculty learning through colleagues, observation, and evaluation of processes being used.

Teaching modalities. There are various teaching modalities available for student learning in colleges and universities. The key is to find the best methodology for the cohort and program. The strategies should be research based with a focus on best practice. These tenets are essential to the success of the first-year nursing student. According to Knud (2004), learning theories define the acquisition of information, how that information is processed, and information retention. This information is often retained through prior experiences in the environment and interaction with others (Knowles, 2011). According to Galbraith (2004), preference of learning style, setting of learning style, ethnicity, culture, and sex all contribute to individual learning, and it takes more than facilitator expertise for learning to occur.

Lectures. The workshop will incorporate lecture and group discussions as one of the teaching and learning methodology. Threaded throughout the workshop will be the core tenets for adult learners. Active learning activities will be used to facilitate engagement during the learning process. According to Woodring and Woodring (2007),

this approach will change the paradigm from a teacher centered environment to a learner centered environment that encourages student engagement. The presentations will be based on the program objectives and include information for diversified learners. Since the workshop will be primarily centered on the student learner, active learning will be the focus on each day of the workshop. Merriam, Caffarella, and Baumgartner (2007) report that instructional strategy should be constructed based on learning level and abilities of the learner. Presenters will be encouraged to use professional experiences, auditory, and visual aides to enhance the learning process. According to Dietz-Uhler and Bishop-Clark (2008), a lived experience promotes learning and has been successfully used in teaching and learning.

Group discussions. An important component of the workshop will be peer to peer interactions and group discussions. The sharing of ideas between participants provides emotional support and is a benefit to the learning process (McKeachie & Svinicki, 2006). The lectures will consist of short presentations that discuss the key points of the topic, and followed by questions and answers for the cohort. This process allows students time to critically think and discuss the findings with other participants. According to Mazur (1996), this approach allows for critical thinking, and assesses the student comprehension of the topic being discussed. This active learning approach also promotes collaborative group learning, cooperative learning, and a structured platform for content discussion (Michaelsen, Knight, & Fink, 2002).

Gregorius (2011) conducted a study that focused on measuring student performance in the classroom setting. The researcher measured the presentation of lecture

exclusively versus concept-based learning with group discussions. A survey was completed to obtain student feedback at midterm and prior to the final exam. The results showed significant improvements in grades with the cohort that had presentations that included lecture and group discussions. The results indicated that lecture followed by group discussions was considered the methodology that promoted best practice for teaching and learning in the classroom. This active learning process motivated the learner by decreasing boredom, involving the learner in the learning process, and encouraging an interactive learning environment.

Peer learning. The process of peer learning is an approach used by many educators that incorporates various activities in the classroom setting. The method involves students sharing ideas with other participants in the class. According to McKeachie and Svinicki (2006), because participants are not experts, the process is less intimidating and enhances the learning environment through discussions, brainstorming, and knowledge building in a setting that is less stressful to the student. The shared experience of the student encourages bonding and emotional support to the student that may feel a sense of being alone (McKeachie & Svinicki, 2006). A caring learning environment is important to student progress and successful outcomes of the nursing student and program (Redmond & Sorrell, 1996).

Reflective learning. The practice of reflection allows students to process new knowledge and evaluate previous knowledge while promoting critical thinking skills in the learning environment. This process will be threaded throughout the workshop experience. Bandura (2005) encouraged reflection as a methodology for student learning

and found the process to be significant during the observation and evaluation process. Knowles (2011) supported reflection and reports that the process adds meaning to the learning experiences. According to Mezirow (1994), it is important to include reflection because it is a motivational way to promote transformation in the learner. Cranton (2010) reported that reflection is supported by research and allows the learner to validate new behavior based on best practice. The strategy will be included throughout sessions and during the evaluation process.

Simulation. Virtane, Leino-Kilpi, and Salanterä (2015) conducted a qualitative research study on simulation. The researchers used a mixed method approach to evaluate the significance of simulation as a teaching strategy. The sample was a clustered group of 43 participants and the researchers did not use a control group. The design used was pretest and posttest. Data collection was based on concept mapping and a computer generated simulation program. At the end of the study approximately one fifth of the students demonstrated knowledge improvement on the posttest. The reported results were positive and additional research was recommended to explore this style of teaching. According to Galbraith (2004), simulation is a valuable way to get students emotionally and cognitively involved in learning. Dean and Gilley (1986) reported several advantages to using simulation in nursing curriculum, and these are as follow:

1. Simulation provides nursing students an opportunity to apply new knowledge to a scenario.
2. The learners are placed in an active learning process versus being passive recipients.

3. The learners are placed in a safe learning environment, and are free to make decisions without the fear of harming a patient.
4. Debriefing provides an opportunity to discuss the situation and observe behaviors.

Implementation

A project was developed utilizing the results of the project study to address the problem regarding student retention during the first year in a local nursing program. The project was a three day workshop and student mentoring program. The student mentoring program consisted of four phases. The phases were the preworkshop phase, which involved the formation of a committee, needs assessment, and a meeting with the department chair of nursing to confirm plans for assistance with resources, location, faculty, and other factors that were needed to make the workshop successful. The second phase involved review of the needs assessment, arranging for speakers, confirming the agenda, and ordering catering. Students were provided with the agenda, workshop objectives, and a copy of the agenda. The third phase involved the workshop implementation and the final phase involved the workshop evaluation and plans for future mentoring to the students. Evaluation was the guide used to determine if the project goals and objectives were met.

It is important for nursing programs to improve retention rates and maximize the number of students who can successfully graduate and pass the NCLEX-RN. The literature reveals that inconsistencies exist in identifying guidelines to improve retention rates in nursing programs. There are no standards available from regulatory agencies that

define what a program should include in the developmental process. This led nursing programs to develop and implement strategies that may differ from program to program and state to state. The rigors of nursing programs are associated with increased levels of stress for students that often impact the learning environment (Huitt, 2010). Academic stress, coupled with financial concerns, family, and work to generate income, may lead students to focus on the minimum requirements for progression. Vital educational outcomes may be missed, causing a continuum of poor program progression for the student. Black, Curzio, and Terry (2014) observed that mentoring often aids the nursing students to pass. This program addressed the needs of the student learner by providing them with learning tools that were based on evidence-based practice with a goal of successful completion of the ADN program.

Preworkshop Phase

The preworkshop phase includes an assessment of workshop needs, plan for implementation, evaluation process, and student follow-up for mentoring. The chairperson will be in charge of the workshop and assemble a committee to assist with all aspects involving the workshop. The assessment should include the logistical location, as well as the human and fiscal resources needed for the phases of the program. Assessment should also include faculty and staff needed, time to prepare for the initial workshop, and follow-up with the students. According to Caffarella (2010), an assessment of all resources should be done prior to program planning.

Needs Assessment

A needs assessment should be done to identify strategies to improve the outcome of the at-risk students. The assessment should also assist in obtaining information that could be used for the workshop and mentoring process. The assessment should assist with the development of additional topics for the workshop and align with the purpose, mission, values, and goals of the program. In keeping with constructivism, the assessment should give the learner an opportunity to participate actively in program development, prioritize topics for the workshop, and identify specific learning objectives that increase the success of the program.

The needs assessment should assist the chairperson in identifying curriculum gaps that may impact student progression. This can assist the nursing program planning for future semesters and promote positive student and program outcomes. According to Caffarella (2010), a structured needs assessment is vital to understanding program problems. The Survey of Needs should be distributed and collected per computerized survey (see Appendix A). The findings of the assessment should be analyzed and logged into an Excel spreadsheet.

Once the needs assessment data is processed, findings should be reported to the department chair and leadership team in a report with the option of a verbal presentation per request. The findings from the project study and needs assessment will serve as the guide in the development of the workshop and learning objectives. The learning objectives are as follows:

1. Upon completion of the program, the learner will be able to identify his or her personal learning style.
2. The learner will be able to identify motivators that will assist in program completion.
3. The learner will explore challenges that first-year nursing students encounter when entering the nursing programs.
4. The learner will be able to identify three learning strategies that can be used to promote a successful outcome during the first year in the nursing program.
5. The learner will be able to identify three test-taking strategies that can be used to promote a successful outcome during the first year in the nursing program.
6. The learner will be able to verbalize the importance of meeting with mentor monthly or as needed.
7. Upon completion of the program, the learner will strengthen areas of weakness as shown by his or her results of the TEAS subtests and total score.

Program Content

Based on the results of this quantitative project study, the risk for student failure is greater in the nursing student who enters the local program below proficiency on the TEAS. A mentoring program is recommended to assist those students who fail to meet the program benchmark at any point during the first year. Mentoring is recommended to avoid student drop out or failing out of the program.

According to Peterson (2009), the number of nursing students graduating has been insufficient to replace the number of nurses leaving the field. An understanding of what

leads a student to be successful or fail out has been a longstanding objective for many nursing programs (ATI, 2012). Obtaining this knowledge is the first step in creating a plan to assist students. Based on the research from the project study, the results identified that students are entering nursing programs underprepared for the program challenges. Results of the TEAS and subsets demonstrated that some students were lacking basic skills necessary to be successful. Also, it was identified that student GPA correlated with TEAS scores. Those students who fail to meet the curriculum benchmark often continue this downward spiral until the students drop out or fail out. Harding (2012) found that students with poor self-efficacy need supplemental instruction to enhance their success in the nursing program. A mentoring program could fill this gap by introducing skills that will help the academically challenged student.

Necessary fiscal resources should include salaries for the individuals involved in conducting the program, purchasing supplies, equipment needed, and implementation of the program, the evaluation process, and technological support for equipment malfunction. Needed supplies shall include brochures for advertising, handouts, pens, markers, computers, printers, projectors, and instructional materials. Financial responsibility for catering breakfast and lunch for 3 days should be obtained from the Student Nurses Association (SNA).

The support staff should arrange for the workshop location. The large conference room at the local college should be the site for the workshop because it provides a comfortable setting with chairs and tables. According to Caffarella (2010), the physical environment for seminars and workshops is an important facet in promoting active

learning. The conference room has good lighting, it's located in a quiet area, and it has spacing to accommodate 75 students. Technological support should arrange for a computer, projector, screen, and microphone.

Teaching methodologies. The teaching modalities should be guided by the content of the workshop, stakeholders, student learning needs, and results of the needs assessment. Various teaching modalities should be used, such as lecture, group work, current interactive learning strategies, video, and questions and answers. These supplemental instructional strategies help students who might otherwise fail out of the program. The workshop should also use reflection and comprehensive topic learning as another way to strengthen self-esteem in at-risk students (Harding, 2012).

Lecture. Lecture is recommended as a component of the workshop and used as a portion of the workshop on Day 1, Day 2, and Day 3. Since the faculty members are highly trained practitioners, they should be asked to participate in the workshop. Faculty work with students on a regular basis and can supply the expert knowledge needed to support students at risk. The lecture should be accompanied by a PowerPoint presentation and the participants should be provided a hard copy for note taking. This process should be done to address the various learning styles of the participants. Students will be able to revisit the information as needed for comprehension and guidance throughout the nursing curriculum.

The first day includes a process for participants to know their individual learning styles. This should be followed up with the meaning of each learning style and how this knowledge can be used to enhance learning in the classroom and clinical setting. Key

points of note taking and skill development can be explored and students will be given an opportunity to share their individual strategies. Lastly, a breakout session should be included as an interactive learning modality followed by a wrap-up session and a period of reflection on the events of the day.

The second day includes a lecture presentation on testing strategies and a panel discussion on a disease process with four former students as guest panelists. A keynote speaker will present at the end of the second day of the workshop. The speaker should be interactive and present information that is based on the results of the needs assessment. The keynote speaker can be an educator in the local community who is well versed on student retention. The second day also should include a breakout session to reinforce knowledge transfer to participants. At the end of the day, students should be given an opportunity to ask questions.

The third day will include a lecture presentation on note taking, test taking, and decreasing anxiety. Also, the day will include breakout sessions for learning enhancement. The chairperson will provide an overview of the three days that includes synthesis and summarization of key topics of the workshop. Participants should be given time to ask questions and network. Reflection and journaling should be included to provide the learner with an opportunity to process the new information received and begin plans for positive changes regarding learning.

Breakout sessions. The breakout sessions should consist of role playing and face to face discussions on specific topics reviewed in the classroom setting. The participants should be divided into two groups identified as Group A and Group B. The sessions

should be planned for approximately 45 minutes. Students should attend one session and, at the end of that session, switch to the other session. This process is used in workshops on a regular basis to keep learning interesting and motivating. The process allows for varying interactive activities to be used during a short period.

Role-playing is another facet of teaching and learning used by many educators in education. In this process, there is a first learner and a secondary learner. It is recommended that the first learner be the nurse and second learner is the patient. Each participant should be granted an opportunity to provide teaching to a group of patients on a designated topic. This process should include reflection as a part of the teaching and learning process. According to Mezirow (1994), self-reflection is a learning tool used to promote critical thinking and transformational learning. Peer evaluations will be done at the end of the process to give each individual an evaluation based on the student perspective (Huitt, 2010). An additional strategy to promote learning is simulation. Students are given the opportunity to practice clinical events in a nonthreatening environment. This strategy is similar to role-playing and facilitates hands on learning in a safe environment.

Transfer learning. There should be a plan incorporated to measure the transferred learning process. This should enhance the student nurses' use of critical thinking skills when taking course exams during the semester. The mentors should use exam scores to measure student outcome from the learning process and create a follow-up plan based on the results. The alternative plan should include incorporating learning strategies based on best practice (ATI, 2012). The plan should also include community

workshop attendance on various topics and rotation to specialty areas based on course objectives in the classroom setting. These strategies should follow the suggestions of Brandon (2010), who found that applying constructivism analysis to the curricula encourages students to be more engaged in their learning.

The use of active learning is important in transferred student learning. Active learning principles are recommended to enhance knowledge transfer and participant feedback leading to an assertion that learning objectives were met. According to Huitt (2010), these strategies have proven to be successful in making nurses the designers of their own learning. The formative and summative evaluations will provide the committee with information needed to continue the facilitation of knowledge.

Diverse perspectives. The teaching methodologies were selected to correlate with the learners, the skill of the presenters, the venue of the workshop, and the findings of the project study. Prior knowledge of the learners should facilitate workshop development and planning by developing active learning principles that correlate with the student level of understanding. Brandon (2010) recommended the use of the various learning principles throughout the workshop.

Potential Barriers

Barriers to the learning process may exist on various levels. The learner may approach the workshop feeling unmotivated or with a defeated feeling. Nursing students may come into the program with doubts about their own ability to pass the program, as suggested by Pennington and Spurlock (2010). This can impact the amount of information the learner receives. Peterson (2009) reported that a lack of self-esteem can

hinder a students' progress in a nursing program. It is important for individuals to feel a sense of caring, love, and belonging (Maslow, 1943). Problems with self-esteem can lead to concerns related to interactions with peers, faculty, and various individuals who are involved in the curriculum. The program should encourage students to feel capable and able to face any barriers they may experience in a nursing program (Peterson, 2009).

The workshop is meant to close the gap in learning by presenting tools that encourage success. Students may not feel that they have the time to actively participate in their own learning. Some students may prefer a more passive type of learning, and expect the faculty member to instruct rather than introducing learner-centered activities. Other students may attribute their lack of academic success to factors other than a deficiency in reading, math, or science skills. All of these are factors worth considering when evaluating student outcomes.

Planning for a workshop takes a lot of time and energy in order to be successful. The program execution may be a problem if there is a change in department leadership or a lack of resources needed to manage the program. Resources such as handouts, supplies, and equipment are important to the comprehension of topics and the learning process. It is equally important to have instructors to present the topics being introduced and to work with the students. Due to budgetary restraints and cutbacks, department faculty members are usually overloaded and may have limited time to devote to the project. Student mentors may not be available or able to provide the incentives to help motivate struggling students. It may also be a challenge to find workshop speakers who are financially affordable, have the time available to present, and the desire needed for the presentation.

Proposal for Implementation and Timetable

Training and support remain to be the most vital elements when developing competency in the nursing student and the transformation of the nursing students from learner into a nursing professional. The project will be implemented each semester as part of the local program's retention plan and assist in the student transformation process. Annual student participation will be determined by the student mentoring committee and recommendations provided to the department chair (see Table 11 for the Timetable for the Project Study).

Table 11

Timetable for Project Study

Task	Time	Stakeholders
Needs assessment	4 weeks prior to workshop	Chairperson Nursing students Educators Nursing program Local college
Obtain <ul style="list-style-type: none"> • Speakers 	4 weeks prior to workshop	Chairperson Educators Counselor
Obtain <ul style="list-style-type: none"> • Resources • Venue • Funding 	3 weeks prior to workshop	Chairperson SNA
Workshop	8 hours/3 days	Chairperson Educators Student nurse Nursing program
Formative evaluation	After workshop and ongoing/3 days	Chairperson Educators Student nurse Nursing Program

Note. Workshop timetable.

Responsibilities

Each stakeholder has specific responsibilities as outlined by the chairperson and committee 4 weeks prior to the workshop. The stakeholders (students, faculty, committee, and nursing program chair) are responsible for allocating time and commitment to promote positive outcomes for the student nurse. The planning committee included the chairperson, three faculty members with agreements to participate, two support staff, two student volunteers, and the department chair.

Plan for Evaluation

Upon workshop completion, educators and student nurses will be required to provide feedback. The evaluation is an important component to any workshop and should be anonymous to promote transparency. According to Caffarella (2010), the evaluation process is an effective way to determine if the goals and objectives were met. The evaluation will occur immediately after the workshop and at the end of each semester during the first year in the nursing program.

The evaluation is an integral component of a program's design and should be addressed on various levels and at various stages during the workshop and mentoring program. The evaluation process is informal, formal, reflective, and summative. An outcomes-based evaluation strategy was planned in the project because it can help to produce objectives and exact information that shows the importance of a student mentoring program among the first-year or junior-nursing students. The program also uses the surveys and comprehensive quantitative methods to analyze the outcome of the program.

Informal Evaluation

The pre-work phase is informal and includes professional exchanges between all the members of the planning committee. The evaluation will be ongoing and meeting minutes will be kept for a reflective review. The focus of the exchanges includes the objectives for the student mentoring program and discussions on phases of the program.

Formative Evaluation

The purpose of the formative evaluation is to assist in amending the program while in progress (Caffarella, 2010). This type of evaluation is more definitive and is a systematic way to gather information. The information obtained will assist in evaluating mentee outcomes in regards to knowledge and skills. This type of evaluation is anonymous and used to promote transparency among all stakeholders. Formative evaluation will occur at various points during the workshop and throughout the mentoring program.

Reflective Evaluation

Reflective evaluation is used to examine changes in behavior, attitudes, and values. The structure of the workshop prompted quick and short feedback regarding attitudes. Questions will be asked periodically that are thought provoking and require short answers (see Appendix A). Anonymity will be maintained to promote transparency. According to Caputi (2015), student reflection is an affective behavior and allows the student to consider self-performance based on program objectives and learning outcomes.

Summative Evaluation

The focus of summative evaluations will be the program outcomes and the stakeholders' perceptions. The chairperson has ensured that all student participants will complete an evaluation to obtain information regarding the program's impact. This will be done by survey 8 weeks after the workshop is completed. Scheduling will allow enough time for student nurses to use the information provided during the workshop and individual sessions.

Overall Project Study Goals

The project study's overall goal was to implant practical knowledge and skills that can be used in the classroom and clinical setting. These tools can increase student matriculation and improve program outcomes. The best way to foster student development is for faculty members to remain cognizant of the program goals and generate activities to promote student progression through the hierarchy of cognitive learning (Caputi, 2015).

Project Implications

In alignment with Walden University's philosophy regarding social change, this project study was designed with an emphasis on student success, program improvement, improved retention of first-year nursing students, and the community. It is predicted that the benefits of this project study will influence students, faculty members, families, the community, and the local nursing program.

Social Change

Data from this quantitative study revealed a correlation among the TEAS total score, scores on the subtests, and student GPA. The study's findings also revealed the students that are at the highest risk of failing out of the nursing program. Student identification is the first step to improve student success, but the overarching goal is to determine a way to decrease attrition. The student mentoring program impacts the success of at-risk students by increasing their learning, comprehension, critical thinking skills, and empowering them with the tools they need to increase their chances of being successful. The program has the potential to reduce the attrition of students during the first year, leading to social change by improving the outcome for all stakeholders. This leads to an increase of nurses in communities and more nurses entering the job market to provide care to patients with medical needs.

The local community has a problem with low literacy, high unemployment rate, and high mortality and morbidity rates. The student mentoring program is important to the local community because it may impact how many students complete the first year in the nursing program, eventually graduate, and pass the NCLEX-RN exam.

The mentoring program can be far reaching because it has the potential of helping first-year students in the nursing program. According to Hansman (2002), student mentoring facilitates learning by encouraging self-confidence, self-efficacy, and self-assurance with peers and faculty members in higher education. Acceptance into a nursing program is not guaranteed to the nursing students; therefore, students may benefit from the opportunities that a mentoring program can offer.

Conclusion

In conclusion, the mentorship of nursing students who demonstrate an inability to attain the standard of practice is a difficult task. However, the task can be simplified by creating an interactive environment that enables the nursing mentors to work together with the students in identifying the problems of learning facing them (Carr, Walker, Carr, & Fulwood, 2012). Section 3 included the project goals, supporting literature, and the implications for practice that is supportive of this project study. An account of resources needed for the project, methods of evaluation, and implications for social change were identified. Section 4 includes personal reflections, a conclusion, and recommendations related to this project.

Section 4: Reflections and Conclusions

Introduction

The final section of the project will include a discussion of the project's strength, limitations, and recommendations of findings. Included will be an examination and a description of my personal scholarship, project development, and leadership qualities. Additionally outlined in this project study will be a reflection of the study, implications, applications, and a discussion regarding future research.

Project Strengths

One of the strengths of the student mentoring workshop and program is based on the level of commitment of the stakeholders. The department chairperson has been supportive of the project and demonstrates support by allowing the use of the necessary resources to meet the project objectives. The administrative assistant assisted with the computer program during the data collection process. Each individual on the committee will continue to work to ensure the success of the workshop. The nursing faculty will provide student resources that can be used during the program. The administrative team demonstrated support by inquiring about my progress and offering words of encouragement. A quorum is expected at all planning meetings, and each individual has demonstrated a desire to attend. The planning process will keep the group focused and assist with troubleshooting prior to the event.

Another strength of the project was teamwork and empowerment of the students, faculty, and committee members. The workshop assisted with the enhancement of study skills, test taking abilities, skill enhancement, and coping strategies. According to

LeMone, Burke, Bauldoff, and Bauldoff (2015), workshops cultivate strategies that can be systematically developed to promote greater comprehension of the materials being discussed. The use of mentors is another element to guide students and motivate them to achieve both personal and professional goals.

Another workshop strength involved the faculty. Nursing faculty gained a greater appreciation of the barriers some student nurses encounter within the first year of school. This can lead to an increase in faculty knowledge on the special needs of the struggling students and improve communication between student and faculty. Student support is an essential quality of nurses and a valuable component of development and progression (Purnell, 2009). The AACN (2008) considered caring to be motivational and a foundational value of nursing. A greater understanding of the needs of the student can lead to improved advisement, decrease in student stress, and improved program outcomes.

Lastly, the faculty mentors gained a greater appreciation of the needs of the struggling student. According to AACN (2011), faculty development is a facet in program development and student outcome. Once faculty had a better understanding of the problems that led to attrition, they were motivated to develop diverse teaching strategies and improve their lesson plans. Working together, they learned to vary their teaching styles and collaborated to improve course exams.

Project Limitations and Recommendations

Limitations

There can be various limitations with the project, such as the budget, available faculty, and resources. The college submits a fiscal proposal yearly, and the state evaluates that plan to determine the next year's college budget. The allotment is distributed at a designated time during the year to meet the needs of the college. The local program experienced a series of problems that included limited recruitment and retention of students. This led to a decrease in funds from the state, resulting in decreases in the hiring process, yearly annual increases, and program resources throughout the college. This could limit the resources needed for the mentoring workshop.

The local program has functioned with a limited number of faculty and staff for the last 3 years. When understaffed, faculty members are cross-trained to teach in various content areas within the nursing program. This results in faculty needing to develop new lesson plans, exams to evaluate student progress, and implementation of strategies that align with the acuity of the cohort for the semester. Changes throughout the year often lead to high stress, an increase in faculty teaching loads, a decline in motivation and job satisfaction, and less time spent with students on an individual basis. This could limit the time faculty would be available to work on special projects, such as a mentoring workshop and program.

Another limitation could be a lack of participation. Some students may not be able to attend the workshop due to illness, clinical rotations, class schedules, and various other reasons. Workshop planning included a 3-day session. Missing any of those days could

impact students' progress and decrease the chances of those students meeting all of the program objectives. This could result in a lack of advancement for the student and the possibility of failing out of the nursing program.

Recommendations

Because of the potential limitations of the project, additional recommendations are needed. The first recommendation is to include other disciplines within the college. A prerequisite for nursing includes biology, English, math, psychology, and humanities. In the results of the study, I found that poor English and science skills caused a decline in student GPA. The mentoring program could consider incorporating the other disciplines in the planning stage to use their expertise in the mentoring process. These disciplines may have larger budgets that will provide resources for the program, have faculty who can be recruited as presenters, and have mentors that will assist before and after the workshop completion. The collaboration among the various disciplines can lead to improved planning and implementation of the program.

Using vendors can be an additional option that can lead to resources for the students. Based on previous workshops, vendors are often eager to provide assistance in the form of books, pens, pads, videos, food, and other educational resources to assist nursing programs and the community. This is considered a good marketing strategy by multiple book representatives who devote their time to visiting colleges. Vendors often attempt to create a relationship with faculty and staff and request opportunities to set-up tables to demonstrate resources and donate door prizes to participants. This networking process is a common strategy used to market resources and services. A vendor fee is an

additional option. When I worked as an educator, I had a surplus of vendors who were eager to assist with various types of workshops. Vendors rely on networking to market their products and resources. Some workshop and seminar planners require vendors to pay a fee to set up a table and showcase their products. Vendor fees can vary and are considered a great opportunity for participants to discuss their products.

Another recommendation is to enlist assistance from the two acute care hospitals in the local area. Health care facilities are often eager to assist in student development by providing classrooms, presenters, resources, refreshments, and a list of other needs that would assist with workshop implementation. Hospitals are eager to be involved with nursing student events because this gives them an opportunity to conduct an informal interview with potential future employees once the students graduate and obtain licensure.

A final recommendation could be to allow all first-year students an opportunity to attend the workshop. Some students are barely passing. Allowing all interested first-year students to attend the workshop may assist students who are struggling academically and encourage those students who are doing well an opportunity to do peer mentoring. According to researchers (Kilgallon & Thompson, 2012; Kraus-Parello, Sarcone, Samms, & Boyd, 2012; Mead, Hopkins & Wilson, 2011), educating students through workshops is an interactive way to improve outcomes in the nursing program. Student workshops are a good way to identify weaknesses in both the student and curriculum. Specific topics should be used based on information generated from a needs assessment. The information

should be introduced through various active learning principles and based on best practice.

Scholarship

Scholarship is an ongoing process that promotes critical thinking through a process of higher order learning. The nursing student transitions from novice to expert over a period of time. This transition requires a level of commitment that varies and can span over an indefinite period of time. This shift in paradigm allows the student to obtain the level of knowledge necessary to matriculate proficiently during the first year in college, become a candidate for the NCLEX-RN, and successfully pass the exam on the first attempt.

As my educational journey nears the end, it is clear that becoming a scholarly practitioner involves motivation, confidence, good time management, and the ability to understand the importance of evidence-based research. I began this journey as a novice learner, but have blossomed into a scholarly practitioner who values the need to strive for excellence in a world quick to overlook the need for research. The feeling of empowerment increased my critical thinking skills, and I was able to develop strategies to improve outcomes. The ANCC (2013) recommended that all nurses should aspire to enhance their careers continuously through professional development, credentialing, and higher education. It is the responsibility of each faculty member to remain current in educational practices that will assist student learning outcomes. Faculty who use teaching methods that exemplify best practice promote student development when creating their lesson plans, lectures, and active learning strategies for students.

Project Development and Evaluation

Program development

The process of assessment, implementation, and evaluation are crucial components of program development. These concepts gave me the information needed to develop an effective workshop geared to the student at risk. Another important element of the project was the stakeholders' acceptance and support. Meeting with the local program administration and faculty, and providing an overview of the project was a crucial element in the project development. The process increased comprehension of the goals, objectives, and commitment to the project. If the project developer lacks conception and fervor in the beginning stage, it is difficult to have a positive outcome at the end of the project.

Evaluation

I have planned and implemented projects for greater than 10 years for diverse groups of all sizes and topics. One important lesson I learned through these endeavors is that there will always be benefits and barriers experienced in program planning and development. I learned that the benefits are ongoing and the barriers are often based on the ability of the event planner to stay motivated and have a positive outcome. Lastly, it is important to develop objectives that align with the purpose of the project. The recipe for success is to believe that possibilities are endless and motivation is priceless.

Leadership and Change

Some researchers believe that leadership is a skill that is acquired based on past experiences, and it is through these experiences that style is developed (Knowles, 1984).

According to Liu, Oi-Ling, and Kan (2010), transformational leadership style is favored by many colleges due to the positive influences that are developed in employees, trusting relationships, and positive outcomes. Establishing a sense of trust promotes knowledge, a sense of ownership, and growth. Burns (1978) was the first to introduce this style of leadership. According to Burns (1978), this style of leadership will engage individuals at a level that facilitates and motivates while increasing performance levels. Individuals who possess this type of leadership style often find value and meaning in their job performance, add significant contributions, and often become leaders in their area of expertise.

I work with faculty members who need to be challenged. Professional development opportunities were limited, and achieving a higher educational degree was seldom visited. However, I found that sharing my experiences and information with colleagues throughout the local college has rekindled an excitement for learning that is noted during interactions, in meetings, and the classroom. Five colleagues in the local nursing program have returned to college to pursue advanced degrees in higher education. Faculty education can lead to improved teaching modalities in the classroom and is a greater benefit for the learner (Galbraith, 2004). My colleagues motivate me by asking about my progress, offering words of encouragement, and sharing their future plans. According to research (Heuston & Wolf, 2011; Salanova, Lorente, Chambel, & Martinz, 2011; Schwartz, Sencer, Wilson, & Wood, 2011), leaders who possess transformational qualities are highly favored in the nursing profession.

Analysis of Self as Scholar

Scholarly learning is a continuous process and growth is seen based on the level of exposure. Remaining current in research based on best practice, the exchange of information, ideas, motivation, and commitment are key components of the learning process. It is equally important to appreciate the perspective of others without personalizing the information received. Initially, it was an unpleasant experience to obtain feedback. I mistakenly perceived recommendations as a weakness and exhausted uncountable hours on revising areas of my project study that did not require revision. Eventually, I learned that the recommendations were priceless in facilitating my growth as a practitioner.

Since enrolling in Walden University's Ed.D. program I have noticed a positive transformation in my thought process, my performance as an educator, and my overall demeanor as a professional. I seem to think much more creatively than I did before beginning the doctoral program. The courses I completed added to my knowledge and skills so that I am a better educator. As a professional, my leadership skills and practice have broadened. I am more confident in my beliefs as an educator and my presentations emanate a sense of enjoyment. I am more engaged during scholarly activities with students and the administrative team. My scholarship activities have increased and I am often asked to share my professional role with others. I am proud to report that I consider research to be a vital component of decision making and learning. It is through this process that decisions should be made.

My excitement for future opportunities is contagious and transcends to my students, colleagues, and the community. Students have been referred to me by other programs, students, and colleagues within the college. My educational preparation and experiences have allowed me endless opportunities in my community and other states. I am a member of a distinguished nursing sorority within the local area. The organization is made up of professional nurses with a primary focus of health and education in the local community. The sorority provides assistance to families, conducts workshops, and plans seminars. I have also served on an out of state committee with a focus on updating the TEAS test. Lastly, I have been asked to be an evaluator for Accreditation Commission for Education in Nursing (ACEN). Each of these activities has enhanced my role as a teacher and a scholar.

My continued scholarly development is important to me both personally and professionally. I will be the first in my immediate family to obtain a doctoral degree. It is my hope that the future generations in my family will follow my path. I would like to see my family members continue their educational journey at whatever level they wish to pursue. Knowledge is powerful, gratifying, and the key to successful outcomes for anyone who decides to pursue this path.

Obtaining my doctoral degree has been a lifelong dream for me and my family. This accomplishment will allow me to assist my family, students, the local nursing program, and the community. This accomplishment will also allow me to transcend beyond my anticipated level of education and allow me to envision broader scopes of opportunities.

Lastly, one of my greatest aspiration is to teach in an online nursing program. My vision is to be able to teach online classes, present at workshops throughout the United States, and create a business in which I can mentor colleagues to obtain their objectives. The program at Walden has generously provided me with the tools I need to pursue these goals.

Analysis of Self as Project Developer

There were many benefits experienced during my journey as a project developer. The greatest benefit was the knowledge of realizing that I have grown as an educator. I was able to develop a project that will assist others with their education. Instead of stress, I felt a sense of satisfaction throughout the process. The project was very important to me because of my experiences as an educator in a large acute care hospital. As a clinical educator, I was unsure of myself. I often sought feedback and approval from colleagues. My greatest asset was the amount of dedication and passion I used to ensure project success.

Through my experiences with Walden, I can report that my effort is based on principles that are research based, geared toward the learner, and I am confident in my selection of teaching modalities. I am content in knowing that my project was developed based on proven practices supported by the literature. My new awareness has allowed me to transform into an educator with a solid foundation that is deeply rooted in proven principles that positively affects my students in the classroom. I am no longer overly critical of myself. I am comfortable and confident in my professional environment. I continue to seek feedback from stakeholders and experienced colleagues in the field.

Now, I include myself as someone who is an experienced practitioner with ideas that can be used to meet the needs of others.

Through my experiences in the Walden Ed.D. program and my experiences as an educator, I am a scholarly practitioner who can develop and implement diverse educational programs at various levels. As a project developer I was able to develop a program that can be instrumental in the success of the nursing student. I have acquired the tools necessary to work in any venue of academia I select. This knowledge gives me a feeling of empowerment that I will use to assist others on their journeys.

Reflection

In reflection, being a student in the Ed.D. Program was extremely challenging, but one of the best life decisions I could have made. I began my journey as a novice and have transformed into a confident scholarly practitioner. An exciting benefit of my journey is the knowledge obtained related to professional development. I am able to plan and implement programs that are deeply rooted in evidence-based practice for the adult learner. The educational strategies I employ have switched from a teacher-entered environment to a learner-centered environment. I find this approach much more fulfilling and valuable to the learner.

I have colleagues who live throughout the U.S and abroad. I learned that online classrooms are just as valuable as classrooms in a physical building. It is not through the building that we learn; it is the structure of the class, quality of the educator, and the level of commitment the program generates. Online learning is like the discovery of a whole new world. I interact with my colleagues on the discussion board. I consider this one of

the greater assets of the program. The sharing of knowledge and motivation received from my chairperson and class is priceless.

The Project's Potential Impact on Social Change

The project can contribute to social change in a variety of ways. This project explored the parameters of training, support, mentorship, and the implications on the success or failure of the nursing students. An even more critical element is keeping students in the classroom, identification of the best approaches to minimize the risk of student failure and identify avenues to promote the competency and success of nursing students. Developing strategies to promote student success, collaboration, and professional development is important to the viability of nursing programs and to future nurses.

Professional development and training are important elements of best practice. The process provides education on current trends and practices that allows for growth of the educator. Workshops can lead to renewed commitment, caring behaviors, and lesson plans that focus on student needs in the class and clinical setting. Development and training provides support to the educator by introducing concepts that can be used to improve the outcome of students when taking their NCLEX exams. Galbraith (2004) believed that a positive characteristic of an effective educator is one who is constantly evolving, changing, and seeking knowledge to improve the learning environment.

Maintaining collaboration between faculty members and faculty to student provides structure and is important to social changes at the local college. Everyone needs structure, including new educators and adjunct faculty. Training is an important element

of the collaborative effort, and increases job fulfillment and retention. Faculty members who are mentored often feel less stressed and often find success in the classroom. This can lead to an increase in productivity and satisfied employees.

Student mentoring often leads to a feeling of confidence and empowerment. This feeling often results in improved study habits and positive results during testing. I have been a student in five nursing programs that range from LPN to Ed.D. I can attest to the importance of mentoring. I began my nursing career as a LPN and was fortunate enough to have great mentors. The leadership of my mentors was empowering, and instilled in me a sense of confidence, pride, and commitment to learning. In reflection, this approach was based on a qualitative and quantitative methodology that promoted positive changes in my life and family.

This project study examined the nursing students during the first year of school. This is an important year for many students. It is at this point that important decisions are made regarding many students educational journey. The results of the study can contribute to social change by exploring strategies for improving retention of adult learners. According to Galbrath (2004), adult learners are an important growing sector of students in the U.S., and impacts occupational trends, governmental policies, educational programs and practice. The mystery that exists with these learners needs to be studied to promote diversity in learning, and improvements in graduation rates. Positive social change can occur when learners are provided with learning strategies earlier in their curriculum. The age of the adult learner can vary, but early mentoring can improve comprehension and facilitate the learning environment for the student and the educator.

Implications, Applications, and Directions for Future Research

Based on the results of this quantitative project study, a mentoring program and workshop were developed to assist in improving nursing students' passing rate during the first year of nursing school. The establishment of a student-mentoring project could have a significant impact on the implications, applications, and the direction of future research by providing an interactive way to improve comprehension, critical thinking, and a student centered approach to the didactic and the clinical settings.

The implications within the local setting are many. The literature review indicated there are limited studies that evaluate the needs of first-year nursing students. At this point, the implications found in this project study may be relevant to the local college, but future research could provide data that suggest a trend throughout programs in the United States. This is an important beginning in determining if the findings are unique, or applicable to other ADN nursing programs. The purpose of the project was to improve student retention during the first year. Mentoring is supported in the literature and shares many positive attributes for the student learner, one of the greatest is caring. Maslow (1943) believed that learning occurs in stages and that an important stage is caring. Mentoring offers many important tools for the student and develops relationships. It is through this process that students develop love and a sense of belonging.

Application of strategies conducive to assisting the nursing students was the primary focus in developing a workshop. A collaborative team was established to create objectives, develop strategic plans, implement these plans, and evaluation of the outcome

of the student-mentoring workshop. A review of the program statistics, while gaining administrative acceptance and approval, became the first step to a successful workshop.

Mentoring assisted some students in developing approaches needed to master the nursing program. Improvement in retention during this period led to a potential for an increase in the program graduation rate and success on the NCLEX-RN with the first attempt. The student-mentoring program can be adapted to work for other programs within the college and with colleges and universities within the local setting.

Future research is recommended for national and international use and should focus on a larger sample size, a random sample, and different methodologies. Additional research is recommended that focuses on professional development for educators, students, and other disciplines of the college or university. I propose a mixed study to obtain information concerning a student-mentoring program and how such a program can aid in the retention of first-year nursing students. A random sampling of educators and students at-risk could be the focus of future research. Another approach that could prove to be valuable is a comparison of teaching modalities. The current trend is the utilization of a student-centered approach in the classroom, but the local program is using the teacher-centered approach and attempting to incorporate the student centered approach. It would be interesting to compare both approaches in the local college and other colleges.

Conclusion

Section 4 included my reflections and conclusions of the project study. Additionally, I presented the limitations, applications, and directions for future research.

Student mentoring can positively impact the life of nursing students and can assist in improving student retention.

In conclusion, my growth as an educator, researcher, and scholarly writer surpasses my vision when I returned to school 4 years ago. I began this educational journey as a novice, but have grown to become an individual who is worthy of being called a scholarly practitioner. I am thankful for all the assistance extended to me during my journey.

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Appendix A: Project

Title of Project: Student Mentoring Workshop

Purpose: The purpose of the student mentoring workshop is to promote change in the at-risk nursing students during the first year of college. These changes will transpire by instilling learning strategies that will promote success on a daily basis in the class and clinical setting of the local program. Based on the research findings located in Section 2 of the project study, some students lack the basic skills necessary to be successful on high stake exams (ATI, 2012). This finding can impede the success of those students failing to meet program benchmark. This can result in low retention rates for nursing programs and high dropout rates.

Mission: The mission of the student mentoring workshop is to improve the success rate of first semester nursing students by applying strategies and ideas that will improve the retention rate and program outcomes. The mission will be in alignment with the local nursing program and the college.

Goal: The central goal of the student mentoring workshop is to impart knowledge to each learner that will be used to by implementing a workshop geared to the needs of a specific group of students. The goal will be in alignment with the goals of the local nursing program and the college.

Target Audience: The target audience for the project will be ADN students who fail to meet the program benchmark of 76% at the end of a course offered within the first year of college.

Learning Objectives: The learning objectives are designed prior to the needs assessment. Once the needs assessment is completed, the objectives may be edited or additional objectives added. According to Knowles et al., 2011; Weimer, 2002, this approach encourages sharing of content and is supported by evidence-based practice.

Upon completion of the student mentoring workshop:

1. The learner will distinguish strategies to improve note taking, classroom interaction, and meet the course benchmark on exams.
2. The learner will be able to identify the need floor group interactions as

related to the clinical setting.

3. The learner will be able to synthesize multiple learning strategies and apply theories in nursing practice.
4. The learner will be able to verbalize test-taking strategies required to master course exams.
5. The learner will be able to identify motivational strategies needed to improve confidence in academia and didactic.
6. The learner will be able to reflect on new knowledge and create changes that correlate with student setting.
7. The learner will be able to identify ATI resources to improve comprehensive learning and critical thinking skills.
8. The learner will be able to evaluate scores from the TEAS and use as a tool to assist with progression.

Desired outcomes: The overarching outcomes are knowledge integration, learning strategies that can be used on a daily basis, and improved benchmark scores.

Program Instructions:

1. The planning committee will consist of a chairperson, two faculty members, 2 support staff, and four student alumni. The planning committee will organize and arrange all aspects of the workshop.
 - A. Obtain nursing Department Chair support for the funding, resources, venue, and staffing.
 - B. Planning committee will determine dates and time for the workshop.
 - C. Planning committee will develop a budget and submit to the nursing chairperson for approval.
 - D. Planning committee will select a venue at the local college and obtain approval from Chairperson of the nursing department.
 - Location will be appropriate size for number of learners, presenters, and all stakeholders.

- Location will have tables with eight chairs.
 - Location should be well lighted and have central heat and air.
 - Location should have restroom facilities and a kitchenette.
 - Location should be able to accommodate a computer and projector.
- E. Develop a survey to obtain learner needs to be distributed online.
- F. Planning committee to discuss project with nursing faculty and staff.
- G. Planning committee to discuss lunch and snacks and plan two weeks prior to workshop.
- H. Planning committee to secure speakers for the event, student support for panel discussion.
2. Once completed, the planning committee will review the computerized needs assessments, analyze, and record on a spreadsheet.
 3. The committee will distribute copies of the agenda for the 3-day workshop.
 4. Technology will have computer and projector in place the evening prior to the workshop.
 5. Technology will review all media equipment for usage and functionality.
 6. Assignments for all breakout sessions will be reviewed with presenters.
 7. Provide formative evaluation forms and instructions.
 8. All breaks, lunches, and overall expectations of the workshop will be reviewed.
 9. The planning committee will ensure that all additional questions or addressed before and during the event.
 10. The contact information for the chairperson and planning committee will be shared to facilitate communication.
 11. Once the workshop is concluded, the planning committee will meet to discuss and develop a plan for ongoing follow-up with student mentees.

Instructions for use of Power Point presentation

1. Review all Power Point presentations meticulously.
2. Review sources of all references. The content for the references should be

abbreviated on the slides of the Power Point.

3. Contact the chairperson for any questions.
4. All Power Point slides should cover the objectives of the workshop.
5. Personal experiences and stories should be shared to motivate the learners and add clarity to the content being delivered.

Computerized Needs Assessment Survey

1. What student-learning topic would you like to explore during the workshop?
2. What class or clinical situation do you find challenging?
3. Would you like to have additional information on study skills and test taking strategies?
4. What clinical skills would you like to develop further?
5. Would you like to have additional information on peer-to-peer learning?

Timetable for Workshop (replica)

Task	Time	Stakeholders
Needs assessment	4 weeks prior to workshop	Chairperson Nursing students Educators Nursing program Local college
Obtain <ul style="list-style-type: none"> • Speakers 	4 weeks prior to workshop	Chairperson Educators Counselor
Obtain <ul style="list-style-type: none"> • Resources • Venue • Funding 	3 weeks prior to workshop	Chairperson SNA
Workshop	8 hours/3 days	Chairperson Educators Student nurse Nursing program
Formative Evaluation	After workshop and ongoing/3 days	Chairperson Educators Student nurse Nursing Program

Needs Assessment

Survey of Needs Form	
Course Description: This will be a 3-Day Student Mentoring Workshop with a focus on developing strategies to improve nursing student's outcome during the first year in the ADN program. This will be an interactive workshop with the focus being on the learner. The workshop will involve transfer of knowledge and will have an evaluation process.	
Student Name:	Course Title: Student Mentoring Workshop
Workshop: Planning Committee	Local Program
Questions	Student Feedback
1. What student-learning topic would you like us to explore during your workshop?	
2. Would you like information on your individual learning style?	
3. What class situation do you find challenging?	
4. What clinical situation do you find challenging?	
5. Would you like information on note taking and study skills?	
6. Would you like information on test taking strategies?	
7. Would you like information on facilitating group discussions?	
8. Would you like information on peer-to-peer learning?	

Workshop Agenda: Day 1

Content	Time	Teaching Methodology	Evaluation Method	Resources
Registration	8am -8:30am	Interactive discussion	Discussion	Conference room Workshop committee Learners
Introduction and overview	8:30-9:00	Interactive discussion	Group Consensus	Conference room Workshop committee Learners
Lecture <i>Learning styles</i>	9:00-10:15	Interactive discussion	Formative Evaluation form	Conference room Workshop committee Learners Computer Projector
Break	10:15-10:30			Conference room Refreshments
Key points of note taking and Skill development	10:30-11:45	Interactive discussion	Group consensus	Conference room Workshop committee Learners Computer
Lunch	11:45-1:00			Conference room (Catered)
Breakout Session	1:00-2:15 (Group A&B)	Discussion	Formative Evaluation form	Conference room Workshop committee Learners
Break	2:15-2:30			Conference room Refreshments
Breakout Session	2:15-3:30 (Group B&A)	Discussion	Formative Evaluation form	Conference room Workshop committee Learners
Closing Remarks	3:30-4:00	Interactive discussion	Group Discussion	Conference room Workshop committee Learners

Workshop Agenda: Day 2

Content	Time	Teaching Methodology	Evaluation Method	Resources
Registration	8am -8:30am	Interactive discussion	Discussion	Conference room Workshop committee Learners
Introduction and overview	8:30-9:00	Interactive discussion	Group Consensus	Conference room Workshop committee Learners
Lecture <i>Testing Strategies</i>	9:00-10:15	Interactive discussion	Formative Evaluation form	Conference room Workshop committee Learners Computer Projector
Break	10:15-10:30			Conference room Refreshments
Panel Discussion Peer-to-Peer Learning	10:30-11:45	Interactive discussion	Group Consensus	Conference room Workshop committee Learners
Lunch	11:45-1:00			Conference room (Catered)
Breakout Session	1:00-1:45 (Group A&B)	Discussion	Formative Evaluation form	Conference room Workshop committee Learners
Break	1:45-2:00			Conference room Refreshments
Breakout Session	2:00-2:45 (Group B&A)	Discussion	Formative Evaluation form	Conference room Workshop committee Learners
Speaker	2:45-3:45	Presentation “Evaluating Test Questions”	Formative Evaluation form	Conference room Workshop committee Learners
Closing Remarks	3:45-4:00	Interactive discussion	Group Discussion	Conference room Workshop committee Learners

Workshop Agenda: Day 3

Content	Time	Teaching Methodology	Evaluation Method	Resources
Registration	8am -8:30am	Interactive discussion	Discussion	Conference room Workshop committee Learners
Introduction and overview	8:30-9:00	Interactive discussion	Group Consensus	Conference room Workshop committee Learners
Discussion <i>The Clinical Experience</i>	9:00-10:15	Interactive discussion	Formative Evaluation form	Conference room Workshop committee Learners Computer Projector
Break	10:15-10:30			Conference room Refreshments
Key points of mastering the clinical experience	10:30-11:45	Interactive discussion	Group Consensus	Conference room Workshop committee Learners Computer
Lunch	11:45-1:00			Conference room (Catered)
Keynote Speaker “Connecting the Dots: The class and clinical Experience”	1:00-3:00	Discussion	Formative Evaluation form	Conference room Workshop committee Learners
Break	3:00-3:15			Conference room Refreshments
Wrap-up and Closing Remarks	3:15-4:00	Interactive discussion	Group Discussion	Conference room Workshop committee Learners

Connecting the Dots: The Class and Clinical Experience

Student Mentoring Workshop

Speaker's Name

Learning Objectives

2

- Upon completion of the student-mentoring workshop:
- The learner will distinguish strategies to improve note taking, classroom interaction, and meet the course benchmark on exams.
- The learner will be able to identify the need floor group interactions as related to the clinical setting.
- The learner will be able to synthesize multiple learning strategies and apply theories in nursing practice.
- The learner will be able to verbalize test-taking strategies required to master course exams.
- The learner will be able to identify motivational strategies needed to improve confidence in academia and didactic.
- The learner will be able to reflect on new knowledge and create changes that correlate with student setting.

Course Content Overview

3

- By the end of this session, the learner will be able to:
 - Identify individual learning style.
 - Identify learning strategies associated with note taking.
 - Identify learning strategies associated with testing.
 - Identify the significance of group discussions and the learning process.
 - Identify the importance of peer-to-peer learning.
 - Identify strategies to excel in the class and clinical setting.

Identifying Student Learning Styles

4

1. Visual Learners
2. Auditory Learners
3. Tactile Learners
4. Kinesthetic Learners
5. Analytical Learners

http://lyceumbooks.com/pdf/howtoteacheffectively_typesoflearners.pdf

What is the Constructivism Theory

5

- Constructivism
- Learning theory
- Process
- Instructional strategy
- Classroom applications
- Instructor and student roles

Constructivism Learning Theory

6

- Learning is a active process
- Knowledge is shaped by life experiences
- Encourages problem solving and understanding
- Uses authentic tasks, experiences, settings, assessments
- Content is holistically presented

Constructivism Theory

7

- Provides multiple methods of depictions and viewpoints on content.
- Generate new understandings of mentoring
 - Coaching
 - Moderating
 - Recommendations
- Encourage that testing should correlate with task.
- Encourage use of errors to update students on progress and understanding.

Adapted based on Christie (2005); Honebein (1996)

Note Taking in the Classroom Setting

8

- Time
- Listening
- Participation
- Handouts

Identifying Testing Strategies

9

- Study habits.
- Time management.
- Identifying priority words.
- Identifying the stem and key to questions.

Benefits of Group Discussion

10

- Participation in the class and clinical setting promotes:
 - Adds interest to subject.
 - Promote student engagement.
 - Promote student preparation.
 - Improve dialogue between students.
 - Improves student speaking skills.
 - Provides an opportunity for instructor feedback.

The Importance of Peer-to-Peer Learning

11

1. Students obtain more time for individualized learning.
2. Direct communication between students to promote active learning.
3. Students are more comfortable when networking with a peer.
4. Peers and students share a similar discourse, allowing for greater understanding.

Cited From: <http://www.opencolleges.edu.au/informed/features/peer-teaching/#ixzz3U5uItQh1>

How to Excel in Nursing Clinical

12

- Follow the dress code.
- Be on time for clinical.
- Use resources to facilitate learning.
- Clinical skills.

Needs Assessment

13

What student-learning topic would you like us to explore during your workshop?

Would you like information on your individual learning style?

What class situation do you find challenging?

What clinical situation do you find challenging?

Would you like information on note taking and study skills?

Would you like information on test taking strategies?

Would you like information on facilitating group discussions?

Would you like information on peer-to-peer learning?

Needs Assessment Results

14

Survey of Needs Form

Course Introduction: This fall 14 a 1-day Student Mentoring Workshop will focus on introducing strategies to improve nursing students' confidence during their first year in the dual program. This fall 14 is an interactive workshop with the focus being on the learner. The workshop will involve transfer of knowledge and will have an evaluation process.

Student Name:	Course Title: Student Mentoring Workshop
Workshop: Planning/Coordinator:	Local Program:
Questions:	Student Feedback:
1. What student learning topic would you like us to explore during your workshop?	
1. Would you like information on your individual learning style?	
1. What class situation do you find challenging?	
1. What clinical situation do you find challenging?	
1. Would you like information on note taking and study skills?	
1. Would you like information on test taking strategies?	
1. Would you like information on facilitating group discussions?	
1. Would you like information on peer-to-peer learning?	

Local College Findings from Project Study

15

- **Stepwise regress was used in the study:** The results of the stepwise regression model predicting first semester GPA based on five candidate variables.
- The final 2-variable model was significant ($p = .001$) and accounted for 17.6% of the variance in the first semester GPA. Inspection of the model steps found the first variable included the model was the TEAS English score which accounted for 14.3% of the variance in the dependent variable.
- The second step of the model added the TEAS Science score which was significant ($p = .003$) and accounted for an additional 3.3% of the variance.

Local College Findings from Project Study

16

- **Quantitative correlation:** The purpose of this study was to evaluate student success in an associate degree-nursing program located in the southeastern region of the United States. Descriptive statistics were used to evaluate the student's first semester GPA and first year GPA.
- The process described the data being evaluated but does not make a definitive conclusion about the results. Descriptive statistics does not draw conclusions about the hypothesis, but enables the presentation of the data in a more expressive way, thereby allowing for simpler understanding of the data (Green & Salkind, 2011).

Local College Findings from Project Study

17

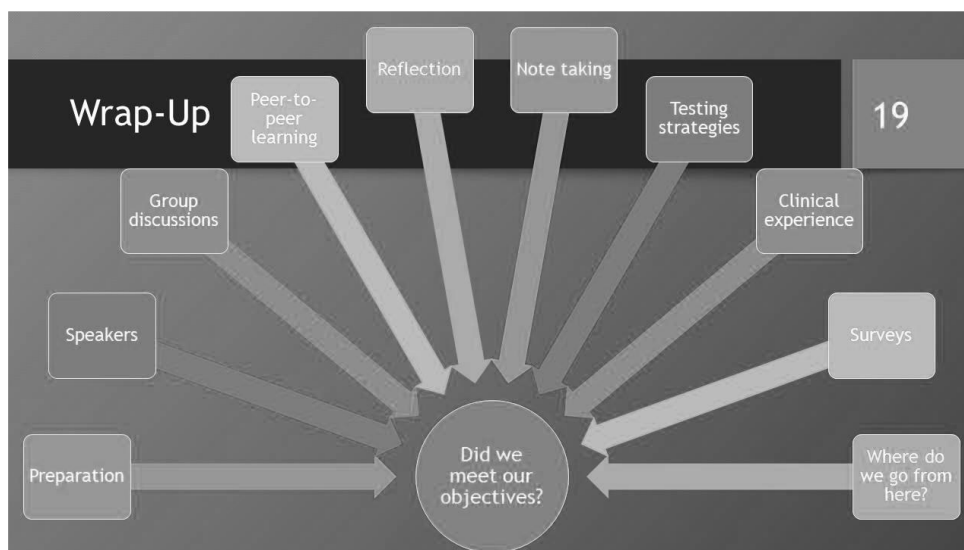
- The results of the project study is a reflection of a positive correlation and supports the belief that a student's scores on the TEAS can predict how well each student will do academically.
- The findings provided the local nursing program with information that can be used to impact successful student outcomes. Those who take the TEAS and score on the low end can be placed into remediation classes so that their academic skills can be improved.
- The findings in this study are supported by previous research that has shown the TEAS scores can predict how well a student will do in a nursing program (Heroff, 2009).

Work Shop Agenda

18

See
Handouts
for agenda
related to
workshop

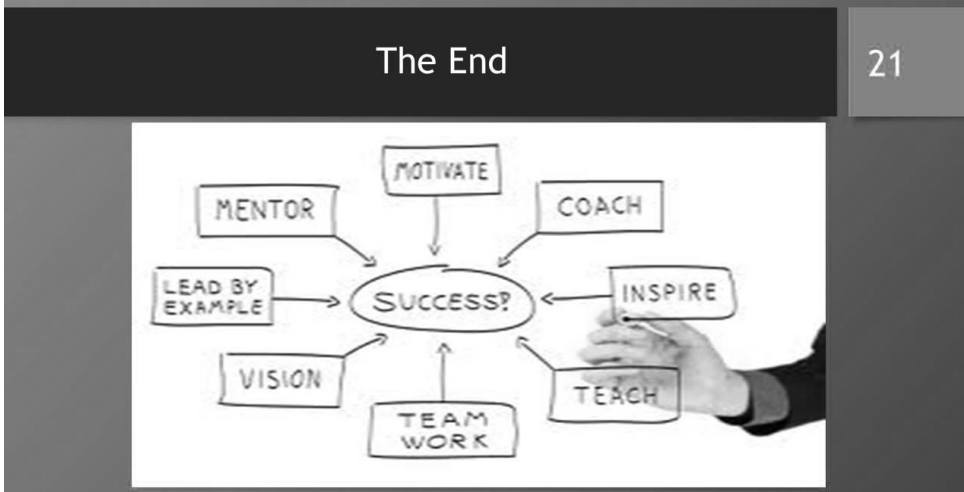
- Day 1
- Day 2
- Day 3



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20

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- <http://www.thirteen.org/edonline/concept2class/constructivism/>
- <http://www.dartmouth.edu/~acskills/success/notes.html>



Formative Evaluation

Participant Name: _____

Date: _____

The presenter

	Strongly Agree	Agree	Disagree	Strongly Disagree
Clearly stated the objectives of the presentation	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Was knowledgeable about the subject matter	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Spoke clearly and appeared confident	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Answered questions	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

	Strongly Agree	Agree	Disagree	Strongly Disagree
The learner				
Was able to understand the concepts presented	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Can apply these skills in the work environment	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Can implement strategies in increase work engagement	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Personal Comments: _____

Thank you for completing this evaluation. Your feedback is valuable.

Reflective Evaluation

This reflective evaluation is anonymous. Please write one sentence to answer the below question and then pass it up to the speaker prior to leaving.

Topic: _____

1. Did the speaker follow the program objectives? _____ Yes or _____ No
2. Did the speaker allow for questions and answers? _____ Yes or _____ No
3. Should this topic be a part of future workshops? _____ Yes or _____ No
4. Describe something you learned about student learning by attending this section of the workshop.

5. Do you believe that this session assisted you with your learning needs?

Yes

No

Comments:

Thank you for taking part in this reflective evaluation.

Summative Evaluation

Name: _____ (optional)

Date: _____

Please answer the below questions. Your feedback and comments are greatly appreciated.

	Yes	No
1. Did the workshop meet your expectations?	<input type="checkbox"/>	<input type="checkbox"/>
2. Would you recommend this learning experience?	<input type="checkbox"/>	<input type="checkbox"/>
3. Was the facility and location conducive to the learning environment?	<input type="checkbox"/>	<input type="checkbox"/>
4. Were the materials and handouts useful?	<input type="checkbox"/>	<input type="checkbox"/>
5. Have you engagement increased?	<input type="checkbox"/>	<input type="checkbox"/>
6. Will you apply any of the practical skills in your learning environment, if so, which ones?		
7. What topics would you like to see presented in the future?		
8. Please provide below any additional comments you may have:		

Peer-to-Peer Evaluation: To explore the student knowledge transfer, a peer-to-peer evaluation should be done 2 months after the student mentoring workshop. The planning committee will design the evaluation tool after the workshop is completed. The projected checklist items that will be a part of the tool will be: Use of a needs assessment, objectives, program plan, goals, teaching modalities, and other items as needed.

Appendix B: Electronic Mail to Participants

To participant's name,

You are invited to attend a student mentoring workshop sponsored in collaboration with the nursing program and as part of a research study. The purpose of this workshop is to assist the first-year nursing student find his or her path to obtaining a successful outcome in the nursing program. Strategies will be introduced to improve study skills, test taking skills, peer-to-peer learning, and improve the overall outcome of the student on a daily basis.

This is a mandatory 3-day program planned to empower the nursing student during the first year. You will be asked to participate in a computerized survey to explore topics that will be discussed during the workshop. Please contact me via email if you have any additional questions or concerns. All of your information will be kept confidential. I look forward to hearing from you and I hope you are inclined to participate in the study.

Laura J. Hope, MSN, RN, CNS

Nursing Faculty

Doctoral Candidate, Walden University

Appendix C: Letter to Nursing Administration

XX XXXXXXXX DBA, MSN, RN
Associate Vice President of Nursing
Re: Quantitative Research Project

Dear Dr. XXXXXXXX

I am a currently enrolled in the doctoral program at Walden University. I am requesting permission to conduct my research in order to complete my Doctoral Study Project. I will need to collect nursing student archival data from years 2010-2013. The data collected will be from the TEAS V total student scores, subsets from the TEAS (English, math, reading, science), and grade point average (GPA) after completion of the first year in the Associate Degree of Nursing Program. The purpose of the study is to evaluate the relationship between the variables to determine if the TEAS can be used to predict academic success. The results of the project study may be published but all identifiable information will be kept confidential. In this research, there are no foreseeable risks to the college. The identity of the nursing students will be kept confidential by coding of the data. The possible benefit of your participation is that the information obtained in the project study may lead to improved attrition and retention in the nursing program. An additional benefit may be the identification of properly prepared students that can potentially be accepted into the nursing program resulting in higher NCLEX-RN pass rates and more nurses to combat the nursing shortage. Thank you for your assistance.

Sincerely,

Laura J. Hope, MSN, RN
Nursing Faculty
Walden University Doctoral Candidate

Appendix D: ATI Permission Letter



December 9, 2014

To Laura Hope:

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- 1) Assessment Technologies Institute, LLC. (2009). *TEAS V Content Validation Study (Table 12)*. Author: Leawood, KS.
- 2) Assessment Technologies Institute, LLC. (2010). *TEAS V Cutscore Executive Summary (Tables 1 and 2)*. Author: Leawood, KS.

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Sincerely,

Michelle Dunham, PhD
Senior Research Scientist

Agreed by: Laura Hope

Laura Hope 9/10/14
Signature

Date

Appendix E: Scatterplots for TEAS Scores with First-Semester and First-Year GPA

 $(N = 130)$ 