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Perspectives of Associate Degree Nursing Students

at Risk for Academic Problems

Phyllis H. Horton

Submitted as Partial Fulfillment for the Doctor of Nursing Practice Degree

Regis University

August 15, 2015

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Executive Summary

This quality improvement project focused on associate degree nursing students (ADN) at risk for academic problems in the community college setting.

Problem

A shortage of nurses exists throughout the United States. Understanding the supply, distribution, and educational requirements for registered nurses (RNs) is an important factor to ensure quality avenues for nursing programs of study to ultimately provide competent nurses to support the US health care system. It is expected that North Carolina will be severely impacted by a projected shortage of nurses by the year 2020.

Purpose

The purpose of this evidence-based project was to identify themes and patterns from the perspectives of ADN students as to what places him or her at risk for academic problems and how faculty could best intervene to help them become successful graduates.

Goal

The goal was to design and implement a qualitative study to identify the perspectives of ADN students self-identified as at risk for academic problems. The findings of this study were shared with ADN faculty for planning interventions to promote academic success and increase the potential for ADN students to graduate and become registered nurses.

Objectives

The objectives for this project included: 1) Analyze the themes of the perceptions of ADN students self-identified as at-risk for successful completion of the program of study, 2) Identify perceptions of students self-identified as at-risk on how faculty can help them be successful and graduate from the ADN program, and 3) Compare and contrast identified themes with the literature and current practice at this community college.

Plan

Implementation of a qualitative study that focused on the phenomenological approach that is primarily interested in describing the lived experiences of research participants. This research design included in-depth interviews using open-ended statements to gather data on the perspectives of ADN students on what places them at-risk for academic problems and how faculty could intervene to increase student success potential.

Outcomes and Results

All of the project objectives were met. There were two broad categories that emerged from this qualitative study with sub-categories that included teaching methods, faculty/student relationships, test taking skills, grading system, study sessions, encouragement from faculty, and class organization.

Acknowledgements

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Perspectives of Associate Degree Nursing Students at Risk for Academic Problems

A shortage of nurses exists throughout the United States. Understanding the supply, distribution, and educational requirements for registered nurses (RNs) is an important factor to ensure quality avenues for nursing programs of study to ultimately provide competent nurses to support the US health care system. There were 2.8 million RNs (including advanced practice RNs) working in the field of nursing or seeking nursing employment between 2008 and 2010 (HRSA, 2013). The number of RNs per 10,000 population (per capita) increased by nearly 14 percent in the past decade (HRSA, 2013). Unfortunately this may not be enough since the need for RNs is projected to grow 19 percent nationally over the next 10 years (Bureau of Labor Statistics [BLS], 2014-2015). The necessity for this growth is because of a number of factors including a greater emphasis on preventative care; growing rates of chronic conditions, such as diabetes and obesity; and the additional need for healthcare services projected for the aging baby boomer population (BLS, 2014-2015). This capstone project addressed the need for an increased supply of graduate nurses with the implementation of a qualitative study to investigate the perceptions and needs of associate degree nursing students self-identified as at-risk for academic problems.

Problem Recognition and Definition

North Carolina (NC) is expected to be severely impacted by this projected shortage of nurses. Nurses are the single largest component of North Carolina's health workforce, and nursing jobs are essential to provide needed health care services (Fraher & Jones, 2011). The National League for Nursing (NLN) reported that by 2020, North Carolina is expected to need approximately 108,000 nurses but will only have an estimated supply of 76,000 of the number needed (NLN, 2011); therefore, it is essential that North Carolina move from a reactive mode to

a proactive and quickly develops plans for how to fill the projected deficit and graduate more nurses. Associate degree nursing (ADN) programs are important gateways to the nursing profession and faculty must work diligently to assist these students as they work toward attaining the ADN degree. With these issues in mind, it is it is essential that nurse leaders in the community college system plan strategically to meet the futuristic needs of nurses prepared at the associate degree level.

Problem Statement

There are more qualified applicants now than can be admitted to nursing programs partly because of a lack of training resources (clinical placement and faculty). With admission numbers capped, it becomes even more critical that all admitted students successfully complete the program, pass the National Council Licensure Examination for Registered Nurses (NCLEX-RN), and add to the pool of RNs in the state. But even with stringent admission requirements to select those most likely to succeed, not all admitted students graduate.

There are multiple factors related to the success of ADN students to complete the curriculum requirements, graduate, and ultimately pass the NCLEX-RN. The total number of graduates from ADN programs shows a downward trend from 2010-2012 (NC Board of Nursing, 2013). This downward trend of graduates is particularly concerning for NC in general and specifically for ADN programs located in rural counties. This has been attributed to a variety of reasons including the fact that many of their students are coming from a vulnerable population with limited resources for higher education. These issues place many of the ADN students in an "at-risk" category for academic failure right from the start of their programs and may put them in jeopardy of dropping out and/or failing the program and never becoming RNs.

Project Purpose and PICO Statement

While there are research studies that clearly support faculty interventions for at-risk students, there is a void in the literature in examining perceptions of what at-risk students believe puts them at risk and how they believe faculty could best intervene to assist them to graduate and pass the NCLEX-RN exam. The purpose of this study is to identify themes and patterns from students; perspectives as to what contributes to their at-risk status for not completing their degree requirements; and, how faculty could best intervene to help them become successful. Identification of students' perceptions was compared to the findings in the literature and will be shared with faculty for future planning as they design and implement quality improvement changes to support nursing students' success.

ADN students at-risk for academic problems were defined as those experiencing failing grades (less than 80%) on unit exams and/or "unsatisfactory" grades in the lab/clinical settings along with students that self-identified as being at-risk for failure. A quality improvement study was implemented at a rural community college in NC to gather qualitative data related to the PICO project question "what are the perceptions of students at risk of not completing an ADN program and how can faculty best intervene to help them become successful?" The PICO statement for this practice issue was as follows:

P: At-risk nursing students enrolled in an associate degree nursing program in rural NC.
I: Interview at-risk ADN nursing students to explore their perceptions of what puts
them at risk and how faculty could best intervene to help them become ADN graduates.
C: Continue current practice that does not identify students' perspectives on academic
problems.

O: Identify themes of at-risk nursing students' perceptions of risk factors and needed interventions by faculty to become ADN graduates.

Factors such as the identification process for selecting study participants, students' sensitivity about sharing information regarding academic struggles and relevant social determinants were potential issues that could have influenced the research findings. Because of these issues, it was of major importance that the qualitative researcher recognize and address the challenges that could have emerged from interview questions that involved sensitive issues. Specific issues that could arise for the researcher who selects a particularly sensitive topic may include disclosure, rapport, clarity regarding the research, strategies for leaving the research relationship, and the management of professional boundaries (Dickson-Swift, James, Kippen, & Liamputtong, 2006).

Project Significance, Scope, and Rationale

The determination of themes and patterns related to the perceptions of ADN students atrisk for academic problems provided valuable insight into the needs of these students for program improvement. This PICO project focused on the needs of ADN students at one rural community college in NC and did not provide data for generalization or long-term goals. Rationales for this study included:

- ADN programs in NC operate with admission numbers capped related to clinical space and a limited number of applicants.
- Not all admitted students graduate.
- There is a scarcity of literature regarding the *students' perceptions* of what places them at risk for academic problems leading to program incompletion.

• It was important to gain students' perceptions within this quality improvement initiative to graduate more ADN students to meet the projected need for nurses in NC.

Theoretical Foundations

Albert Bandura's Self-Efficacy Social Learning Theory, Watson's Science of Human Caring, and Knowles Adult Learning Theory provided the theoretical foundations for this PICO project. Bandura defined self-efficacy as one's belief in one's ability to succeed in specific situations as playing a major role in how one approaches goals, tasks, and challenges (1997). These concepts are especially relevant to nursing students as they strive to refine the critical thinking and clinical reasoning skills essential for academic success.

Watson's Science of Human Caring (2008) described sensitivity to self and others, developing trusting/caring relationships, and a relationship caring for self and others as concepts specifically aimed at the nursing profession. Watson's reflective/meditative approach that focused on understanding the person with questions such as *tell me about yourself, your life experiences, your feelings,* demonstrated the principles of this qualitative (lived experiences) research.

Malcolm Knowles brought andragogy, defined as the art and science of helping adults learn, to life with his Adult Learning Theory (Knowles, Holton, & Swanson, 2005). Knowles made five assumptions about the characteristics of adult learners (andragogy) that are different from the assumptions about child learners (pedagogy). These assumptions included self concept, adult learner experiences, readiness to learn, orientation to learning, and motivation to learn (Knowles, Holton, & Swanson, 2005). The nurse educator's role to facilitate the students' movement toward more self-directed and responsible learning will foster the student's

motivation for lifelong learning. Nursing students want to know the relevance of what they are learning as well as respect for previous life experiences.

The core concepts of each theoretical framework utilized in this qualitative study along with the relevance to this project are detailed below in Table 1.

Table 1

Theoretical Foundations

Albert Bandura Self-Efficacy Social Learning Theory		
Core Concepts	Relevance to this Project	
Belief in One's Ability to Succeed	• Cognitive processes – efficacy beliefs affect	
	thought patterns that can enhance or undermine	
	performance.	
	• Successes build a robust belief in one's personal	
	efficacy.	
	• Failures undermine personal efficacy.	
Jean Watson's Science of Human Caring		
Core Concepts	Relevance to this Project	
Sensitivity to Self and Others	• Reflective / meditative approach focuses on	
Trusting / Caring Relationships	understanding the person with questions such as <i>tell</i>	
	me about yourself, your life experiences, your	
	feelings, demonstrated the principles of qualitative	
	research.	

Malcolm Knowles Adult Learning Theory		
Core Concepts – Adults	Relevance to this Project	
Self-Concept	• As the student matures, he or she moves from being	
	dependent to using critical thinking skills for the	
	attainment of academic success.	
Motivation	• Students are internally motivated and self-directed to	
	learn.	
Life Experiences	• Adult students bring life experiences that provide a	
	resource for learning.	
	• Problem centered – given the proper guidance each	
	student will develop skills for academic success.	
Goal-oriented	• Graduation from the ADN program and attain the	
	RN licensure.	
Relevancy and Respect	• Nursing students want to know the relevance of what	
	they are learning as well as respect for previous	
	learning experiences	

Background of the Problem and Literature Selection

Review of the Literature

A systematic review of the literature was conducted to better understand the scope of previous qualitative studies addressing the problem statement (Appendix A). The PubMed, CINAHL Plus, Ovid Technologies, and ProQuest databases were searched through the

community college and university library portals using keywords that included student retention, faculty/student relationships, at-risk nursing students, academic success in ADN, helping at-risk students, and the "lived experiences" of nursing students to identify research articles that related to this capstone project.

Background of the Problem.

There were a few very good studies regarding qualitative research for students at risk for academic failure. For instance, Poorman, Webb, and Mastorovich conducted two very interesting studies on *Students' Stories* (2002) and *Teachers' Stories* (2008) that described the "lived experiences" of nursing students who told their stories of academic struggles and teachers who shared stories of how they helped and hindered students at risk. The Students' stories revealed a pattern of "expecting" with the emerging themes of helping (being with, reviewing, and approaching), and hindering (uncaring, owning, hovering, and favoring). The research design for these studies was based on Diekelmann's Narrative Pedagogy (Poorman, Webb, & Mastorovich, 2002, Poorman, Mastorovich, & Webb, 2008, Diekelmann, 2001).

Diekelmann (2001), led a 12-year study to identify the shared experiences of students, teachers, and clinicians in nursing education. Diekelmann implemented an Interpretive Phenomenology (hermeneutical) method to study interview texts in this longitudinal study. *Interpretive phenomenological* analysis offers insights into how a given person makes sense of a phenomenon while *hermeneutics* focuses primarily on the meaning of qualitative data, especially textual data with the purpose of aiding human understanding (Smith, Flowers, & Larkin, 2009). Narrative pedagogy evolved from Diekelmann's research and resulted in a philosophy identified as "Concernful Practices" (2001). Narrative pedagogy is an approach to teaching and learning and a way of thinking about what is possible and problematic in nursing education. The

Concernful Practices identified themes of 1) *gathering*, 2) *creating places*, 3) *assembling*, 4) *staying*, 5) *caring*, 6) *interpreting*, 7) *presencing*, 8) *preserving reading, writing, thinking*, and 9) *dialogue, and questioning* (Diekelmann, 2001). This research provided outstanding stories to describe both positive and negative teacher-student relationships to create new pedagogies for nursing education. The Concernful Practices were identified and implemented in a number of subsequent qualitative studies that included student interviews resulting in clarifying the difference between teachers *working with* students and teachers *talking to* students to create excellence in nursing education (Andrews, et al., 2001, Ironside, 2005, Altmiller, 2012).

Faculty-Student Relationships.

Faculty-student relationships are an essential component required to promote academic success in the community college setting. Expectations of students and teachers raise many questions regarding unmet expectations for academic progress. Themes from previous studies included students' perspectives of nursing faculty using unprofessional behavior, poor communication techniques, inequality (favoritism and/or negative bias), power gradient (fear of failure, embarrassment), authority issues (failure to control the classroom), and stressful clinical environment behaviors (Altmiller, 2012, Yoder, 2002, Clark & Springer, 2010). Clinical experiences are especially important to provide an opportunity to enrich the teacher-student relationship. Many students may feel set up for failure when activities to learn critical competencies cannot be guaranteed in the clinical setting (McGregor, 2005). Nurse educators must identify types of faculty support that facilitate student success. Creating a nursing education community that provides presence and a voice not only for students but for teachers can help overcome conventional ways of thinking as faculty strive to improve relationships within a program of study (Poorman, Mastorovich, & Webb, 2011).

Shelton (2003) provided empirical evidence of the relationship between faculty support and retention of ADN students in which interaction between faculty and students occurred in both the classroom and clinical setting. According to Shelton both psychological and functional support contribute to student retention by promoting student persistence. Shelton (2003) contended that psychological support might be promoted with a caring atmosphere while functional support requires direct help from the instructor to facilitate learning. Wolf, Bender, Beitz, Wieland, and Vito (2004) identified patterns such as being a knowledgeable and strategic teacher, creating a positive learning environment, displaying scholarly traits, and being supportive as attributes for excellence in teaching.

Additional Factors Affecting Academic Success.

Text anxiety has been identified as one of the significant factors related to students' academic success. Griffiths, Papastrat, Czekanski, and Hagan (2004) identified inadequate study habits, lack of knowledge about how to prepare for testing, and poor test-taking skills as students' perspectives contributing to failure. Bowden (2008) conducted a study to examine the perspectives of nursing students in a single case study who "almost left" but ultimately stayed in one institution's nursing program. A major factor identified in this study revealed stress caused by examinations. A combination quantitative / qualitative study implemented to identify factors related to academic success in at-risk senior nursing students revealed test-taking anxiety in addition to time management, and heavy course load as contributing factors for academic failure (McGann & Thomson, 2008). Rollant (2006) recommended a model for individual test preparation that included specific actions labeled "The 5 C's for Test Success" as content, confidence, control of tension, common sense, and compare (reword questions or compare options) (p. 265). Rollant advised nursing faculty to compile responses to the 5 C's in order to

guide actions to use with students to raise their confidence in taking exams (2006). Sifford and McDaniel (2007) implemented a research study to identify the effectiveness of a remediation program to increase exam NCLEX-RN passing rates. These researchers concluded that remediation interventions targeting test-taking strategies, anxiety reduction, and time management could be effective for enhancing student success (Sifford & McDaniel, 2007).

There are many additional factors that may influence academic success including motivation to learn, time management, work/home responsibilities, and poor study habits. Rogers (2010) identified emerging themes at the conclusion of a qualitative study to explore the factors that contribute to student success in associate degree nursing programs as follows:

- Student-Related Themes motivation, academic abilities such as critical thinking, testtaking, and study skills; organization; prioritization of roles and responsibilities; the ability to manage life events and extreme stress.
- Collaboration-Related Themes support systems that may include religion, finance, family, and friends. Communication with faculty members and the level of faculty involvement with students (p. 97-98).

Students must take the initiative to develop study plans and prepare for testing by accessing available resources. Remediation of faculty teaching and evaluation methods may prove more valuable than aiming remediation solely at students (Pennington & Spurlock, 2010).

Clark and Springer (2010) identified five major themes as stressors perceived to be the most challenging for nursing students that included juggling multiple roles related to work, academic, and home responsibilities; financial pressures; time-management; lack of faculty support; and mental health issues. An additional factor that greatly influences academic success

includes the students' locus of control. Wood, Saylor, and Cohen (2009) reported students who were more likely to attribute academic outcomes to forces beyond their personal control (external locus of control) experienced a significant negative relationship with academic success.

Scope of Evidence Summary

This PICO project focused on a quality improvement initiative to determine perceptions of nursing students self-identified as at-risk for not completing an ADN program and how faculty could intervene to help them become successful. The literature revealed a clear gap regarding the students' perceptions of academic problems. Research is needed to explore factors related to ADN students' academic struggles. Outcomes of this study included the identification of themes expressed by ADN students self-identified as at-risk for failure and provided insight into needed interventions for students to become ADN graduates, thereby increasing the pool of much needed RNs in NC.

Project Plan and Evaluation

Market and Risk Analysis

A tool to analyze internal strengths and weaknesses along with external opportunities and threats (SWOT) of the project was assessed. The SWOT analysis was designed as a construct with the potential to help the community college think about strategic decisions related to markets and competitors. The internal environment for this project was envisioned as the School of Nursing while the Community College was identified as the external or broader organization. Once a school of nursing can identify its SWOT, it can develop plans and incremental changes that will allow it to graduate more nursing students by playing to its strengths, reducing its weaknesses, seizing opportunities, and guarding against threats (Crow et al., 2008).

The SWOT analysis identified strengths that included nursing faculty seeking curriculum change to assist students' success. Opportunities for this project included the community college support for a "student centered" learning environment as well as an administrative team that highly supported student success.

Weaknesses identified for this project included the sample size limited to one ADN cohort and time constraints. Threats to the student included perceptions of the community regarding students' academic problems and a loss of student enrollment to nearby community college nursing programs related to low graduation rates as shown in Table 2.

Table 2

Market / Risk Analyses – Strengths, Weaknesses, Opportunities, Threats (SWOT)

Strengths – Internal (Nursing Program)	Weaknesses – Internal (Nursing Program)
• Faculty seeking curriculum change	• Sample size – one ADN cohort
• Project leader – education experience	• Student sensitivity to being "at-risk
• Strong faculty/administrative relationships	• Student sensitivity for sharing information
• Space and equipment availability	• Time constraints
Opportunities – External (Community College)	Threats (Community College)
• Supports mission for "student centered"	• Perceptions of community regarding
learning environment	students' academic problems
• Administration / faculty support for student	• Loss of student enrollment to nearby
success	colleges related to low graduation rates
• Project leader is a strong member of the	• Apprehension related to students' potential
college strategic planning team	negative reports of faculty issues.

Driving / Restraining Forces

Driving forces for this capstone project were clearly stronger than the restraining forces. Driving forces included the project leader's experience in nursing education, support from college faculty and administration, and the literature need for research focused on the "voices" of at-risk nursing students. This offered the potential to afford students the ability to provide insight into needed interventions for them to become ADN graduates, thereby increasing the pool of much needed RNs in NC.

Restraining forces included the potential for students' resistance to participate in this research study. In addition, faculty resistance to quality improvement initiatives and time constraints could present barriers for the project study. These obstacles were addressed at the beginning of the study with clearly stated benefits outlined for both students and faculty. These benefits included the potential for enhanced relationships between students / faculty, students' "voices" heard for potential program improvement strategies, and a better understanding of student perceptions.

Needs, Resources, and Sustainability

A comprehensive assessment of the available resources and necessary support of the project was essential in the strategic planning process. The need for this project was reflected in the recognition of the problem that included projections for an increase in the RN workforce in terms of job growth through 2020. According to Zaccagnini and White (2014) a thorough assessment of available resources should be conducted early in the project development and planning. These resources included financial support, materials for the project, physical space, statistical analysis support, personnel, and consulting costs. The necessary components identified for this capstone project were identified as the following:

- Project leader time and commitment.
- Research interviewer time, commitment, and fees.
- Transcriptionist time, fees.
- Office space.
- Equipment computer, printer, audio.
- Miscellaneous supplies folders, pens, paper.
- Qualitative consultant data analysis, fees.

The resources for this educational capstone were cost-effective and primarily absorbed by the community college as demonstrated support for the identification of strategies to promote future success in nursing education.

The sustainment of this project will come from the faculty review of how this quality improvement initiative can be utilized for future teaching / learning strategies to promote student success in the ADN program. In addition, future plans include a replication of this study to reinforce the themes and patterns identified as essential for student success and graduation from the ADN program of study.

Feasibility, Risks, Unintended Consequences

This study received strong feasibility early in the planning stage. ADN faculty and college administration expressed support of the project and the college IRB application was approved in a timely manner. Risks included the perception of the quality of the existing ADN program. Communication was the key to resolving these concerns with detailed information regarding this project as a "quality improvement" initiative to assess and strengthen successful student outcomes. Unintended consequences resulted in a small sample size that could very well

be attributed to the interview scheduling process. Student interviews were scheduled in December and could have influenced the number of study participants related to "end of semester" timing as students prepared for final exams and fall / spring semester break.

Stakeholders and Project Team

Students who choose to participate in this capstone were the largest group of stakeholders for the success of this project. Nursing program faculty and administrators were also primary stakeholders as they work together to promote success in the nursing program. Nursing faculty are invested in providing students the best opportunities to learn as well as facilitating the student to achieve high levels of self-efficacy in their educational endeavors. Additional stakeholders included the capstone chair as she provided support and guidance for this project as well as the potential NC nursing pool to meet the projected number of RNs needed by the state as predicted for the year 2020.

The principal team members for this capstone project included the DNP project leader followed by the research interviewer, clinical mentor, college administrators, project participants, and qualitative consultant for data analysis. In addition, key to the design, implementation, analysis, and dissemination of the project was the DNP Capstone Chair.

Cost Benefit Analysis

This study focused on first year nursing students identified as at-risk for not completing the ADN program. A quality improvement initiative was implemented to determine the students' perceptions of being at-risk of not graduating from the school of nursing and how faculty could best intervene to help them become successful. The cost analysis revealed an initial investment of between \$12,000 and \$15,000 to establish a qualitative study designed to

interview nursing students to identify themes or patterns related to their perceptions of being atrisk for academic problems. Benefits attained from this project included the following:

- Improved knowledge of at-risk factors as perceived by nursing students.
- Potential for enhanced faculty / student relationships.
- Students "voices heard."
- Better understanding of students' perceptions of issues related to academic success.

The conclusion of this analysis was that the benefit of identifying students' perceptions regarding being at-risk for academic problems far outweighed the cost. As a result of this project, the identification of study themes provided insight into needed interventions by faculty for program improvement strategies.

Mission / Vision / Goals

Mission

Nursing education at the associate degree level is a process that facilitates changes in behavior, the acquisition of knowledge, skills, and attitudes necessary to function in the role of the entry-level nurse. The Capstone Project Mission Statement was "to increase graduation rates and NCLEX pass rates in the ADN program, while the Capstone Vision Statement affirmed the need to "increase the number of qualified and safe RNs in North Carolina. The nursing education program is dedicated to the community college's commitment to students that upholds respect, fairness, and encouragement for each student to progress to their maximum potential. To that end, research was needed to explore the needs of ADN students self-identified as experiencing academic struggles and their perceptions of how faculty could help them become successful graduates.

Vision

As ADN faculty becomes more aware of future trends, the task becomes that of moving forward to embrace change. A professional vision may be framed or shaped by the faculty's view of change. The nurse leader can begin the change process by conceptualizing immediate goals as something reachable while also heading in a new direction (McBride, 2011). The professional vision statement for this nursing program is *"the associate degree program strives to provide a student-centered quality program with strengthening strategic alliances to support both the students and the program."* This program vision statement allows for the achievement of potential as futuristic changes impact the role of the associate degree nurse.

Goals

The goal was to design and implement a qualitative study to identify the perspectives of ADN students self-identified as at risk for academic problems. The findings of this study will be shared with ADN faculty for planning interventions to promote academic success and increase the potential for ADN students to graduate and become registered nurses. Long-term goals include the application of identified themes as trial interventions for program improvement.

Outcomes

Objectives

Objectives established for the capstone project included the following:

- Analyze the themes of the perceptions of ADN students self-identified as at risk for successful completion of the program of study.
- Identify perceptions of students self-identified as at-risk on how faculty can help them be successful and graduate from the ADN program.

 Compare and contrast identified themes with the literature and current practice at this community college.

Benchmarks

Specific benchmarks associated with the implementation of the capstone project included the permission to conduct the study that occurred in September, 2014 followed by the sequence of events that concluded with the dissemination of the project findings as shown in Table 3.

Table 3

Project Timeline

Process	Dates / Benchmarks	
Permission to conduct study	• September, 2014	
• Submitted and received College and Regis IRB approval	• October, 2014	
• Identified study population	• October, 2014	
Conducted interviews	• December, 2014	
• Completed transcription of interviews	• March, 2014	
• Completed coding of qualitative data	• June, 2014	
• Analyzed data and identified themes	• July, 2015	
Capstone defense	• August, 2015	
• Final capstone approval	• August, 2015	
Submission to Regis library	• August, 2015	
• Share PICO project findings with nursing faculty	• Fall, 2015	

Logic Model

This quality improvement initiative included a logic model. A logic model is a picture of how the project developer believes the program will work (Zaccagnini & White) (2014). The purpose of the logic model was to provide a template for strategic planning and evaluation of the project in addition to the demonstration of inputs, constraints, activities, outputs and outcomes.

The model utilized for this project outlined the components required as resources, activities necessary to achieve the desired outcomes, outputs described as the immediate project results followed by short and long-term outcomes that measured the themes for this study group including potential faculty interventions to support student success (Appendix B)..

Population Sampling Parameters

The target group for this qualitative study included first-year ADN students enrolled in the fall 2014 semester of the research setting. ADN students at-risk for academic problems selfidentified as experiencing academic problems that could lead to unsuccessful progression in the program of study. Failing grades (less than 80%) on any one unit exam or quiz and unsatisfactory grades in the lab or clinical setting were parameters for academic problems. As shown in Table 4, exclusion criteria included second-year ADN students, practical nursing students, and ADN I students from other community college programs.

Table 4

Population and Sample

Inclusion Criteria	Exclusion Criteria	
• ADN I (first-year) students	• ADN II (second-year) ADN students	
• At-risk for academic problems	enrolled in the fall, 2014 semester, RCC	
• Failing grades (less than 80%) on	• Practical Nursing (PN) students enrolled in	

- any one unit exam or quiz
- Unsatisfactory grades in the lab/clinical setting
- Students' that self-identify as atrisk / voluntary participation
- the fall, 2014 semester, RCC
- ADN I students from other community college nursing programs

Setting

The setting for this project was an ADN program in compliance with the NC Community College System (NCCCS) that provides education, training and support services through a network of 58 community colleges serving all 100 counties in the state (NCCCS, 2015). This setting for this project offers an associate degree in nursing program in compliance with the North Carolina Board of Nursing (NCBON) Educational Standards (2015). The project focused on first-year ADN students from an incoming fall 2014 class of 26 students.

Methodology and Measurement

This capstone project utilized a qualitative design in order to look for themes and patterns from personal interviews to address academic problems from the students' perspectives. In regard to qualitative research, Morse, Barrett, Mayan, Olson, and Spiers (2002) wrote, "without rigor, research is worthless, becomes fiction, and loses its utility" (p. 14). The analysis of qualitative research differs from quantitative methods of study with an emphasis on the rigor necessary to demonstrate credibility, transferability, dependability, and confirmability of the study.

Qualitative studies are often exploratory in nature using *inductive* (starting with observations and developing hypotheses) rather than *deductive* (starting with extant hypotheses)

and testing them with observations) approaches (Curry, Nembhard, & Bradley, 2009, p. 1442). Qualitative studies, therefore, generate the narrative data necessary for a comprehensive understanding of the issue (nursing students self-identified as at-risk for academic problems). This is the very foundation of "why" this project was so important to increase academic success in the community college setting. The goal of this project was to look for the "perspectives" of nursing students regarding academic problems rather than jump to traditional faculty rationales such as "they just didn't study enough for the test."

Guba and Lincoln (as cited in Morse et al., 2002) substituted the quantitative terms "reliability and validity" with the parallel concept of qualitative "trustworthiness," containing four aspects: credibility, transferability, dependability, and confirmability. *Credibility* corresponds with the positivist concept of internal validity (believable from the perspective of the participant in the research); dependability relates more to reliability (could the same results be observed twice); transferability is a form of external validity (could the results be generalized to other settings); and *confirmability* is largely an issue of presentation (could the results be confirmed or corroborated by others) (Rolfe, 2006, Trochim, 2006). Methodological strategies for demonstrating qualitative rigor, such as the audit trail, member checks when coding, categorizing, confirming results with participants, and peer debriefing provides a set of guidelines to evaluate the quality of qualitative inquiry (Morse et al., 2002).

One of the major challenges to ensure a scientifically sound qualitative project involved the process of collecting data in a systematic manner (student interviews), then organizing and interpreting this data in accordance with rigorous and widely accepted qualitative techniques. Curry, Nembhard, and Bradley described these techniques as research strategies, sampling, data collection, and analysis (2009). The phenomenological approach to a study is primarily interested in describing the *lived experiences* of research participants. Rather than attempt to control elements of the research situation, such as by manipulating variables, the qualitative study is designed to capture experiences as they naturally occur which are not easily reduced to numbered responses to questions on paper-and-pencil instruments (Mateo & Kirchhoff, 2009). According to Curry, Nembhard, and Bradley the aim of qualitative sampling is to identify information-rich participants who have certain characteristics, detailed knowledge, or direct experience relevant to the phenomenon of interest (2009). In other words, the participants should represent a perspective rather than a population. Smith, Flowers, and Larkin (2009) recommended between three and six participants as a reasonable sample size for a student project using interpretative phenomenological analysis. An additional point related to sample size is determined by the principle of theoretical saturation. According to Curry, Nembhard, and Bradley theoretical saturation refers to the point at which no new concepts emerge from the review of successive data from a sample that is diverse in pertinent characteristics and experiences (2009).

The qualitative data collection process included in-depth interviews using discussion guides that include open-ended questions. Cullen stated the importance of subjectively, triangulation (using multiple data sources in the research process), use of verbatim accounts, participant feedback and bracketing (methods uses to remove bias) to obtain qualitative data (More About Measurement, 2011). Data analysis was a major component of this project and was reviewed line by line as codes were developed to tag and catalog concepts that emerged from the interviews (Curry, Nembhard, & Bradley, 2009).

Protection of Human Subjects Category

This quality improvement study gathered qualitative interview data related to the perceptions of nursing students self-identified as at-risk for academic problems and how faculty could intervene to help them succeed and become graduates of the nursing program. Institutional Review Board (IRB) approval was received from the community college research setting in October 2014 (Appendix C). The project received Regis University IRB *Expedited* status and approval in November 2014 (Appendix D). Justification for *Expedited* status included:

- Research would not involve greater than minimal risk to student participants.
- The research interviewer recruited the student participants.
- Participation in the study was voluntary and did not impact student's nursing program status in any way.
- Informed consent included project details and methods of maintaining student confidentiality (Appendix E).
- Research interview data was coded with random number sets to protect the student's identity.
- No one other than the research interviewer (during the actual interviews) had access to the student's true identity including the project leader, transcriptionist, and nursing faculty.
- No demographic information was collected to assure participant confidentiality.
- Audio recordings were transcribed with only the number sets for identification.
- Transcription data and audio recordings were placed in sealed envelopes, locked in the Dean's office, and will be destroyed three-years post research study.

• Interviews were conducted in an office that was not located in the Nursing Building with a 45-minute break between appointments to prevent student's observing one another enter/leave the office area.

A Participant Recruitment Letter (Appendix F) was sent by email from the Research Interviewer to each ADN I first-year nursing student prior to the implementation of the project. The letter's intent was to describe the project details, research design, voluntary nature of participation, and detailed information regarding maintaining student confidentiality throughout this project. The Capstone Project Leader completed the CITI Collaborative Institutional Training Initiative. Ethical practice and confidentially was maintained throughout the project. The Human Research Curriculum Completion Report certificate (CITI Training Documentation) (Appendix G) was submitted with the IRB application.

Instrumentation Reliability and Validity

The researcher was the primary instrument for data collection and analysis as required for qualitative research. Trustworthiness was established during the data collection process with the concepts of qualitative *credibility, transferability, dependability,* and *confirmability*. Rigor was demonstrated by the established audit trail, member checks when coding, and categorizing. Inter-rater reliability for the analysis of the data was established with the project leader, a qualitative research consultant, and the research interviewer. According to Guba and Lincoln (as cited in Morse et al., 2002), negative case analysis may be regarded as a process of revising or comparing data with hindsight to continuously refine codes and themes until it accounts for all known cases without exception. Inter-rater reliability for this project included a line-by-line verification of the coding categories by all three members of the data analysis team.

Data Collection and Procedure Protocol

Data collection included the qualitative phenomenological approach during the interviews. The main aim was to gain a deeper understanding of the nature or meaning of everyday experiences in the nursing program. The research questions were not pre-determined; instead, the research interviewer followed the cues of the participants. The interview question was characterized by an open-ended question that was developed in advance with prepared probes (follow-up responses). The project interview question was "what do you feel places you at-risk of not completing the ADN program and how can nursing faculty best intervene to help you become successful?" (Appendix H).

The data collection process included open-ended statements that employed subjectively (existing in the mind), triangulation (multiple data sources that included face-to-face interview and audio recordings), verbatim accounts, participant feedback, and interviewer bracketing (methods used to remove bias). The research interviewer expressed her intent to keep the concept of bracketing in mind throughout the interview process; in addition, she practiced "reflexivity" as a key thinking activity that helps the researcher realize the potential for influence throughout the process.

Project Findings and Results

The data obtained from participants' interviews was imported into the QSR International's NVivo 10 software platform for analyzing all forms of unstructured data into codes, categories, and labels to assist the qualitative researcher with data analysis (QSR International, 2015). Each sentence / passage was coded with one or more codes. Codes were derived verbatim from participant's words. Codes were added or modified as necessary when new meanings or categories emerged. Once the codes were established, each piece of text was systematically compared and assigned to one code. Codes were rechecked and assigned text to

assess coding consistency; therefore, negative case analysis was used to establish trustworthiness throughout the coding process.

Broad categories (labels) were established for both objectives that included 1) factors related to the risk of not completing the ADN program and 2) faculty interventions to help success. Category descriptions were added to indicate the meaning of the category including key characteristics along with links (relationships with other categories). The category system was revised and refined with close reading of the text to establish negative case analysis.

Participants in the study were assigned pseudonyms to assure confidentiality of the interview data. These pseudonyms were Rachael, Casey, Courtney, and Regan for the four participants in the study. The initial analysis of the data revealed 147 codes that resulted in 128 "most coded" data points with 19 outliers (not used in the study). The reduction of the initial codes revealed two broad categories as 1) at-risk of not completing the ADN program that equaled 61 codes and 2) faculty interventions for success that equaled 67 codes.

Objective One

Objective one focused on the perspectives of ADN students self-identified as at-risk for not completing the program of study. The analysis of the themes of the perceptions of ADN students' responses for factors related to academic problems included four sub-categories identified as *"Teaching Methods," "Faculty Student Relationships," "Test-Taking Skills,"* and *"Grading System."* Table 5 outlines the themes related to objective one while Table 6 contains examples of students' comments related to factors that place them at-risk for not completing the ADN program.

Table 5

Themes – At-Risk for Not Completing the ADN Program

Teaching Methods	Faculty Student	Test-Taking Skills	Grading System
	Relationships		
# Coded Text = 9	# Coded Text = 4	# Coded Text = 4	# Coded Text = 3
# References = 17	# References = 10	# References = 7	# References = 7
# Coded Text – the number of times the text was identified in the transcripts = 20			
# References – the number of times the codes were referenced in the transcripts = 41			

Table 6

Students' Comments – Factors Identified as At-Risk for Academic Problems

Teaching Methods

- Rachael "I don't know if the teachers don't have time to get into detail about the questions or they're just saying it's your responsibility to learn it"
- Casey "During lecture time they read PowerPoints I can read those from home; organization of lecture time is not effective"

Faculty Student Relationships

- Rachael "I feel like they should just be more positive to the students and encouraging"
- Courtney "I don't have time for them to figure out how to work...we don't have time to be guinea pigs"
- Rachael "They just don't make it a point to say 'how can we help?

Test-Taking Skills

• Casey - "They did do a good job with test-taking skills sessions - I'll be honest, I only went

to two" "we need to work with application versus the knowledge based tests"

• Regan – "I feel like the only information that we've gotten was sort of how tricks to take the test instead of practice with problems"

Grading System

- Courtney "That's the reason they're losing people out of the program is that grading scale.
 I mean, if you have a 77 or a 79 they're losing people"
- Regan "The test are computerized...I feel like if a question is missed by more than eight people, we need to put it back on the list and go back over this"

Objective Two

Objective two focused on the perspectives of ADN students self-identified as at-risk for academic problems as to how faculty could potentially help them succeed and graduate from the nursing program. The analysis of the themes of the perceptions of ADN students' responses for factors related to faculty interventions included three sub-categories identified as "*Study Sessions*," "*Encouragement from Faculty*," and "*Class Organization*." Table 7 outlines the themes related to objective two while Table 8 contains examples of students' comments related to faculty interventions for success to complete the ADN program.

Table 7

Themes – Faculty Interventions for Success

Study Sessions	Encouragement from Faculty	Class Organization
# Coded Text = 10	# Coded Text = 8	# Coded Text = 6
# References = 19	# References = 11	# References = 13
# Coded Text – the number of times the text was identified in the transcripts = 24		

References – the number of times the codes were referenced in the transcripts = 43

Table 8

Students' Comments – Faculty Interventions for Success

Study Sessions

- Casey "Maybe have a set of NCLEX questions afterwards that's strictly with that content that we discuss as a class
- Rachael "That would be great if we would have more like study sessions" "It's something that I've had to learn how to kind of reorganize my thoughts when I read the test question"
- Regan "To best intervene I think would be to identify the topics that are being most or being least understood…review sessions at the end and go through all the questions"

Encouragement from Faculty

- Rachael "I would consider encouraging, you know, talking to the class after a lecture is over just saying 'how is everybody feeling about this' 'is there anything else I can do' ' do you all want to make an appointment with me'?
- Courtney "it's too many of us that are struggling...this program is so stressful"

Class Organization

- Casey "just maybe research or see what other community college programs teaching style, to see how they're using their lecture time"
- Courtney "I think maybe if they was to create the exam before they start the topics so they can make sure that they cover what is on the exam" "we do nursing plans every single week.
 This is a lot of paperwork and a lot of time that takes us away from learning"

• Regan – "Overburdened is the word"

Identified Themes

The results of the themes identified from this qualitative study of the perspectives of ADN students self-identified as at-risk for academic problems are as follows:

- Teaching Methods heaviest concerns revealed by all participants (total 23 "most coded" categories).
- Faculty / Student Relationships concerns expressed by 3 of 4 participants (total 14 "most coded" categories).
- Test-Taking Skills concerns expressed by all participants (11 "most coded" categories).
- Grading System concerns expressed by 2 of 4 participants (10 "most coded" categories).

The themes identified for the students' perspectives of how faculty could intervene for success are as follows:

- Study Sessions heaviest concerns revealed by all participants (total 29 "most coded").
- Encouragement from Faculty concerns expressed by 3 of 4 participants (total 19 "most coded").
- Class Organization concerns expressed by all participants (22 "most coded").

At the conclusion of this data analysis, the reliability of the findings was supported by the interviewer bracketing process – *initiated during the interview process*, member checks when coding – *inter-rater reliability that included the project leader, research interviewer, and qualitative consultant,* rigor of the study – *negative case analysis with comparison procedures to*

establish trustworthiness, and transferability – the results of this study may be transferred for consistency with additional research.

The evidence-based practice question for this project went "full circle" as the results of this study were compared to the existing theoretical frameworks. Bandura's Self-Efficacy Social Learning Theory, Watson's Science of Human Caring, and Knowles Adult Learning Theory related to the findings of the study as follows:

- Bandura the students' demonstrated a lack of confidence, need for success interventions from faculty, and test failure undermined personal efficacy.
- Watson students' voiced a need for trusting relationships with faculty, need for "caring" validation from faculty, and the need for encouragement from faculty.
- Knowles the students' indicated difficulty recognizing the rationales for testing, the need for input into class organization, and the need for faculty-led study sessions.

This qualitative project provided valuable data for faculty consideration of program improvement strategies to improve graduation rates from this community college and thereby increase the pool of RNs in North Carolina. Long-term goals include additional studies to verify the themes and potential faculty interventions to support student success.

Limitations, Recommendations, and Implications for Change

Limitations

The study had several limitations related to the targeted population and generalization of the findings. The scope of this qualitative project focused on the perceptions of ADN students self-identified as experiencing academic problems at one rural community college in NC and

therefore was not designed to generalize to other populations. In addition, this study was not designed to test the significance related to interventions for success identified by the participants.

Recommendations

The small sample (4 participants) is a limitation of this project and recommendations include project replication with multiple student populations. The timing for data collection (student interviews were scheduled in December) could have influenced the number of study participants related to "end of semester" workloads as students prepared for fall/spring semester break. Recommendations for future studies include consideration for timing of the project to avoid end-of-semester activities.

Long-term goals at this community college include follow-up studies based on identified themes for comparisons (qualitative and quantitative). A "mixed methods" study including qualitative and quantitative data would add strength to the research findings.

Implications for Change

The improvement in knowledge demonstrated by this project is important to add to the known factors related to student success in ADN programs. There is a scarcity of literature regarding the *students' perceptions* of what places them at risk for academic problems leading to program incompletion. ADN programs in NC operate with admission numbers capped related to clinical space and a limited number of applicants. Not all ADN students admitted to the nursing program graduate and this project provided valuable insights into how faculty can design future strategies for success.

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Appendix A

Systematic Review of the Literature – Exemplar

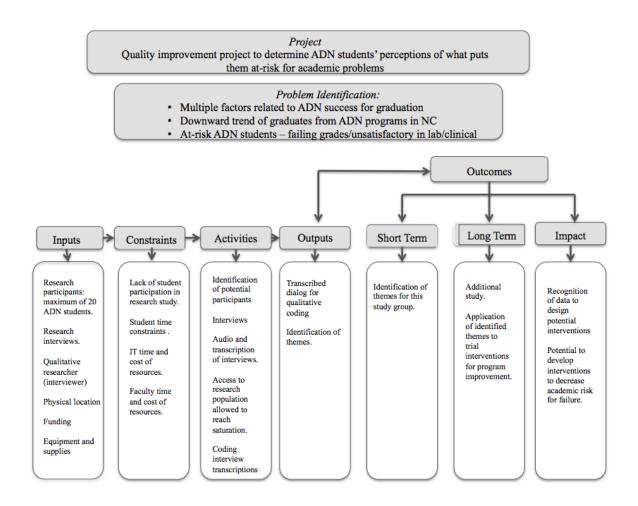
Systematic Review Evidence Table Format: Evidence table format for a systematic review. In J. Houser & K. S. Oman (Eds.), Evidence-based practice: An implementation guide for healthcare organizations (p. 155). Sudbury, MA: Jones and Bartlett.

Article/Journal	Factors Related to Academic Success in At-Risk Senior Nursing Students International <i>Journal of Nursing Education Scholarship</i> , 5, (1). 1-18.
Author/Year	McGann, E. & Thomson, J.M., (2008).
Database/Keywords	CINHAL Plus Full Text: At-risk Nursing Students, Academic Performance, Education, Nursing Students, Nursing Test Taking
Research Design	Quantitative and qualitative approaches were used in this descriptive study. The quantitative approaches included surveys and questionnaires while journal submissions for qualitative data.
Level of Evidence	Level VI: qualitative and single descriptive study.
Study Aim/Purpose	The purpose of this descriptive study was to investigate factors related to academic success for at-risk nursing students.
Population/Sample size Criteria/Power	A convenience sample of 16 participants was enrolled in the study – 13 students were generic baccalaureate students and three were accelerated second-degree students. The sample was drawn from the population of 18 senior students enrolled in Academic Improvement Strategies, a one-credit seminar course offered to students who had failed to meet program requirements.
Methods/Study Appraisal Synthesis Methods	Data consisted of student work products, official academic records, and Mosby Assess Test scores. Participants were asked to create an Individualized Plan for Improvement (IPI) that identified problems, goals, actions, and evaluation criteria.
Primary Outcome Measures/Results	IPI – top-ranked learning barriers included test-taking anxiety, time-management, weak foundation (introductory nursing courses), and heavy course load. The four more common test-taking issues were changing answers, over-thinking answers, not reading the questions carefully, and test anxiety.

Author Conclusions/ Implications for Key Findings	The Academic Improvement Strategies course with mentoring sessions proved to be successful in helping at-risk senior nursing students to significantly improve semester GPA, graduate, and pass the NCLEX-RN. The IPI plan for improvement forced participants to face these issues in a realistic and concrete fashion, making their issues less abstract. Assisted by a faculty mentor, a plan was developed, evaluated, and modified. This assignment empowered students to be accountable and responsible for their daily work.
Strengths/Limitations	Strength – the Academic Improvement Strategies course and faculty mentoring. Limitations – faculty shortages in some nursing programs that could inhibit the creation of this type of course.
Funding Source	None cited.
Comments	Relevant to the quality improvement initiative for this author's PICO study.
	nyk, B. M., & Fineout-Overholt (2005). In Houser, J. & Oman, K. S. actice: An Implementation Guide for Healthcare Organizations. artlett.

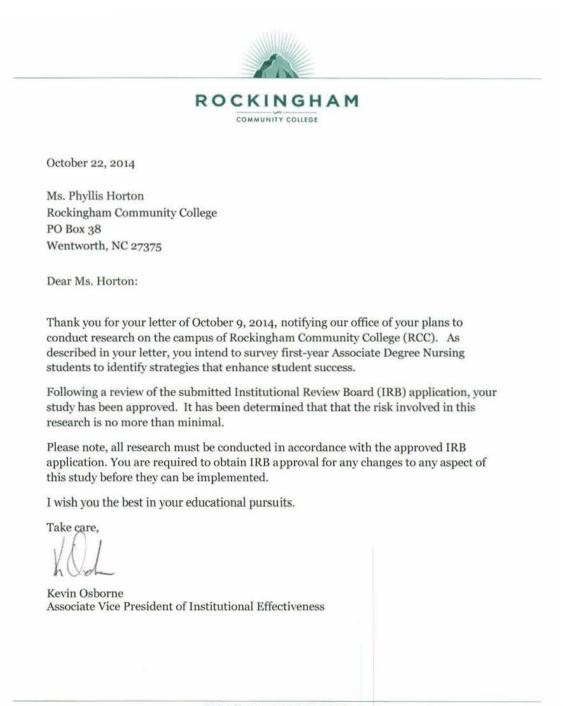
Appendix B

Logic Model



Appendix C

RCC IRB Approval



P.O. Box 38 Wentworth, NC 27375-0038 336.342.4261 Fax 336.349.9986 TTY 336.634.0132 rockinghamcc.edu

Appendix D

Regis University IRB Approval



Academic Grants

3333 Regis Boulevard, H-4 Denver, CO 80221-1099

303-458-4206 303-964-5528 fax www.regis.edu

IRB - REGIS UNIVERSITY

November 25, 2014

Ms. Phyllis Horton 1417 Town Creek Road Eden, NC 27288

RE: IRB #: 14-345

Dear Ms. Horton:

Your application to the Regis IRB for your project, "Perspective of Associate Degree Nursing (ADN) Students Who Are At Risk for Academic Problems", was approved as an expedited study on November 25, 2014. It is approved per OHRP Category of Research #7.

If changes are made in the research plan that significantly alter the involvement of human subjects from that which was approved in the named application, the new research plan must be resubmitted to the Regis IRB for approval. Projects which continue beyond one year from their starting date require IRB continuation review. The continuation should be requested 30 days prior to the one year anniversary date of the approved project's start date. A completion report of the findings of this study should be sent to the IRB.

In addition, it is the responsibility of the principal investigator to promptly report to the IRB any injuries to human subjects and/or any unanticipated problems within the scope of the approved research which may pose risks to human subjects. Lastly, a final report should be submitted at completion of the project and it is the responsibility of the investigator to maintain signed consent documents for a period of three years after the conclusion of the research.

Sincerely,

Patsy Cellon

Patsy McGuire Cullen, PhD, PNP-BC Chair, Institutional Review Board Professor & Director Doctor of Nursing Practice & Nurse Practitioner Programs Loretto Heights School of Nursing Regis University

cc: Dr. Lynn Wimett

A JESUIT UNIVERSITY

Appendix E

Informed Consent

Title: "Perspectives of Associate Degree Nursing (ADN) Students Who Are At Risk for Academic Problems."

Researcher: Phyllis Horton, DNP Student

Description:

This quality improvement initiative will involve collecting interview data from nursing students to gain his or her perceptions of why he or she may feel "at risk" for not graduating from the ADN program and how nursing faculty can best intervene to help them become successful. The interview will take place in an office /conference room that is not located in the Nursing Building (ADT Building). Interviews will be scheduled with a 45-minute break between appointments to prevent student's observing one another enter/leave the conference room.

Voluntary Participation:

Your participation in this project is completely voluntary and will not impact your nursing program status in any way. Participants may cease participation at any time without penalty.

Confidentiality:

No student demographic data will be collected to assure student confidentially. The process for maintaining student confidentially is as follows:

- Research interview data will be coded with random number sets such as 4981, 5823, etc. (not in sequence) to protect the student's identity; no names or identifying data will be collected.
- No one other than the *Research Interviewer* (during the actual interview) will have access to the student's true identity all documents will be coded and no names will be collected.
- Audio tapes will be transcribed with only the number set for identification; audio tapes will be placed in sealed envelopes and locked in the Dean of Health Science's office for a period of three-years post research study, then destroyed. *The Transcriptionist will not have access to the student's identity and will not have contact with any members of the nursing faculty.*
- Interview transcription data will placed in sealed envelopes and locked in the Dean of Health Science's office for a period of three-year post research study, then destroyed.
- Interviews will be scheduled in a conference room that is not located in the Nursing Building.
- Interviews will be scheduled with a 45-minute break between appointments to prevent student's observing one another enter/leave the conference room.

Risk and Benefits:

The Principle Investigator (PI) for this study is presently the Department Chair of the Nursing Programs at the study College. For this reason, Dr. Bettie Little, who has no relationship with study participants, will function as the participant recruiter and interviewer for this project. The PI will not have access to individual participant information. No nursing faculty members or

other employees will know which students chose to participate in this research project or be able to identify data to any particular student. Only themes (aggregate data) will be shared.

Benefits to participants include having a voice and being heard as to what their perceptions are of being at risk and what they think might be helpful to reduce the risks. There is also a potential benefit to participants and future students as faculty gain insight and design additional interventions that include student perceptions of what might be beneficial in helping them achieve academic success.

Informed Consent: I	, have read all of the information within
this	

(Please Print)

informed consent, including the option to withdraw from the study at any time. Each of the items has been explained to me by the research interviewer. The research interviewer has answered all of my questions regarding the study, and I believe I understand what is involved. My signature indicates that I freely agree to participate in the project interview and that I have received a copy of this agreement from the research interviewer.

Signature (Research Interviewer):	
Date:	
Signature (Investigator):	
Date:	

Investigator: Phyllis Horton, MSN, RN Regis University DNP Student 336-688-4023 phorton@regis.edu

For additional information regarding this study, please contact any one of the following:

Lynn Wimett, EdD, APRN-	Patricia Cullen, PhD	Kevin Osborn
C, Capstone Chair	Chair of Regis IRB	Chair of RCC IRB
Regis University	Regis University	Rockingham Community
3333 Regis Boulevard	3333 Regis Boulevard	College
Denver, CO, 80221-1099	Denver, CO, 80221-1099	PO Box 38
303-458-4063	303-964-5132	Wentworth, NC 27375
lwimett@regis.edu	pcullen@regis.edu	336-342-4261
		osbornek@rockingham.edu

Appendix F

Participant Recruitment Letter

Dear Student

As a first year student in the Rockingham Community College Associate Degree Nursing program, you are being invited to participate in a Doctor of Nursing Practice Quality Improvement Project designed to give students a voice as to what they believe may put them at academic risk and how they perceive faculty could help them be more academically successful. Your perceptions will help our faculty update interventions designed to assist students to successfully complete the ADN program and pass the RN licensure examination.

This research project involves participation in an interview (approximately 30-40 minutes) with the *Research Interviewer* (Dr. Bettie Little) to answer the following:

• What do you feel places you at-risk of not completing the ADN program and how can nursing faculty best intervene to help you become more successful?

Your choice to participate is voluntary and will not impact student's nursing program status in any way. Informed consent will be obtained prior to scheduling an interview. Participants may cease participation at any time without penalty. No student demographic data will be collected to assure student confidentially. Maintaining student confidentiality will be as follows:

- Research interview data will be coded with random number sets such as 4981, 5823, etc. (not in sequence) to protect the student's identity; no names or identifying data will be collected.
- No one other than the *Research Interviewer* (during the actual interview) will have access to the student's true identity – all documents will be coded and no names will be collected.
- Audio tapes will be transcribed with only the number set for identification; audio tapes will be placed in sealed envelopes and locked in the Dean of Health Science's office for a period of three-years post research study, then destroyed. *The Transcriptionist will not have access to the student's identity and will not have contact with any members of the nursing faculty*.

- Interview transcription data will placed in sealed envelopes and locked in the Dean of Health Science's office for a period of three-years post research study, then destroyed.
- Interviews will be scheduled in a conference room that is not located in the Nursing Building.
- Interviews will be scheduled with a 45-minute break between appointments to prevent student's observing one another enter/leave the conference room.

Thank you in advance for consideration of your voluntary participation. Should you be interested, the data analysis will be complete in June, 2015 and I would be happy to share the research information with you.

Sincerely,

Phyllis Horton, MSN, RN

For additional information regarding this study, please contact any one of the following:

Lynn Wimett, EdD, APRN-C, Capstone Chair Regis University 3333 Regis Boulevard Denver, CO, 80221-1099 303-458-4063 lwimett@regis.edu Patricia Cullen, PhD Chair of Regis IRB Regis University 3333 Regis Boulevard Denver, CO, 80221-1099 303-964-5132 pcullen@regis.edu Kevin Osborn Chair of RCC IRB Rockingham Community College PO Box 38 Wentworth, NC 27375 336-342-4261 osbornek@rockingham.edu

Appendix G

CITI Training Documentation

COLLABORATIVE INSTITUTIONAL TRAINING INITIATIVE (CITI)

HUMAN RESEARCH CURRICULUM COMPLETION REPORT

Printed on 06/07/2014

LEARNER DEPARTMENT EMAIL INSTITUTION EXPIRATION DATE Phyllis Horton (ID: 4199160) Nursing phorton@regis.edu Regis University 06/06/2017

SOCIAL BEHAVIORAL RESEARCH INVESTIGATORS AND KEY PERSONNEL

COURSE/STAGE: PASSED ON: REFERENCE ID: Basic Course/1 06/07/2014 13182195

REQU	IRED N	ODULES
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Introduction History and Ethical Principles - SBE The Regulations - SBE Assessing Risk - SBE Informed Consent - SBE Privacy and Confidentiality - SBE Regis University 06/06/14 06/07/14 06/07/14 06/07/14 06/07/14 06/07/14 06/07/14

DATE COMPLETED

For this Completion Report to be valid, the learner listed above must be affiliated with a CITI Program participating institution or be a paid Independent Learner. Falsified information and unauthorized use of the CITI Program course site is unethical, and may be considered research misconduct by your institution.

Paul Braunschweiger Ph.D. Professor, University of Miami Director Office of Research Education CITI Program Course Coordinator

Appendix H

Project Interview Question

Title: "Perspectives of Associate Degree Nursing (ADN) Students Who Are At Risk for Academic Problems."

Research Interviewer: PhD – Nurse Educator

PICO Project Interview Question:

"What do you feel places you at-risk of not completing the ADN program and how can nursing faculty best intervene to help you become successful?"

Follow-Up Responses:

- "What do you mean by...?"
- "Can you tell me more about...?"
- "Can you give me an example?"
- "You mentioned that...can you tell me more...?"