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# Perceived Factors Contributing to NCLEX-PN Success Rates: A Case Study of a High Performing Practical Nursing Program in Pennsylvania

Lisa Shustack

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PERCEIVED FACTORS CONTRIBUTING TO NCLEX-PN SUCCESS  
RATES: A CASE STUDY OF A HIGH PERFORMING  
PRACTICAL NURSING PROGRAM IN PENNSYLVANIA

A Dissertation

Submitted to the School of Graduate Studies and Research

in Partial Fulfillment of the

Requirements for the Degree

Doctor of Education

Lisa M. Shustack

Indiana University of Pennsylvania

August 2017

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Title: Perceived Factors Contributing to NCLEX-PN Success Rates: A Case Study of a High Performing Practical Nursing Program in Pennsylvania

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The purpose of this qualitative case study was to explore the perceptions of what contributes to NCLEX-PN success rates within a high performing Practical Nursing program in Pennsylvania. To satisfy this purpose, the Community College of Beaver County's Practical Nursing program was selected for the case study based upon a NCLEX-PN success rate of 100% for the past 10 out of 11 years. Although the literature is saturated with specific academic elements such as admission policies, standardized testing scores, high stakes testing, or GPA in correlation with overall program success; this study brought forth the link between the human intrinsic characteristics present in the educational system of a program achieving exceptional success. Through the use of vignettes, insight is provided into the deeper patterns of success as experienced by those involved in the Practical Nursing program. Each vignette blossomed from the analysis of interviews, artifacts, and observations collected during the study.

Thematic analysis of the data unveiled eight themes of program similarity, communication, collaborative intellect, meaningful purpose, passion, binding relationships, intellectual aerobics, and altruism which were presented in vignette form to tell the story of one program's success. The themes were then filtered through the theoretical framework of system's theory which ultimately organized and prioritized the themes into a dynamic new Human Essence of Education: A System's Model. The Human Essence of Education: A System's Model presents a new way of thinking about and evaluating educational systems.

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## CHAPTER 1

### INTRODUCTION

One of the most prevalent issues facing the nursing profession is the current and projected shortage of nurses. As a result, a shortage of nursing faculty within all types of nursing programs exists as the number of nurses leaving clinical practice to enter academia continues to decline (American Association of College of Nursing, 2015). The public awareness of the nursing shortage has led to an increase in applicants in all levels of nursing programs only to be turned away (Brady, 2007). Although there are multiple factors resulting in applicant rejection, one of the most prevalently documented throughout the literature since the early 1990s is the shortage of nursing faculty (DeYoung & Bliss, 1995; Hinshaw, 2001; World Health Organization, 2002; Cash, Daines, Doyle, Von Tettenborn, & Reid, 2009; Carlson; 2015). The shortage of nursing faculty then continues to perpetuate the shortage of nurses in clinical practice settings. Therefore, addressing nurse faculty retention and student academic success within all nursing academic settings becomes imperative.

Practical Nursing administrators need to evaluate multiple factors including organizational climate and program success on the State Board of Nursing licensing examination (NCLEX-PN) strategically to support recruitment and retention of students and faculty. Practical Nursing administrators are responsible for leadership behaviors that influence the overall effectiveness of Practical Nursing programs and Practical Nursing faculty. Garbee and Killacky (2008) reported that a supportive administrator influenced faculty satisfaction while extremes in leadership behavior led to dissatisfaction. As a component of the leadership role, Practical Nursing administrators must work to establish and share a vision for the department and are responsible for creating the organizational climate. There is a significant amount of literature correlating nursing department chair's leadership style to organizational climate as perceived by

nursing faculty within Associate Degree and Baccalaureate Degree programs (Hausssler, 1988; Kennerly, 1989; Disch, Edwardson, Adwan, 2004; Cash, Doyle, Von Tettenborn, Daines, Faria, 2011; Mintz-Binder, 2014). To date, there is no nursing education research conducted specifically on the link between the intricacies of the workplace and achieving program success.

The shortage of nurses both in the clinical and academic setting places a strain on nursing education programs. In an attempt to supply the health care field with more nurses' educational programs have responded by increasing enrollment. The effect of this response is challenged by the shortage of faculty to teach, limited clinical site experiences, and lowering benchmarks for admission. Moreover, schools of nursing continue to feel the pressure to produce high performing students who will ultimately be successful on the State Board of Nursing Licensure Examination-Practical Nursing (NCLEX-PN). This case study explores the perceptions of what contributes to NCLEX-PN success rates within a high performing practical nursing program in Pennsylvania.

### **Statement of the Problem**

The Pennsylvania State Board of Nursing continually monitors each nursing education program and designates approval status based upon meeting the minimum threshold standard. The State Board of Nursing evaluates educational programs on many different variables including curriculum, faculty requirements, clinical sites, educational facilities, policies, and student body. Although each of the variables represent significant components of the educational program, a substantial factor in gaining State Board approval stems from the program's yearly NCLEX pass rates. Prior to 2008 approval status for Practical Nursing programs was set at a minimum pass rate of 60% of its first-time examinees during an examination year (PA State Board of Nursing, 2009). For the following two consecutive years the minimum standard was

increased by 10% each year. Therefore, as of October 1, 2010 approval status for Practical Nursing programs was set at a minimum of 80% (PA State Board of Nursing, 2009). Programs that fall below that benchmark are in jeopardy of potential loss of approval status from the State Board of Nursing. Therefore, programs of learning are faced with the need to conduct comprehensive program evaluation in order to provide high quality educational programs that will ultimately lead graduates to success on the NCLEX-PN. To that end, there is no research on an exemplary program model for Practical Nursing education within the literature.

### **Purpose of the Study**

The purpose of this case study was to determine what perceived factors lead to student success on the NCLEX-PN within a high performing Practical Nursing program within Pennsylvania. Accordingly, this study analyzed research participant's stories of their experiences and how they perceive they successfully created a Practical Nursing program that has achieved 100% NCLEX-PN pass rates for 11 out of the previous 12 years (PA State Board of Nursing, 2015). The central phenomenon explored was the learning organization as a whole and the perceived specific components that link to program success. Conducting a case study analysis of one high-performing program could provide an exemplar model that may be replicated by other Practical Nursing programs across Pennsylvania. In addition, understanding current successful organizational components could provide a platform for future growth and expansion of Practical Nursing programs.

### **Research Question**

The qualitative case study of a selected Practical Nursing program was guided by one all-embracing research question:

1. What factors contribute to the program's success rates on the NCLEX-PN in a top rated Practical Nursing program in Pennsylvania as perceived by the program's stakeholders?

The stakeholders are identified as the administrators, faculty, staff, and students within a top rate practical nursing program in Pennsylvania. In order to maintain participant and site confidentiality pseudonyms will be utilized throughout the study. The research question focuses on extracting an understanding of the perceptions related to individual student success, the factors that may contribute to program success, and the overall responsibility and accountability of the nursing education program for providing high quality education that will ultimately lead graduates into the practice of the profession through success on the NCLEX-PN.

### **Significance of the Problem**

The nursing profession continues to work diligently to combat the issue of the nursing shortage in all types of nursing education programs. Consequently, approximately two-thirds of nursing programs are unable to admit all qualified applicants due to faculty shortages (American Association of Colleges of Nursing, 2015). Also, a significant amount of the nurse faculty workforce is nearing retirement age proposing a future deficit (American Association of Colleges of Nursing, 2015), just as the rapid growth in the population of older adults perpetuates the need to educate more nurses to supply the future demand (Sade, 2012). The rapid growth in the elderly population from 2010 to 2030 is projected to increase from 12.6% to 19.3% within the United States (Hobbs, 2010). However, the numbers correlate with the need to increase the nursing workforce to care for this growing population. Recent trends in health care have transformed the role of the Licensed Practical Nurse (LPN) to settings such as long term care, assisted living facilities, and home care/community nursing. Therefore, as the projections of the geriatric



population continues to grow so does the future need for licensed caregivers to work in those areas. These issues support the need to increase the number of students entering Practical Nursing programs as well as to graduate successful candidates ready to enter the profession.

Increasing the number of graduate nurses entering the workforce and the growing high standards set by the State Board of Nursing presents unique challenges for nursing educational programs. Fitzgerald, Kantrowitz-Gordon, Katz, and Hirsch (2012) described the specific challenges facing nursing education as the need for curriculum revision, an increase in the use of simulation, and the need for nurse educators to work closely with stakeholders to create lasting educational change. In addition, as nursing education programs strive to meet these challenges they must also remain cognizant of the benchmark standard for NCLEX-PN success rates in order to obtain continued State Board approval.

Nationally, each state sets the standard for attaining minimal approval status. Within Pennsylvania, if a program falls below the threshold of 80% the program is placed on provisionary status and must initiate a remediation plan with corrective actions. The school must demonstrate improvement within the next two consecutive years to avoid State Board approval denial. In 2016 the NCLEX-PN pass rate was 83.73% within Pennsylvania (National Council of State Boards of Nursing, 2015). Therefore, it becomes evident that many Practical Nursing programs across the state of Pennsylvania are struggling to just meet the minimum standard in order to sustain the future of their program.

On the contrary, one Practical Nursing program within Pennsylvania has been able to successfully demonstrate resilience when faced with the many challenges facing nursing education. A nursing expert website ranked Pine County Community College's (PCCC) Practical Nursing program as a top rated program in Pennsylvania in 2015. The organization reviewed the

results of the NCLEX-PN over the past five years and it was determined that PCCC has achieved a 100% pass rate for 11 out of the last 12 years.

## **Background**

Located in rural Pennsylvania, 40 miles west of Pittsburgh, Pine County Community College is situated in western Pennsylvania. The Practical Nursing program accepts 20 students and is a 12-month program running from January to December. The Pine County Community College's Practical Nursing Program is geographically surrounded by four other Practical Nursing Programs which have very similar admission criteria, curriculum, academic standards, and program accreditation. In comparison, PCCC is the only program able to achieve the 100% NCLEX-PN pass rates when drawing potential applicants from the same geographic location with similar admission and academic progression criteria. Table 1 portrays a comparison of admission criteria and academic requirements from PCCC with Practical Nursing Programs in close geographic proximity.

Table 1

*Comparison of Practical Nursing Programs in Surrounding Geographic Location to PCCC*

School	Admission Testing/ College Level Course- Work	Preadmission Interview	Nursing GPA	Accreditation
PCCC	Yes	National League for Nursing PN Admission Test - Minimum of 73%	Grade of “C”	Middle States Accreditation of College and Schools
Practical Nursing School “A”	Yes	PSB Aptitude for PN Admission Test - Minimum cut score 45 <sup>th</sup> percentile, 25 <sup>th</sup> percentile for reading, or earned 2.5 GPA in post-secondary college level coursework	Grade of “C”	Accreditation Commission for Education in Nursing
Practical Nursing School “B”	Yes	TEAS V total score of 50 or a minimum score of 45 with a reading score of 60 or greater	Grade of “C”	Accreditation Commission for Education in Nursing
Practical Nursing School “C”	Yes	TEAS V total score of 60	Grade of “C”	Accreditation Commission for Education in Nursing
Practical Nursing School “D”	Yes	TEAS total score of 43.3	Grade of	Middle States Association of of College and Schools

*Note:* Information obtained from Practical Nursing Program websites.

Table 2 presents the comparison of first-time NCLEX-PN pass rates from the same competitive schools within close geographic proximity of CCBC from 2005 to 2015.

Table 2

*NCLEX-PN Performance of First-Time Candidates from 2005-2015*

PN Program	2005 %	2006 %	2007 %	2008 %	2009 %	2010 %	2011 %	2012 %	2013 %	2014 %	2015 %
PCCC	100	100	100	100	100	100	100	100	100	90.00	100
Practical Nursing School “A”	87.04	91.78	94.74	87.50	86.36	88.10	92.73	83.33	89.33	75.76	75.00
Practical Nursing School “B”	77.97	70.18	87.72	92.00	87.10	90.63	97.47	88.71	97.14	95.00	85.53
Practical Nursing School “C”	-	-	-	-	-	First Class	100	86.67	89.47	84.06	66.23
Practical Nursing School “D”	77.78	80.56	73.53	86.11	81.48	90.48	89.06	87.50	89.47	97.44	86.00

*Note:* Obtained from the NCSBN – Report Rolling Quarters – Numbers and Percent Passing of First-Time Candidates Educated in BON/RB Jurisdictions 2005-2015.

Table 3 provides an overview of the average NCLEX-PN pass rates within Pennsylvania over the past six years. Prior to 2008 approval status for Practical Nursing programs was set at a minimum pass rate of 60% of its first-time examinees during an examination year (PA State Board of Nursing, 2009). For the following two consecutive years, the minimum standard was increased by 10% each year. Therefore, as of October 1, 2010 approval status for Practical Nursing programs was set at a minimum of 80% (PA State Board of Nursing, 2009). Furthermore, in 2013 the National Council of State Board of Nursing (NCSBN) Board of Directors voted to revise the passing standard from -0.27 to -0.21 logits (NCSBN, 2013).

According to the NCSBN (2013), a logit is defined as a unit of measurement to report relative differences between candidate ability estimates and test item difficulty. The change to the passing standard accompanied the revised NCLEX-PN test plan implemented April 1, 2014 and was to remain in effect until March 31, 2017 (NCSBN, 2015). The 2015 NCLEX-PN pass rate average of 82.08% prompted the NCSBN Board of Directors to vote on allowing the passing standard to remain at -0.21 logit without an increase to the passing standard. The historic vote not to raise the passing standard resulted in only an increase of 1.59% to the average NCLEX-PN pass rate to 83.73% in 2016 (NCSBN, 2017). Moreover, the NCSBN Board of Directors voted to allow the passing standard to remain at -0.21 logit until March 31, 2020. Therefore, many schools of nursing continue to struggle in achieving minimum program success on the NCLEX-PN.

Table 3

*Pennsylvania NCLEX-PN Pass Rate Average*

Year	Number of Test Takers in Pennsylvania	Pass Rate %
2015	2,456	82.08
2014	2,512	85.75
2013	2,677	88.14
2012	2,677	90.03
2011	2,470	90.28
2010	2,266	89.67

*Note:* Obtained from NCSBN – Rolling Quarters – Jurisdiction Program Summary of all First-Time Candidates Licensed in all Jurisdictions 2010-2015.

The comparison of the surrounding schools drawing from the same geographic location of potential applicants presents a picture that PCCC is similar in admission and academic progression within the Practical Nursing Program as compared to the competitive practical nursing programs. Therefore, the ability of PCCC to achieve a 100% NCLEX-PN pass for 11 out

of the previous 12 years is an extraordinary case as no other program has been able to achieve such a significantly high pass rate consistently. Furthermore, a few of the programs did not achieve the minimum passing standard of 80% indicating provisional approval status by the Pennsylvania State Board of Nursing. When the comparison of programs reveals similarities within the admission and academic progression, determining what distinguishes a program that performs exceptionally well from those who underperform warrants further exploration and supports the intent of this study.

The performance standard of exceptionally high NCLEX-PN pass rates comprised the inclusion criteria for this case study. The NCLEX-PN is a test that is administered to all Practical Nursing graduates and is meant to ensure that each nurse is competent and can practice safely as a new nurse. The NCLEX-PN is developed by the National Council of State Boards of Nursing to measure the minimum knowledge, skills, and abilities required to deliver safe, effective nursing care at entry level (NCSBN, 2016). Based upon the definition of a NCLEX entry-level nurse, the Pine County Community College has produced the most prepared new graduate nurses over the past 11 years as compared to any other Practical Nursing Program in the surrounding area as well as within the state of Pennsylvania. Therefore, this qualitative case study guided by organizational theory, specifically Senge's (1999, p. 129) concepts of "Shared Vision, Mental Modeling, Team Learning, and Systems Thinking" utilizing PCCC's Practical Nursing program is significant for the following reasons:

1. The findings will contribute to a more comprehensive understanding of the perceived factors which contribute to program success on the NCLEX-PN.
2. The findings will contribute to a more comprehensive understanding of the variables which inhibit program success on the NCLEX-PN.

3. The findings will reveal how organizational structure influences program success.
4. The findings will assist Practical Nursing administrators and faculty across Pennsylvania in conducting program evaluation focused on improving NCLEX-PN pass rates.
5. The findings may contribute to the development of an exemplary organizational model that can guide nursing program development and evaluation.

### **Methodology**

To identify and analyze how one particular school of nursing has consistently achieved high success rates on the NCLEX-PN, a qualitative case study utilizing a grounded theory design through the use of in-depth semi-structured interviews and artifact analysis was used for the research. A grounded theory methodology was appropriate since the goal of the investigation was to generate a theory from the phenomenon (Heath & Crowley, 2004). Additionally, grounded theory is appropriate since the intent of the study was to investigate the research question of what perceived factors lead to NCLEX-PN success within one Practical Nursing program and evaluate how those factors developed a theory of success grounded in those perceptions (Strauss & Corbin, 1994). The study used semi-structured interviews and existing literature to explore the perceptions of administrators, faculty, staff, and students on factors that contribute and hinder overall program success. The in-depth semi-structured interview was appropriate for the study because it explored how members of the practical nursing program interpret the positive elements of the academic program. Furthermore, insight from the semi-structured interviews provided knowledge on the organizational climate of a high performing nursing education program. The literature analysis grounded in organizational theory, specifically Senge's (1999) perspective on Systems Thinking illuminated the theoretical

framework. Analyzing existing documentation was appropriate since it substantiates and guides interview data (Yin, 2003).

### **Limitations**

The following limitations were considered:

1. The participants included those from one Practical Nursing program in the state of Pennsylvania and may not be completely reflective of Practical Nursing programs across the state. Therefore, generalizing the outcomes will require analysis of the specific variables common within multiple Practical Nursing programs. Interpretation of the results will be subject to applicability of individual program circumstances.
2. The semi-structured interviews are limited to the participant's willingness to respond candidly.
3. The potential exists of interview respondent's positive inflation regarding the program due to the nature of the study.
4. The Practical Nursing program utilized in this case study is set within a community college setting and therefore, programs from different types of educational institutions may not have the resources available and thus, the results may not be applicable to their program.
5. The role of Practical Nursing faculty varied in the number of hours worked and numbers of courses taught per year which may have influenced perceptions.
6. The findings have a limited ability to generalize findings to Associate Degree and Baccalaureate Degree nursing programs due to the differences in State Board program regulations.



## Definition of Terms

1. *Licensed Practical Nurse*: “A Licensed Practical Nurse (LPN) is one that provides care to the ill, injured, or infirm under the direction of a licensed professional nurse, a licensed physician, or a licensed dentist who does not require the specialized skill, judgment, and knowledge required in professional nursing” (Pennsylvania State Board of Nursing, 2015, p. 32).

2. *Practical Nursing Administrator/Coordinator*: A Practical Nursing Administrator/Coordinator is a registered professional nurse responsible for planning, organizing, supervising, and directing the Practical Nursing department operations (Pennsylvania State Board of Nursing, 2015, p. 21-60).

3. *Practical Nursing Faculty Member*: “A Practical Nursing faculty member who is either full-time or part-time didactic or clinical instructor within a Pennsylvania State Board of Nursing approved Practical Nursing program that has no administrative duties” (Pennsylvania State Board of Nursing, 2015, p. 21-61).

4. *National Council of State Boards of Nursing Examination – Practical Nursing (NCLEX-PN)* – The NCLEX-PN is designed to test knowledge, skills and abilities essential to the safe and effective practice of nursing at the entry level (Pennsylvania State Board of Nursing, 2015).

5. *NCLEX-PN Program Success*: According to the Pennsylvania State Board of Nursing (2015)

A nursing education program shall prepare its graduates to pass the National licensure examination at a rate at least equal to the minimum rate set by the Pennsylvania State Board of Nursing. The minimum rate for graduates to pass the National licensure examination is as follows: Beginning on October 1, 2010, a nursing education program shall achieve and maintain a minimum pass rate of 80% or more of its first-time

examinees during an examination year (Pennsylvania State Board of Nursing, 2015, p. 21-56.2).

6. *Examination year*: The period beginning on October 1st of a year through September 30th of the following year (Pennsylvania State Board of Nursing, 2015).

7. *Shared Vision*: “A collective discipline establishing a focus on mutual purpose” (Senge, 1999, p. 191).

8. *Mental Model*: “A reflection and inquiry skill focusing around the development and awareness of attitudes and perceptions” (Senge, 1999, p. 163).

9. *Team Learning*: “A discipline of group interaction that transforms collective thinking and mobilizes the energy into action to achieve common goals” (Senge, 1999, p. 216).

10. *Systems Thinking*: “The ability to identify, learn and understand interdependency and change” (Senge, 1999, p. 27).

### **Summary**

This chapter introduced the purpose of the qualitative research study to uncover the perceived factors that contribute to NCLEX-PN success rates in the top rated Practical Nursing program within Pennsylvania. Through the use of a qualitative case study the specific elements related to program success were uncovered. Senge’s (1990) organizational theory on System’s Thinking served as the theoretical foundation for this study and guided the development of the semi-structured interview questions. Uncovering the specific elements related to program success within this unique case could enable the results to be conceptualized for the benefit of other educational programs. The limitations and implications for the nursing education programs were discussed. The subsequent chapter will include a review of the literature and a theoretical

overview of organizational theory, specifically Senge's theory on Systems Thinking, and historical significance of the NCLEX-PN.

## CHAPTER 2

### LITERATURE REVIEW

Nursing education continues to work diligently to prepare safe and competent nurses to adequately combat the increasing demand for practicing nurses (Sade, 2012). Nursing education programs have attempted to supply the growing need for nurses by increasing enrollment and decreasing attrition rates (Brady, 2007). Although increasing enrollment and retention is financially beneficial for the academic organization it raises concern about the quality of the graduate nurse entering the workforce (Sade, 2012). In order to protect the public from unsafe and ineffective nursing care, each State Board of Nursing (SBN) is responsible for regulating the practice of nursing which begins by having graduate nurses take a licensing examination for entry into practice (PA State Board of Nursing, 2009).

The National Council Licensure Examination for Practical Nursing (NCLEX-PN), developed by the National Council of State Boards of Nursing (NCSBN) is used by state board jurisdictions to grant permission to graduate nurses to engage in nursing practice (PA State Board of Nursing, 2009). Licensure is necessary due to the complexity and specialized knowledge and skill related to the practice of practical nursing (PA State Board of Nursing, 2009). According to the Pennsylvania State Board of Nursing (2009) in order “to ensure that the passing standards for the exam accurately reflect the amount of nursing ability currently required to practice competently at entry level, the NCSBN’s Board of Directors re-evaluates the passing standards every three years when the test plans are reviewed (p. 3).” Prior to 2008 approval status for Practical Nursing programs was set at a minimum pass rate of 60% for first-time test examinees during an examination year (PA State Board of Nursing, 2009). For the following two consecutive years the minimum standard was increased by 10% each year (PA State Board of

Nursing, 2009). As of October 1, 2010 approval status for Practical Nursing programs was set at a minimum of 80% (PA State Board of Nursing, 2009). In 2015, the overall NCLEX-PN pass rate was 82.14% among schools of nursing within Pennsylvania (National Council of State Boards of Nursing, 2015). Therefore, it is evident that many schools of nursing are struggling to meet the minimum standard and maintain State Board program approval. The following literature review investigated the history of practical nursing, entry into practice, the nursing shortage, the future of practical nursing, academic and non-academic variables as predictors of success, students at-risk, and contributing factors to nursing program success. For the purpose of this study, program success is defined as consistently achieving high pass rates on the NCLEX-PN. Moreover, the literature analysis grounded in organizational theory, specifically Senge's (1999) perspective on System's thinking constructed the theoretical framework.

Using EBSCO Host, ProQuest database, OVID, Cumulative Index to Nursing and Allied Health Literature (CINAHL), and SAGE research methods the following key terms were searched: *Practical Nursing Education, Nursing Shortage, Predictors of Academic Success, Entry into Nursing Practice, Predictors of Nursing Academic Success, At-Risk Nursing Students, Organizational Learning, and System's Thinking*. The advanced search options were utilized to limit the search for Peter Senge's work on System's thinking. An Internet search of Websites was also utilized to research information from the Pennsylvania State Board of Nursing on NCLEX-PN pass rates, the history of the examination and NCLEX-PN test blueprint. Finally, The Bureau of Labor Statistics was also researched to investigate the projected workforce demands for Practical Nurses.

## **History of Practical Nursing**

The history of practical nursing dates back to the mid-1800s and has been historically shaped by the demands of society. Historically, no formal education was available for those who provided the earliest care for the sick or infirmed. At that time, the art of nursing care was based on oral tradition and had minimal scientific influence. The majority of the care provided for the ill occurred in the home unless the ill were ostracized which then led to placement in a hospital setting (White, 2001). Early hospitals were mainly organized and operated by religious nuns and monks who devoted their lives to care of the infirm (Egenes, 2009). The first significant leadership influence in nursing was made by Florence Nightingale who historically altered the future of nursing and nursing education.

Florence Nightingale was born into a wealthy British family. Despite her formal upbringing and education Florence decided to embrace and dedicate her life to the service of humanity. Although this work was considered undignified for a women of Florence's social class, she studied for two weeks at a hospital in Germany and learned basic care providing skills (Richards, 2014). During the 1854 Crimean War, Nightingale gathered a band of women drawn from the upper class to travel to Crimea to provide care for the wounded soldiers (Richards, 2014). Florence drew on her formal education and used that knowledge to improve the care provided to the sick and dying soldiers (Richards, 2014). The removal of dirt from wounds, cleansing of the wards and infirmaries, along with the importance of sunshine and fresh air was revolutionary and laid the foundation for modern evidence-based practice (Richards, 2014).

### **The Influence of War on Practical Nursing**

Within a decade of the work started by Florence Nightingale, the Civil War erupted in the United States. Thousands of American women volunteered their service during the Civil War.

Although the women had no formal training to provide care, the services they rendered to the wounded and dying soldiers provided the groundwork for professional nursing within the United States. The Civil War also helped to change the public opinion of the role of women's work as nurses and the importance of formal education (White, 2001). Many of the nurses who served during the Civil War made significant leadership contributions to the profession and practice of training future nurses.

During World War I the United States had a shortage of nurses. At that time, military service was only offered to graduates of nurse training programs. However, due to the exceeding demand for nurses, high-society women unwilling to commit to formal education programs pressured the government for the right to serve as volunteers. Although nurses were greatly needed, nurse leaders at that time held steadfast to the regulation that only trained nurses were permitted to serve in the military. In 1918, an attempt to recruit more college prepared nurses led Vassar College to develop a 12-week training program for nurses. The training program at Vassar provided students with basic care giving skills. Additionally, The Army School of Nursing was formed to help train more practical nurses to fill the absent roles both in the military and in civilian hospitals within the United States. The Army School of Nursing provided a high standard of education and served as a model for nursing schools within the United States (Jensen, 1950).

Following WWI, many of nurses who volunteered to serve returned home and did not continue to work in nursing. As a result, during World War II, there was once again a shortage of nurses in the United States. The need for practical nurses to provide basic level care soared in response to this demand. Practical nurses began being formally educated in basic medical knowledge and the delivery of hands-on nursing care. Practical nurses worked under the

supervision of the Registered Nurse (RN) which made it possible for the RN to care for more patients. It was the high demand for nurses during this time which initiated the U.S. government's funding for nursing education programs in order to increase the supply of nurses and improve the quality of nursing education.

### **Formalized Education for Practical Nurses**

In 1941 the National Association for Practical Nursing Education and Service (NAPNES) formed and became the accrediting body for practical nursing training programs from 1945 to 1984. The National Federation for Licensed Practical Nurses (NFLPN) was established to evaluate the skills and training programs for practical nursing. In 1951, the Board of Vocational Nurse Examiners (BVNE) was created with the intent to grant waivers to practice for nurses who had health care experience or physician affidavits attesting to their skill level. Throughout that time, nurse leaders continued to lobby for regulation of practicing nurses through a mandated entry into practice standard. The first national examinations for practicing nurses were initiated in 1952 and the waiver system was eliminated. By 1955, licensing was done at that state level and each state had their own practice regulations for both Registered Nurses and Licensed Practical Nurses (LPNs).

During the 1960s and 1970s a dramatic formalization of practical nursing education erupted in order to meet professional competencies and accreditation standards. During the 1980's nursing leaders began conversations regarding the differentiation of roles between all levels of nursing including Licensed Practical Nurses, diploma prepared Registered Nurses, Associate Degree Registered Nurses (ADN), and Baccalaureate Degree Registered Nurses (BSN) in order to establish a standardized level of entry into practice. Unfortunately, that time



saw another shortage of practicing nurses and the conversation halted and the topic was left undecided.

Currently, the boards of nursing within each state serve to protect the public's health and welfare by assuring safe and competent nursing care practice by licensed nurses (PA State Board of Nursing, 2016). The subsection of the state board of nursing, the National Council of State Boards of Nursing (NCSBN) sets the initiatives for the board of nursing in their role of regulating nursing education programs (PA State Board of Nursing, 2016). Although curriculums vary within nursing education programs, each program must obtain approval status based upon meeting minimal competency in the standards set forth by the board. Furthermore, graduates from each approved nursing program must take a standardized licensure examination prepared by the NCSBN in order to practice nursing in each state.

### **Entry into Nursing Practice**

The debate over the minimum qualifications for nurses to enter into the practice of professional nursing started following the 1965 American Nurses Association (ANA) position paper advocating that the baccalaureate degree be the minimum degree for entry into registered nurse practice. Complicating the debate is the evidence that hospital use of licensed practical nurses (LPNs) declined since the 1980s (Spetz, J., Dyer, W. T., Chapman, S., & Seago, J. A., 2016; Akien, Sochalski, & Anderson, 1996; Buerhaus & Staiger, 1999). Although it has been more than a half century since the publication of the ANA's position paper there still remains four distinct levels of entry into the practice of nursing: Licensed Practical Nurse (LPN); Diploma Registered Nurse (RN); Associate Degree Registered Nurse (ADN); and Baccalaureate Degree Registered Nurse (BSN). Moreover, there is no standard curriculum and students completing the diploma registered nurse program along with the ADN and BSN graduates all

take the same pre-licensure examination and are eligible for practice as a registered nurse. As a result, nurses are the least educated members of the health care team among all of the interdisciplinary colleagues which they collaborate (Taylor, 2008). The following will present the debate over the significance of each level of nursing and conclude with encouragement and support of two levels of nursing the licensed practical nurse and the professional registered nurse having a baccalaureate degree for entry into practice.

### **Healthcare Complexity: The Need for Baccalaureate Prepared Registered Nurses**

The recent advancements in the health care industry have placed increasingly high demands on nurses to provide the highest quality care based upon excellent clinical making decisions. As a result, nursing education programs have restructured curriculums to meet these ever-changing demands and ensure that graduates are adequately prepared to meet the challenges of entry into practice. Aiken, Clarke, Cheung, Sloane, and Silber (2003) conducted a cross-sectional analysis of outcomes data on 168 adult-care general hospitals operating in Pennsylvania in 1999 and found an association between the number of nurses holding a bachelor's degree and a decrease in both the likelihood of patients dying within 30 days of admission and lower surgical mortality rates. Delaney and Piscopo's 2007 phenomenological study explored the experience of associate degree nurses transitioning to the baccalaureate role and found that after completing the additional education nurses described their enhanced ability to move beyond old patterns of thinking and critically analyze the complexity of the human experience. Furthermore, Delaney and Piscopo's 2007 study revealed that once the associate degree nurse completed the baccalaureate education they believed that they had better critical thinking skills and enhanced professionalism which is also consistent with findings from Brown, Alverson, and Pepa (2001) and Phillips, Zimmerman, and Mayfield (2002). Delaney and Piscopo (2004) reported a

correlation between a higher education level of the nurse and higher job satisfaction. Rush, Waldrop, Mitchell, and Dyches (2005) reported that students who obtained a baccalaureate degree described themselves as becoming professionals with awareness of enhanced knowledge and increased assessment skills. Although these findings support the need for the baccalaureate degree as entry into professional practice Smith (2010) noted the lack of internal cohesion within the nursing community as a major obstacle in achieving this initiative. Regardless, the Institute of Medicine's (2010) recommended that 80% of RNs be BSN prepared by 2020. Unfortunately, nursing continues to be the least educated of all the major health care professionals (Domino, 2005) and yet the argument continues that the associate degree provides adequate preparation for entry into practice (Taylor, 2008).

### **The Role of the Associate Degree Registered Nurse**

The development of the associate degree two-year program expanded rapidly during the 1960s in response to the need to quickly educate more nurses to supply the growing demand (Taylor, 2008). To this day, the proponents in support of the associate degree registered nurse (ADN-RN) imply that many of the issues facing the nursing profession may be addressed by expanding the role of the AND-RN. Starr (2009) suggests that the ADN-RN is essential to the nursing workforce and agree with others who found that ADN-RNs are better prepared clinically as compared to the BSN-RN (Nagler, 2007). Associate degree registered nurses have been found to be more likely to practice in rural settings, community settings, and long term care (Fraher, Belsky, Carpenter, & Gaul, 2008). Starr (2009) further implied that ADN-RNs are competent, provide safe and effective care as well as pass the same pre-licensure examination as the BSN graduates which determines basic level competency. Although those in favor of multiple routes for entry into the practice of professional nursing support the case with enhanced clinical skills

and filling the vacant positions the BSN-RN leaves behind the literature shows that graduate level professional nurses demonstrate a significant difference in competency as compared with associate degree nurses (Nelson, 2002). Nelson (2002) further suggests that failing to make the baccalaureate degree the entry into practice for professional nursing has made the nursing career less appealing to college bound freshmen. By limiting the educational requirement for professional nursing to a two-year degree, the professional nurse is categorized similarly as a technician or assistant in other health care professions (Taylor, 2008; Nelson, 2002). Therefore, it is time for all three levels of professional nursing to merge and require rigorous academic training for entry into the field of professional nursing. When the merge occurs, it will then be the licensed practical nurse (LPN) who emerges as the educated colleague responsible for providing safe, quality, and cost-effective bedside care under the direction of the professional registered nurse.

### **The Future of Licensed Practical Nursing**

The significance of the Licensed Practical Nurse (LPN) within health care history is evident; however, the future relevance continues to be debated. Fueling this uncertainty is the confusion over the role differentiation between the Licensed Practical Nurse (LPN) and the Registered Nurse (RN). Although the entry into practice regulations are inconsistent for RNs the scope of practice remains constant, unlike that for the LPN, which varies from state to state. Therefore, understanding what an LPN may or may not do based upon state regulations leads to the under-utilization of the LPN within certain health care practice settings (Anderson, 2016). Spetz, Dyer, Chapman, and Seago (2016) conducted a multivariate regression analysis to estimate hospital demand for LPNs and theorized that the future projections show acute care settings demanding fewer LPNs as patient acuity rises. Other researchers support the need to

increase the RN workforce by suggesting an overall increase in health benefits to patient care and reducing organizational costs by decreasing RN to patient ratios in long-term care settings (Harden & Burger, 2015; Zhao & Haley, 2011). Interestingly, Harden and Burger (2015) further recommend increasing the numbers of advanced-practice or master's prepared RNs into the long-term care picture to improve safety and quality of health care within long-term care. Although the literature calls for increasing the numbers of RNs in long-term care the reality is that the majority of RNs working in long-term care take on administrative roles with the RN providing the least direct patient care relative to other settings (Corazzini, Anderson, Rappy, Mueller, McConnell, et al. 2010). Therefore, many health care facilities, including long-term care, could not function to provide adequate nursing care including administrative nursing duties as well as skilled hands-on care without the role of the LPN as a partner to the registered nurse (Anderson, 2016; NLN, 2014; Corazzini, Anderson, Rappy, Mueller, McConnell, et al. 2010; Kenney, 2001).

Although LPNs work in a variety of settings including home-care, prisons, occupational health, school settings, and physician offices, their presence is proportionately greatest in long-term care and community-based settings (NLN, 2014; HRSA, 2013; Lacey & Shaver, 2004). The LPN is currently the licensed professional working in long-term care completing many of the tasks that an RN can perform including administering medications, administering fluids and medications via intravenous lines, performing sterile wound care, and inserting indwelling urinary catheters based upon state Practice Acts. The Bureau of Labor Statistics (2012) reported that employment of the LPN is expected to grow 22 percent by 2020 while meeting the needs of older adults and other vulnerable groups in multiple health care settings (HRSA, 2013). By 2020, an estimated 12 million older adults will need long-term care (Centers for Medicare and Medicaid Services, 2008) and 70 percent of licensed skilled-care in nursing homes is provided

by the Licensed Practical Nurse (Corazzini, Anderson, Muller, McConnell, Landerman, Thorpe, & Shorti, 2011). Furthermore, the National League for Nursing has acknowledged the vital role the LPN fulfills in nursing as well as supporting educational preparation and future practice (NLN, 2014).

To that end, there is a need for the nursing profession to gain a better understanding of the LPN scope of practice as well as unifying the entry into practice level for the registered nurse profession. Standardization of education by establishing a national practical nurse curriculum and decreasing the wide disparity of Nurse Practice Acts across the states may present an opportunity for a greater partnership between the two distinct levels of nursing (Spector, 2005). Furthermore, evaluating the literature for predictors of academic success may help to identify admission criteria and individual students who have a higher probability of nursing academic success. Ultimately, ensuring that educational programs are developing rigorous standards of education and producing quality nurses to enter the workforce may help to solidify future practice roles for the licensed practical nurse.

### **Practical Nursing Education**

Practical nursing education is regulated by the State Board of Nursing respectively. However, the philosophy, objectives, and curriculum are formulated and agreed upon by the individual program faculty (PA SBN, 2016). The State Board regulates that practical nursing education include a minimum of not less than 12 months and include a minimum of 1500 hours (PA SBN, 2016). The State Board of Nursing mandates that the minimum qualification for practical nursing faculty include graduation from an approved school of professional nursing and hold a baccalaureate degree, preferably in nursing, with additional preparation for teaching appropriate to the teaching of practical nursing (PA SBN, 2016). Since most of the practical

nursing faculty are bachelor prepared registered nurses who are initially entering into academia after leaving clinical practice, there is limited research on practical nursing education in general. Therefore, to supplement this literature review of predictors of academic success, research was expanded to include both Associate Degree and Baccalaureate Degree nursing programs. Evidence from the expanded search adds strength to the findings and creates a rigorous foundation for the present study.

### **Predictors of Academic Success**

Many nursing programs are seeing an increase in student enrollment coupled with the challenge of fewer faculty, increased attrition rates, and failures on the NCLEX (Schmidt & MacWilliams, 2011). Nursing schools including practical nursing, ADN, and BSN programs, are academically demanding making program completion as well as NCLEX success challenging. To gain a better understanding of academic achievement within nursing programs as well as on the NCLEX a comprehensive evidenced-based literature review of the most commonly identified predictors of academic success are presented.

#### **Pre-Nursing GPA**

Preadmission GPA upon entering the nursing program has been linked to many studies implying a high correlation with student academic success (Timer & Clauson, 2011). The concept of previous academic achievement as a predictor of future success is not a new concept. Carpio, O'Mara, and Hezekiah (1996) found similar results linking high school grades to success within post-secondary nursing education. To further support that study Lancia, Petrucci, Giorgi, Dante, and Cifone's (2013) retrospective observational study indicated that the upper-secondary diploma grade correlated positively with academic success. A descriptive study of a large baccalaureate nursing program indicated that although neither pre-nursing scholastic aptitude nor

nursing aptitude was predictive of long-term BSN student attrition, pre-nursing scholastic aptitude and first-semester nursing success were both predictive of NCLEX readiness (Newton, Smith, Moore, & Magnan, 2006).

### **GPA in Science Courses**

Utilizing GPA from pre-nursing science courses as admission criteria is not an uncommon practice for many nursing programs (McNelis, Wellman, Krothe, Hrisomalos, McEleveen, and South, 2010; Schmidt & MacWilliams, 2011). This standard is supported by Phillips, Spurling, and Armstrong (2002) found four significant predictors of success in a nursing program as cumulative GPA, English GPA, core biology GPA, and number of times a student repeated any of the core biology courses. Jeffreys' (2006) retrospective study of Associate Degree Nursing (ADN) students found that pre-nursing GPA and Anatomy and Physiology course grades did not significantly influence retention, attrition, or licensure. However, Levy (2010) found that grades in Anatomy and Physiology were predictive of NCLEX success for practical nursing students. From another perspective, Lewis and Lewis (2000) linked the number of repeated Anatomy and Physiology classes to success in the nursing program. Beyond the focus on pre-nursing science courses, the literature also evaluated the relevance of achievement in non-science courses to nursing academic success.

### **Academic Achievement in Non-Science Courses**

As Grossbach and Kuncel (2011) evaluated the specific areas of standardized testing which correlated with academic success, it was revealed that students who scored the highest on the American College Testing (ACT) social science and SAT verbal scores appeared to be the strongest. Sayles, Shelton, and Powell (2003) implied that as scores on the Nursing Entrance Exam (NET) in math skills and reading comprehension increased so did the probability of



passing the state licensure examination. Whereas Gallagher, Bomba, and Crane (2001) observed no significant difference between successful and unsuccessful student mean scores on the NET and further suggested that admission scores are not good predictors of success in final nursing courses due to the time lapse between admission testing and program completion. Adversely, Abel, Penprase, and Ternes' (2013) retrospective analysis revealed that non-nursing courses might be a highly predictive factor in student success. Additionally, Abel, Penprase, and Ternes' (2013) infer that pre-requisites are critical for student success and may be predictive of early at-risk for failure students. Nonetheless, Higgins (2005) proposed no relationship between English or Psychology grades and NCLEX success. Whereas, Yin and Burger (2003) identified that college GPA before admission into the nursing program as the most important predictor of student success. Additionally, Yin and Burger (2003) implied that course grades in natural science, Psychology, and high school rank are also related to nursing academic success along with no correlation between grades in English, ethnicity, gender or age with NCLEX success. This is contradictory with the literature which does not support the ability of college GPA to predict NCLEX success (Seldomridge & Dibarolo, 2004; Crow, Handley, Morrison, & Shelton (2004); Haas, Nugent, & Rule, 2004; Uyehara, Magnussen, Itano, & Zhang, 2007). To that end, Matthias' (2014) dissertation found an association between the Test for Adult Basic Education (TABE) scores for reading, math, and language to be associated with student success in practical nursing education. Evaluating pre-requisite course grades, overall GPA, and high school achievement is only one component of the predictors of academic success. Scores on standardized testing have been used as an inclusive measure during the acceptance process into nursing school and more recently as a prediction of NCLEX success.

## **Achievement on Standardized Admission Testing**

Traditionally, high school grade point average along with some format of a standardized test, such as the Scholastic Aptitude Test (SAT) or the American College Testing (ACT), are used to predict post-secondary success (Beauvais, Stewart, DeNisco, & Beauvais, 2013; Timer & Clauson, 2011). Grossbach and Kuncel (2011) conducted a meta-analysis to examine the prediction strength of standardized test scores from the American College Testing (ACT) and Scholastic Aptitude Test (SAT) as compared to pre-nursing grade point average. Their findings revealed that both the SAT and ACT had a positive correlation with predicting academic success. Grossbach and Kuncel's (2011) further revealed that pre-nursing GPA was a strong predictor but had a weaker effect as compared to either standardized test. Booth (1992) also identified that students with higher reading and math scores on college entrance exams were more likely to be successful completers of the practical nursing program. Furthermore, Boudreaux's (2004) study found similar results implying that increased reading and math scores on entrance exams correlated with an increase in overall GPA and successfully completing practical nursing school. These findings are supported by Gilmore's (2008) retrospective correlational study which identified that participants who successfully completed the nursing program had a higher mean ACT composite score compared with the mean score of those students who were unsuccessful. Furthermore, Gilmore (2008) found that completers of the nursing program had a higher mean ACT Reading and English sub-scores than those who were unsuccessful. On the contrary, Gilmore (2008) found no difference in the mean ACT Science sub-score of students completing and not completing the nursing program.

Underwood, Williams, Lee and Brunnert (2013) found a strong correlation between Elsevier's HESI Admission Assessment English scores and final nursing course grades during

the first semester. Levy (2010) also found the PN-HESI to be a strong academic indicator of success on the NCLEX for practical nursing students. Likewise, Luoma's (2003) descriptive correlational predictive study implied a positive correlation between standardized examinations and NCLEX success for practical nursing students. Luoma's (2003) findings are supported by Chen and Voyles' (2013) study which suggests that the HESI was a valid predictor of student success within the first semester of an ADN program. Opposing that view, Eickhoff (2016) suggests that standardized entrance examination scores were not good predictors of passing the NCLEX on the first attempt among practical nursing students. Interestingly, Hinderer, Dibartolol, and Walsh (2014) found that the HESI, as a predictor of timely progression through the nursing program, was not helpful. Their findings are consistent with Newton & Moore (2009) who surmised that a standardized entrance examination was not predictive of NCLEX success.

Another commonly used standardized entrance examination, the Test of Essential Academic Skills (TEAS) is arguable within the literature. Diaz, Sanchez, and Tanguma (2012) found a statistical significance between TEAS scores and success of male nursing students. Furthermore, Diaz, Sanchez, and Tanguma (2012) identified that an average TEAS score of 76.1 was a consistent predictor of academic success for baccalaureate nursing students. Crow, Handley, Morrison, and Shelton (2004) add further support with their national study which correlated a significant relationship between standardized entrance examinations, SAT scores with NCLEX pass rates. To that end, Manieri, De Lima, and Ghosal's (2015) review of the literature revealed entrance examinations as a significant predictor of student success. On the contrary, Whitham's (2015) dissertation determined that students' scores on the ATI PN Comprehensive Predictor examination did not significantly increase the ability to predict NCLEX success among practical nursing students. Standardize testing used as admission criteria

as well as throughout nursing programs may offer insight into the probability of program completion as well as NCLEX success. However, coupling the results of standardized testing scores with nursing GPA may reveal a complete picture of academic success.

### **Nursing GPA**

Gilmore (2008) was able to identify that nursing GPA was statistically significant in predicting success on the state licensure examination. Likewise, Jeffreys (2006) correlated first time NCLEX pass rates with a higher (B average) nursing course grade average. This finding is consistent with the historic literature which revealed that grade point average in nursing and science courses as the greatest cognitive predictor of nursing academic success (Campbell & Dickson, 1996). Eickhoff (2016) also found that the higher a student's GPA, the greater the likelihood of passing the NCLEX on the first attempt among practical nursing students. Further support for correlating nursing GPA with NCLEX success among practical nursing students was found in Ostrye's (2000) quantitative dissertation on 16 practical nursing programs. These findings are consistent with, Hawsey's (1997) dissertation which suggests that cumulative nursing grade point average along with the number of nursing courses failed correlated with the likelihood of completing the practical nursing program along with a specific correlation between nursing GPA and first time NCLEX success. These findings are consistent with historic literature found in Booth's (1992) study of 362 LPN students which found a link between successful nursing course completion and program completion. Boudreaux (2004) was also able to correlate an increase in GPA with an increase in program completion for practical nursing students.

Similarly, Trofino (2013) proposed that grades in pharmacology and advanced medical-surgical nursing were statistically significant in relation to the probability of passing the NCLEX. Scores from the first year medical-surgical course have also been correlated to NCLEX success

as seen within Horton, Polek and Hardie's (2012) study of Associate Degree Nursing student success on the NCLEX. Evaluating a student's success specifically in nursing courses led to the literature discovery of the relationship between student nurse academic achievement and previous personal experience with health care.

### **Previous Healthcare Experience**

There is limited literature related to previous experience or knowledge of the nursing profession as a predictor of nursing academic success (McNelis, Wellman, Krothe, Hrisomalos, McEleveen, and South, 2010). Although, a study conducted by Wilson, Chur-Hansen, Marshall, and Air (2011) found that successful students were significantly more likely to have had previous nursing experiences or have known a nurse. Additionally, Fenton (2012) suggests that for practical nursing students, previous education as a certified nurse aide correlates with student academic success. Moreover, Grainger and Bolan (2006) suggest that first year nursing students had an idealistic view of nursing and surmised that students might enter nursing without clearly understanding the role and responsibilities. Therefore, exposure to health care and working as a Certified Nursing Assistant (CNA) may relate to a decrease in student nurse attrition (Urwin, Stanley, Jones, Gallagher, Wainwright, and Perkins (2009).

Interestingly, Astin and Sax (1998) indicated that participating in community service during the time students were enrolled in the nursing program enhanced the student's academic development. The findings from Astin and Sax's (1998) study may be linked to the discovery of Schenk and Harper (2013) who implied that students with higher levels of emotional intelligence, particularly intrapersonal capacity and stress tolerance, are more likely to be successful in baccalaureate nursing programs. Moreover, Beauvais, Stewart, DeNisco, and Beauvais' (2013) descriptive correlational study suggested that total emotional intelligence was

related to academic success in graduate students but not at the undergraduate level. Similar to that finding, McLaughlin, Moutray and Muldoon (2007) found that students with certain personality traits, such as higher self-efficacy beliefs, were more likely to be successful in final academic performance. Understanding that personality traits and attributes may contribute to student nurse success many schools of nursing include an admission essay as part of the application process.

### **Admission Essays**

Sadler (2003) suggests that admission essays which ask the student to describe their motivation for entering nursing may help to identify potentially successful students academically. Sadler (2003) implied that students who tend to write about nursing as external to themselves were not as successful academically as students who internalized the role of nursing within their essay. In contrast, Timer and Clauson (2010) implied that non-cognitive tools used in the admission process did not identify more academically successful students or offer any significant predictive value. This finding is further supported in historical literature within a Brown, Carpio, and Robert's (1991) study which failed to show a positive prediction between an autobiographical essay and student academic success. Writing an autobiographical essay may not always provide the applicant with an opportunity to fully express themselves limiting the reviewer's conceptual idea of the applicant. Therefore, utilizing a face-to-face interview process may provide a better opportunity to determine additional personality characteristics which may correlate with nursing academic success.

### **Personal Interviews**

Conducting personal interviews for potential nursing school applicants is controversial, time-consuming, and labor intensive (Hendricks & Krothe, 2014; McNelis, Wellman, Krothe,

Hrisomalos, McEleveen, & South, 2010). Interviewing applicants is not a novice component of the application process. Burton (1972) found that interviewing techniques were not a reliable method of identifying potential successful candidates. However, McNelis, Wellman, Krothe, Hrisomalos, McEleveen, and South's (2010) descriptive study found that admission interviews provided an opportunity to emphasize student's attributes as well as allowing for a more holistic approach to assessing applicants. On the contrary, Hendricks and Krothe's (2014) case study on the interview process resulted in the inability to reconfigure the composition of the student body with regards to gender and ethnicity nor improve retention or NCLEX pass rates. This finding is reinforced by Ehrenfeld and Tabak (1999) who postulated that admission interviews might only help to reduce attrition rates that stem from personal reasons. Of the interviews conducted by Ehrenfeld and Tabak (1999), the drop-out rate for nursing students was almost 30% suggesting that the interviews were fruitless with several flaws.

Supporters of the interview methodology for identifying potentially successful students typically ascribe to the notion that certain personality characteristics are reflective of the nursing profession (Rosenberg, Perraud, & Willis, 2007). Pitt, Powis, Levett-Jones, and Hunter (2013) found significant relationships between student's personality qualities of self-control and resilience with academic performance. Furthermore, Pitt, Powis, Levett-Jones, and Hunter's (2012) literature review suggests that "student's academic performance is affected by many factors including; age, gender, English as a second language, employment status, critical thinking skills, personality, and self-efficacy;" all of which may be identified or discussed during an admission interview (p. 906). Moreover, Levy (2010) suggests that support from friends, significant others, family, and readiness as important factors for practical nursing student success. Scialdo (2004) found that practical nursing students who were more diligent were more

likely to succeed in the program. Additionally, Salamonson, et al. (2012) suggests that students who selected nursing as their first choice as entry into post-secondary education were more likely to be successful. An opportune time to identify this student population would be during an interview process. Moreover, Rose's (2011) review of the literature reveals that positive student outcomes result from intrinsic, self-determined motivation which may also be identifiable during the admission interview process. The interview process may also identify student minority status which is many times a barrier to nursing student academic success.

### **Minority Students**

Timer and Clauson (2010) inadvertently identified that male students and ethnic minority students were found to have lower mean course grades as compared to their peers. Diaz, Sanchez, and Tanguama (2012) conducted a quantitative exploratory study to identify academic aptitude predictors of nursing academic success in the first academic course taken by nursing majors at a baccalaureate program in a culturally diverse public university. Diaz, Sanchez, and Tanguama (2012) suggested that scholastic aptitude exams, such as the TEAS, may identify at-risk students and assist Hispanic students during their first fundamentals nursing course. Furthermore, Crow, Handley, Morrison, and Shelton (2004) found that programs with higher percentages of Caucasian students were more likely to have higher passing rates on NCLEX whereas programs with higher percentages of Hispanic students reported lower pass rates. Additionally, Lamm and McDaniel (2000) conducted a quantitative retrospective study that examined factors that might accurately predict practical nurse graduate success on the NCLEX and found that African American students showed a higher rate of academic failure.

Jeffreys' (2006) study identified older students, women, and minority students as the most at risk for being unsuccessful in nursing school. Also, multiple role responsibilities,



maternal role stress, and cultural incongruence influenced attrition rates (Diaz, Sanchez, & Tanguma, 2012; Jeffreys, 2006). Life stressors influencing academic success is further supported by Marshall's (2012) dissertation which identified challenges specific for the student practical nurse as role commitments, relationship challenges, financial strain, personal growth, and health. However, Jeffreys (2006) found that first-time NCLEX pass rates were significantly influenced by academic indicators rather than demographic variables. With that said, Jeffreys (2006) recommends initiating early academic intervention for high-risk students as a proactive approach to facilitating NCLEX success. Walker, et al. (2011) agreed that early identification for at-risk students is imperative but only if the student flagged meets a refined labeling criteria.

In the face of increasing standards for the minimal pass rate on the NCLEX exam, nursing programs need to ensure that students accepted into the program have the ability to rise successfully to the academic challenge. The previous studies revealed many contradictions as to predictors of academic success, most of which were preadmission criteria. Beyond nursing GPA, personality characteristics, and community service the literature on predictors of academic success and NCLEX success among students currently enrolled in nursing programs is scarce. Therefore, a significant gap in the literature exists between the organizational climate of the nursing program and student academic achievement and ultimate NCLEX success. The following review of the literature explores organizational learning theory, specifically Senge's Systems Theory as the guiding theoretical framework.

### **Organizational Learning Theory**

Organizations, regardless of the type, engage in a continual process of change requiring all members to have the ability to accept, adapt, and respond in a manner that is productive and goal focused. The process by which organizations acclimate to both internal and external change

factors occurs as a learned response. Garvin and McCarthy (2008) describe the processes that enhance the actions of the organization through better knowledge and understanding of organizational learning. Therefore, organizational learning encompasses the structures, processes, and networks that facilitate how knowledge is created and disseminated within an organization (Kirwin, 2013). Therefore, the term *learning organization* describes an organization that is successful in the process of learning together in a successful manner (Kirwin, 2013). Brown and Duguid (1991) describe organizational learning as a bridge between working and innovating. Organizational learning suggests that organizations obtain knowledge from their experiences which are then used to improve the organization's operating practices (Argote, Beckman, & Eppele, 1990; Levin, 2002, & Levitt & March, 1988). Proponents of organizational learning theory ascribe to the idea that through experience patterns of organizational learning unfold (Argote, Beckman, & Eppele, 1990; Levin, 2002). On the contrary, behavioral theorist argues that learning through experience is challenging and unreliable (Greve, 1998; Levitt & March, 1988). Furthermore, negative aspects of organizational learning include constraints on change due to organizational policy, political pressures, as well as antiquated solutions reversing an organization's progress (Sutton & Galunic, 1991; Levinthal & March, 1993).

Those who subscribe to organization learning theory suggest that learning is a continual process that is facilitated through organizational encouragement, productivity, and accountability within an effectively adaptive system (Mumford, 2011). Organizational learning flourishes when members are empowered to share talents, try new ideas and explore organizational boundaries for solutions (Minati, 2007). Therefore, learning organizations can be simply described as people working together at their best. The climate then becomes a continual process within the

organization where learning becomes the norm. Senge's System Thinking erupted from the heart of organizational learning.

### **Senge's Systems Thinking**

The notion of the learning organization grew out of Senge's (1990) *The Fifth Discipline* that conceptualized System's Thinking. Senge (2006) formalized the idea of organizations learning together as a team while incorporating human aspects into the workplace as Learning Organization Theory. Senge (2006) describes learning organizations as people working together to formulate teams that are exceptional. Learning organizations embrace differences among team members acknowledging that diversity attracts strength (Senge, 2006). Overtime, the organization learns how to enhance its capacity to achieve its overall goal (Senge, 2006). Senge's (2006) theory suggests that traditional authoritarian hierarchical leadership fails to tap into people's potential. Organizational learning theory subscribes to the belief that people within the organization are not interchangeable and should be placed at the center of the organization (Senge, 2006). Senge (2006) describes System's Thinking as a manner of evaluating a problem by viewing the entire process or system. Systems Thinking is an understanding that structure influences behavior in an interdependency pattern. Senge (2006) suggests that productive organizations do not operate under the tyranny of independence but rather with the enlightenment that consequences occur as a result of cause and effect.

Senge (2006) identifies certain learning disabilities which can hinder the process of organizational learning. These include individuals failing to see their connection to the entire organization, being reactive rather than proactive in finding solutions, and not recognizing consequences of behavior. Therefore, Systems Thinking is a framework for seeing

interrelationships rather than individuality (Senge, 2006). Within this framework, there are five distinct disciplines.

### **Personal Mastery**

Senge (2006) explains personal mastery as the process of approaching one's life and work as creative work. Living from a creative standpoint rather than a reactive viewpoint. Personal mastery occurs when individuals can clearly identify what is important to them and the path they are on for the future. Personal mastery is a special sense of purpose behind a vision or goal. It occurs when individuals are inquisitive to learn more and are connected to others in the workplace. Individuals who have personal mastery recognize they never arrive at their destination but rather when the destination is reached the areas for additional personal growth are recognized. Personal mastery views the journey as the reward (Senge, 2006).

### **Personal Vision**

The domain of personal mastery begins with personal vision. Organizations will not have visions until individuals have visions (Senge, 2006). Senge (2006) differentiates visions from goals in that visions are something individuals deeply care about or meaningful. Personal vision then leads to shared vision. Shared vision becomes more powerful and is vital for organizations (Senge, 2006). Senge (2006) acknowledges that multiple personal visions may co-exist within organizations; although, leadership is responsible for articulating the shared vision successfully. Once the shared vision is developed leaders must engage all members of the organization to commit to the cause. Engaging the team members can be accomplished through leader demonstration and role modeling (Senge, 2006). Shared vision is described as ongoing, in both organizational dialect and goal setting (Senge, 2006). Systems Thinking occurs when individuals envision themselves as influential within the attainment of the shared vision (Senge, 2006).

## **Mental Models**

Senge (2006) describes mental models as active, powerful ways to look at change.

Mental models are how individuals make sense of the information and visualize how the puzzle pieces fit together (Senge, 2006). Creativity in mental models should be encouraged along with a consistent natural inquiry into other's views to grow and uncover original and unique solutions or future pathways (Senge, 2006).

## **Team Learning**

Team learning is the capacity of a team to create the results the members truly desires (Senge, 2006). Team learning builds on shared vision and personal mastery with the understanding that shared vision and talent are not enough. Team learning recognizes that team thinking is greater than individual thinking by using innovative and coordinated action towards continued learning to foster team growth (Senge, 2006). Through the process of dialogue among the team members everyone is seen as colleagues, and there is a sense of shared responsibility in goal attainment and learning together.

## **Assumptions of Learning Organizations**

Creating a learning organization requires moving from a practice setting to one of discussion and dialogue. Learning organizations work best when the environment is safe for exploration and idea expression. Time lapse in problem identification and solution creates significant obstacles. Therefore, the organization needs to create a culture of openness where people feel safe in discussing the realities of the workplace. Finally, learning organizations recognize that the workplace relies on the entire team, not individuals, to reach a shared vision.

## **Summary**

This chapter presented a comprehensive review of the literature related to the history of practical nursing, the debate over entry into practice, the future role of the licensed practical nurse, and predictors of academic success for both practical nurses and registered nurses. The existing gap in the literature, the lack of research on the relationship between organizational climate and program success, was identified. Based upon that gap, the theoretical framework on which this study was built was further explored. Acknowledging that Organizational Learning Theory and Senge's Systems Theory is not flawless critics of the model were also presented. The chapter concluded with an overview of Senge's Systems Theory. Chapter three will discuss the population, setting of the study, and the methodological design for the data collection and analysis.

## CHAPTER 3

### METHODOLOGY

The recent increase in the minimum pass-fail rate for approved Licensed Practical Nursing programs to 80% has led to internal program evaluation within many schools of nursing to ensure they are providing a high-quality education that will ultimately lead to NCLEX success. Moreover, the 2015 NCLEX-PN pass rate average of 82.14% within Pennsylvania (National Council of State Boards of Nursing, 2015) identifies that many Practical Nursing programs across the state of Pennsylvania are struggling just to meet the minimum standard to sustain the future of their program.

#### **Statement of the Problem**

According to the National Center for Health Workforce Analysis (2013) the number of Practical Nursing graduates who successfully passed the licensure exam from 2001 to 2011 increased by 80%. Although that number appears impressive, the number of actual licensed nurses to supply the demand is still too small (National Center for Health Workforce Analysis, 2013). The dichotomy between nursing supply and demand coupled with the increasing pass/fail benchmarks on post-graduate licensure examinations creates substantial challenges for nursing education programs. To combat these challenges, it is paramount that nursing education programs revise curricula and employ educational best practices to achieve high-performance standards. Therefore, the central phenomenon explored within this study was the learning organization as a whole and the perceived components that link to program success. Conducting a qualitative case study analysis of one high-performing program could provide an exemplar model that may be replicated by other Practical Nursing programs across Pennsylvania. Also,

understanding current successful organizational components could provide a platform for future growth and expansion of Practical Nursing programs.

### **Research Question**

The primary objective of the case study was to identify a specific high performing Practical Nursing program to better understand internal program factors that relate to high success rates on the NCLEX-PN was guided by one all-embracing research question:

1. What factors contribute to the program's success rates on the NCLEX-PN in a top rated Practical Nursing program in Pennsylvania as perceived by the program's stakeholders?

### **Population**

This research is a case study of one exemplary Practical Nursing program in the state of Pennsylvania. The entire population includes a total of 55 State Board of Nursing approved Practical Nursing programs. One factor, NCLEX-PN success rates, guided the inclusion of the Practical Nursing program for this study. The Pine County Community College (PCCC) Practical Nursing program is ranked as the number one Practical Nursing program within Pennsylvania based upon the results of the NCLEX-PN over the past five years (PracticalNursing.org, 2015). For 10 out of the last 11 years, PCCC has achieved a NCLEX-PN success rate of 100% as compared to the overall first-time pass rate of 82.08% for all nursing schools in the United States in 2015 (PA State Board of Nursing, 2015). The criteria for this distinction is based on the analysis of NCLEX-PN pass rates going back five years (PA State Board of Nursing, 2015). After doing so, the school's pass rates were averaged together and weighted by the date of the exam (PracticalNursing.org, 2015). Based upon this distinction, PCCC was chosen to for the study to elicit information relative to the guiding research question.



## **Setting of the Study**

Located in a rural setting, PCCC is situated in western Pennsylvania. The Practical Nursing program accepts 20 students and is a 12-month program running from January to December. The Practical Nursing program offers a Diploma in Practical Nursing. The nursing curriculum includes general education as well as nursing courses. Students receive clinical laboratory experience in a variety of hospitals and health related agencies as part of the nursing courses. All the nursing faculty within the Practical Nursing program are master degree prepared nurse educators.

## **Pilot Study**

A pilot study was conducted to test data collection methods and to develop familiarity with preliminary methods of analysis. Validity and reliability of the interview protocol were established through the pilot study which allowed the researcher to ensure specificity and overall response effectiveness of the research questions. The pilot study included interviewing the administrator, one faculty member, and a focus group of 3 students from one Practical Nursing program situated within a two-year college setting in eastern Pennsylvania. The results of the pilot were not included in the results of the formal case study. During the pilot changes were made to the interview based on the interviewee's reaction or response to further clarification as well as the researcher's determination to alter the question for clarity which provided for validity. Reliability of the interview questions is based on the information obtained during the pilot study. The participants in the pilot study were asked to provide feedback on the transferability, generalizability, and the casual reasoning nature of the interview questions.

## **Research Procedures**

In an attempt to answer the research question related to a single phenomenon of one high performing Practical Nursing school a qualitative case study approach was used for this study. Case study research is an ideal design for understanding and interpreting observations, multiple types of data, and extracting understanding from individual perspectives (Merriam, 1988). One of the first uses of a case study in graduate education was implemented by Harvard Business School in 1920 and since that time, the method has continued to infiltrate many other professions (Breslin & Buchanan, 2008). Although the roots of the case study method stem from anthropology and sociology (Hamel, Dufour, & Fortin, 1993), contemporary use of this approach is multidisciplinary.

The field of nursing education favors the case study approach to uncover academic trends and best practices within nursing programs. Schiele (1996) employed the case study approach to elicit trends of organizational design within a baccalaureate nursing program. In 2010, Rogers' conducted a case study analysis to examine predictors of success within a Practical Nursing program in an eastern Kentucky community college. Additionally, Taylor's 2012 case study attempted to discover and comprehend the relationship of students and contributing factors of success within a bridge Licensed Practical Nursing to Associate Degree in Nursing program. However, the limitations of the case study methodology are recognized within the literature as well. The case study approach has been criticized for limited ability to generalize the findings outside of the particular case (Gomm, Hammersley, & Foster, 2009). Conversely, Stake (1995) proposed that case studies facilitate learning through natural experiences and can be a preferred method in the field of education. Stake (1995) further described the process of "naturalistic generalization" by identifying similarities of objects, issues, and circumstances that occur both in

and out of context. Additionally, Stake (1995) suggested that when a case study is descriptive in the story produced the reader can identify and extract meaning relevant to his/her own experience. Therefore, the ability to foster learning and create solutions to common problems through the unfolding of another's story provides substance to the case study methodology. To that end, the value of the case study methodology coupled with the precedent of this approach within nursing education supports the decision to implement a case study methodology for this particular study.

The methodological approach for this case study included the use of semi-structured interviews and a literature review of organizational theory, the revisions within the practice of nursing education, and the historical trends of the National Council Licensure Examination- Practical Nursing (NCLEX-PN). Moreover, multiple artifacts such as the Practical Nursing curriculum, program handbook, program philosophy and mission statement, program student attrition records, and program policy and procedure manual were analyzed in comparison to the interviews to add rigor to the findings. Including multiple forms of data reinforces the findings since personal accounts can be skewed due to the nature of the study. Combining multiple methods of data collection is a major strength of case study and provided methodological triangulation (Merriam, 1988).

The Dean from the School of Nursing and Allied Health at PCCC was contacted via email requesting participation in the study. The researcher was introduced and clearly articulated the focus of the study and explained why the program was chosen. Following Indiana University of Pennsylvania's IRB approval, a petition to conduct the study at PCCC was completed and a formal site approval was obtained (Appendix A). The site visit was scheduled between the researcher and an assigned contact person (a Practical Nursing faculty member) to coordinate the

research procedures and the site visit. The researcher discussed the research procedures, the time frame for conducting the research, and provide the faculty member with copies of the letters explaining the research study (Appendix B) and consent forms (Appendix C) for the participants. Opportunities for the researcher to observe scheduled classes and labs were also discussed. The faculty and students were made aware by the program Coordinator and the faculty member of the potential for the researcher to join their learning session as a silent observer; however, they were not told the exact date that would occur. Marshall (2012) suggests honest quality assurance of teacher/classroom evaluation is more likely to occur during an unannounced visit. During the site visit a private conference room/office was chosen and agreed upon by both the administrator and the researcher for conducting the interviews and focus groups. The conference room/office provided privacy for the researcher to also analyze artifacts and document field notes on campus.

During the site visit, the research met individually with the administrator, faculty, staff, and students to explain the purpose of the study. While on campus, the members of the Practical Nursing program were able to individually schedule personal interviews with the researcher in order to accommodate their schedules. Emails were sent to a list of alumni from the Practical Nursing department to request their willingness to participate in the study. During the interview the researcher reiterated that participation in the study is completely voluntary and the decision to withdraw could occur at any time without any consequence academically or personally. Student participants were asked to engage in the research study by either participating in a face-to-face interview or as part of a focus group interview. The option was presented to the student to increase interview comfort and elicit more willing participants.

The researcher's email address and phone number were provided on the consent form for any participant who requested clarification of the study or to answer any questions or concerns

participants may have. The participant information form (Appendix D) requesting basic demographic information was also provided to the willing participants during the scheduling of the interviews. The participant information form requested basic communication information to be respectful of the participant such as preferred telephone numbers, office hours, preferred email address, and the best time to be in touch with them and the time to avoid calling them. Participants were informed that in the event that any faculty, staff member, or student decided not to participate in the study, their information would be permanently destroyed.

The researcher is currently a Practical Nursing Coordinator at a Practical Nursing Program located in eastern Pennsylvania. Although the study was evaluating a Practical Nursing program and the role of the Practical Nursing Coordinator, the setting of study occurred in western Pennsylvania. The researcher has no prior involvement or association with the Practical Nursing program or any of the faculty, staff, or students enrolled at PCCC. Therefore, the researcher has no bias towards the study.

### **Data Collection**

During each of the interviews, the researcher provided the participants with a copy of the research description and the participant's rights and consent forms, reviewed both documents, and answered any questions (Appendix C & D). The participants were informed that the personal one-on-one interviews were voluntary and that they could retract any statement they desired during or after the interview without any consequences. A semi-structured interview approach was conducted allowing for the opportunity to explore deeper meaning from the participant responses (Appendix G, H, I, & J). Semi-structured interviewing may be preceded by observation and informal, unstructured interviewing to allow the researcher to develop a deeper understanding of the topic necessary for developing more relevant and meaningful questions

(Bernard, 2006). The flexibility of this interview approach allowed for the discovery of pertinent information that was not previously obvious to the researcher (Gill, Stewart, Treasure, & Chadwick, 2008).

Exploratory follow-up questions elicited more in-depth participant responses. Participants were asked to share their insights and thoughts related to the success of the Practical Nursing program over the past number of years. The interviews were confidential and tape recorded. A recorder with a separate microphone was utilized to enhance audio clarity. During the interviews the researcher annotated field notes on follow up questions, non-verbal behaviors, and researcher personal insights. Each of the separate interviews was set to a predetermined time frame of 45 minutes. The 45-minute time frame was strictly adhered to for each interview out of respect for the participant's time and uniformity of the structure to include a beginning, middle, and closure (Seidman, 2013).

The researcher developed an identification coding system for each participant to maintain anonymity during the interviews. Each interview was coded using the participant's last initial from the first and last name, a Roman numeral to identify the number interview in the sequence, and an Arabic page number, for example, NGII3. Following the interviews, the researcher transcribed the interviews independently into Microsoft Word. Different headings, font styles, and sizes were used for various sections, such as questions and responses. Track changes in Microsoft Word were also used during transcription to add in the researcher's preliminary thoughts, memos, and areas of interest that ascended during the process. Based on these initial excerpts a preliminary codebook was developed.

The focus group was scheduled by determining a time that would work for all the willing participants. The focus group was held in a private room and the discussions were audio

recorded. The participants were provided with a copy of the participant form, consent form, the focus group ground rules (Appendix E) and the focus group confidentiality form (Appendix F). The researcher reviewed the rules and provided the opportunity for any questions regarding the focus group or the study. Each of the members in the focus group were assigned an anonymity code by the researcher which was used to annotate field notes and assist in identifying individual responses during transcription.

While visiting the school, the researcher reviewed and made copies of additional data. Additional artifacts included the Practical Nursing curriculum, program handbook, program philosophy and mission statement, program student attrition records, and the program policy and procedure manual. The interview tapes, field notes, and additional data were stored in a locked file cabinet in the researcher's home. The transcriptions were saved to the researcher's password-protected laptop computer as well as on a USB travel drive which was stored in the locked file cabinet. Finally, to prevent inadvertent loss of data all Microsoft Word documents will be saved to the cloud storage based internet service Dropbox. All of the data collected will be destroyed after five years following publication of the researcher's dissertation.

### **Data Analysis**

In order to process, interpret, and organize the data collected a grounded theory approach was utilized. The grounded theory approach served as a guide for the explanation of how the program of learning achieved outstanding program success on the NCLEX-PN. In grounded theory conceptual categories emerge from the evidence and are used to illustrate a concept (Glaser & Strauss, 1999). The grounded theory approach to data analysis provides a lens through which theory can be derived and used to improve practice (Ng & Hase, 2008). Following collection of the data, the constant comparative method was implemented to analyze the data.

Each datum was first coded into themes using the preliminary codebook developed during the transcription process following the suggestions of Glaser and Strauss (1999) by “open coding,” “selective coding,” and “theoretical coding.” Glaser (1992) suggests that this method of coding will lead to the formulation of a theory. During the open coding process, the datum was compared with like datum in search of emerging themes and patterns and was compared with the researcher’s field notes and artifact data obtained at the site. During the selective coding phase, merging of data occurred under certain categories. Thematic analysis of the data presented patterns of descriptive words within the narratives which led to the development of new categories. The entire coding process included reading the transcripts several times, engaging in constant self-dialogue, and combining the themes to meet researcher satisfaction.

The final stage of the coding process, theoretical coding, funneled categories and themes through the concept of organizational theory, specifically, Senge’s (1990) Systems Thinking. The theoretical coding stage provided the opportunity to begin story and theory development. Along with coding each datum was placed on a colored index card and then re-colored based upon the selected category. Field notes taken during the interview process were integrated into the constant comparative process providing validity to the categories and enabling the emergence of theoretical themes (Figure 1). According to Glaser and Strauss (1999), the constant comparative method will generate theoretical properties and will guide further investigation or patterns of similarities.

To ensure validity of the qualitative study three strategies including researcher self-reflection, member checking, and triangulation were implemented by the researcher. Creswell and Miller (2000) suggest that qualitative validity is achieved by the procedures used to establish credibility of the study and the inferences the researcher makes about the data. Through the



process of self-reflection, self-dialogue, and cross analysis of the field notes with narrative analysis the researcher determined that saturation of the data was achieved as recurrent themes and categories emerged. Patton (1980) describes the process of researcher analysis as returning over and over again to see if the constructs, categories, explanations, and interpretations make sense. Secondly, member checking of the data occurred following transcription of the interviews. Lincoln and Guba (1985) describe member checking as the most crucial technique for establishing credibility. The participants were provided with a written transcript of their interview and were asked to review and comment on accuracy. Participants were also provided with an opportunity to retract any statement from the narrative prior to data analysis. At the completion of thematic analysis the themes were shared with the participants to review. Participants were asked to verify if the overall account was realistic and accurate of their experience adding further credibility to the findings. Finally, triangulation of the data was twofold. Once themes and categories were identified the researcher searched through the artifacts for evidence that was consistent with the themes and field notes. Creswell and Miller (2000) describe triangulation as the search for convergence among multiple and different sources of information to form themes in the study. Furthermore, theory triangulation substantiated the findings and was conducted by filtering the emerging themes from the narratives through the theoretical framework. Patton (2002) suggested that theoretical triangulation adds substance to the converging lines between the data. The result of the case study was the development of a substantive theory presented in the story of one successful practical nursing program.

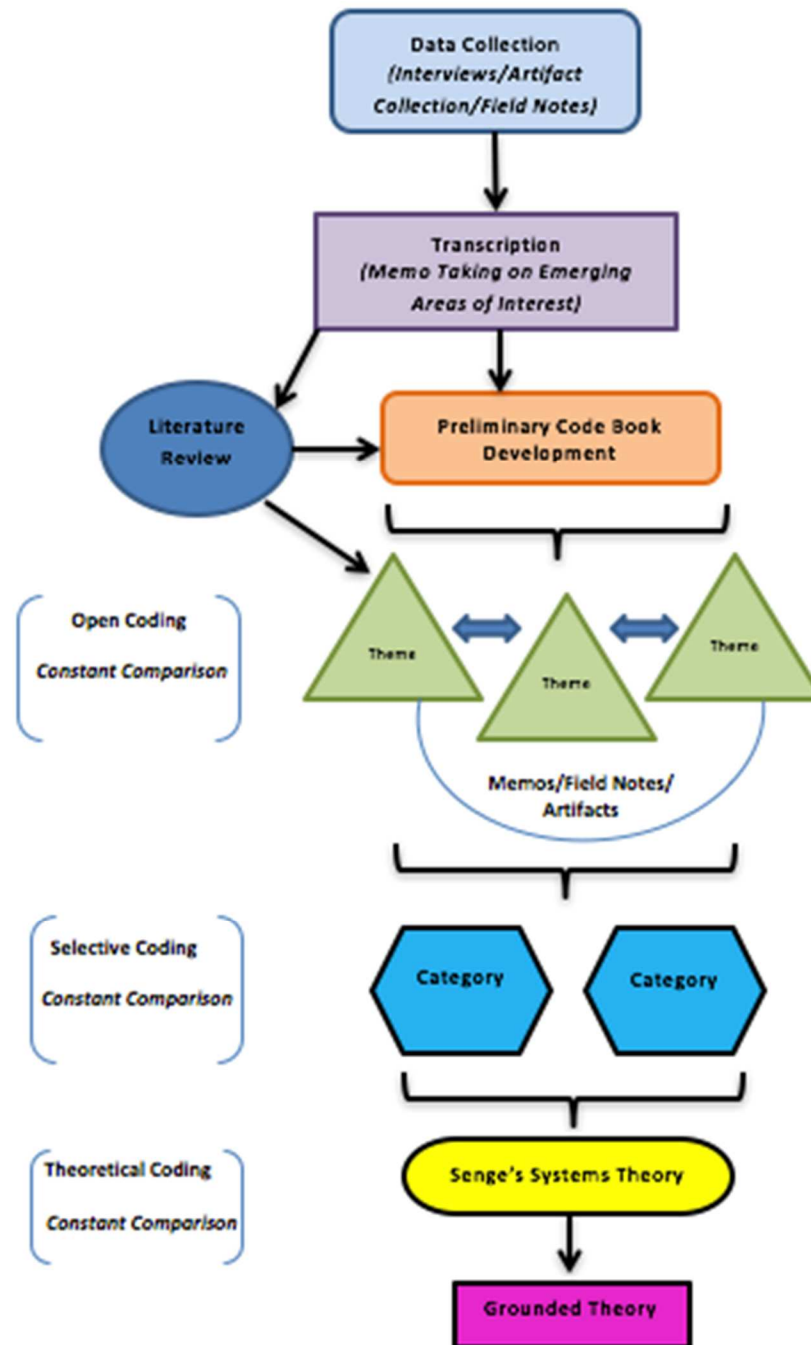


Figure 1. Data analysis model for developing a grounded theory. This figure illustrates the data analysis process utilized for this study.

## **Summary**

The focus of this qualitative case study was to uncover the factors that contribute to one Practical Nursing program's outstanding success. The study was an examination of the perceptions of faculty, staff, and students as well as the intrinsic human characteristics present within a successful educational program. In doing so, the study contributed to the body of knowledge in nursing education relating to program success, student achievement, and organizational climate. By exploring one particular case study, a story portraying one high performing practical nursing program spawned the discovery of strategies to increase overall program success that can be utilized throughout nursing education as well as across different disciplines. The following chapter presents a story of one successful nursing program told through the lens of individual vignettes. The vignettes illuminate the themes that surfaced from the data analysis which may ultimately be used to suggest a theory of program success within nursing education.

## CHAPTER 4

### ANALYSIS OF FINDINGS

Glancing down the hallways of the Allied Health building, attention is immediately drawn to the hundreds of class pictures adorning the walls. Beaming in crisp white uniforms, Associate Degree Registered Nursing students stand in silence, forever sealed in a moment of academic celebration behind the sheer covers of protective glass. There is an air of professional pride, a sense of profound achievement for the graduate nurses from the Pine County Community College (PCCC). Unbeknownst to the unsuspecting viewer is that blanketed behind these walls of academic prowess lies within the “hidden gem” of nursing program excellence; the collective voices of a Practical Nursing program grounded in passion and endurance ready to be heard. Moving beyond the more public spaces and pictures into the private offices of professors and teachers unveils the beginning of a story that goes beyond the basic academic elements of nursing school curriculum. Consequently, eight vignettes will present a theoretical explanation of how this charming and unique program achieved significant success and survived over the past 50 years.

#### **Description of the Sample**

The following story is told from the perspective narratives from those directly involved with the Practical Nursing Program today. Faculty and staff participant saturation was achieved by inclusion of all members of the Practical Nursing program. Six of the current 16 students agreed to participate in a focus group for the study. The total interview participants included the Dean of Allied Health Sciences, one clinical site representative/employer of current students, the four Master’s degree prepared Practical Nursing faculty, one staff member, six students, and two alumni who were students throughout the past five years. The participants included one male and

14 females. Interviews concluded when saturation of data was achieved. Upon collection of the interviews, the qualitative thematic analysis on the responses of the participants was performed.

### **Artifact Analysis**

Along with the participant narratives, select items were included as part of the program's artifact analysis. Artifacts analyzed included historical newspaper articles from the Pine County Times, the PCCC Practical Nursing Program Curriculum, the PCCC Practical Nursing Program Handbook, the PCCC Practical Nursing Program Admission Policy, the PCCC Practical Nursing Program Attrition Rates, the PCCC Practical Nursing Mission Statement, and the PCCC Practical Nursing Progression and Promotion Policy. The PCCC Practical Nursing Program Systematic Evaluation Plan was in the process of initial development and therefore was not included in the artifact analysis. The artifacts were analyzed and compared to the findings of the Chapter 2 literature review regarding nursing program success to determine uniqueness or comparability to other nursing programs. Additionally, the artifacts were analyzed for themes and a constant comparative method with the participant narratives and the researcher's field notes was utilized for final theme determination.

### **History**

The Crawford School of Practical Nursing, originated in 1952, held classes at the Crawford High School until 1965 when the classes were moved to the Crawford Recreation Center. During this time, significant controversy over the placement and continuation of the Practical Nursing program was dramatized within the county throughout newspaper articles. The December 1, 1965, article in the Pine County Times portrays the county's concern for the physical location and continuation of the Practical Nursing Program. The Executive Secretary of the Greater Crawford Area Chamber of Commerce stated that moving the school out of

Crawford “would be a great economic loss to our community.” However, following a review from the State Board of Nurse Examiners, it was determined that the “program site was inadequate and would be forced to withdraw its certification if something wasn’t done to improve the situation.” Those in opposition to continuing the Practical Nursing Program felt that the required improvements were a “financial burden the taxpayers should not be forced to bear.” Adding to the controversy, the State Board of Nurse Examiners placed the Practical Nursing Program on a provisional status claiming that the “Practical Nursing school facilities were inadequate and unstable due to three different locations in three years.” Furthermore, “the academic records were inconsistent, inaccurate and incomplete.” Additionally, the State suggested there was “recent instability among the faculty members” and claimed that “some were unqualified.” Following this review, the State Director of Vocational Education informed the Crawford Area School District that “reimbursements could no longer be made for the Practical Nursing Program unless all requirements of the State Board of Nursing Examiners have been met.”

It was decided to send representatives of the school board to Harrisburg to meet with the State Board of Nurse Examiners to clarify what were considered “misunderstandings” at that time regarding inadequate staffing and resources. During the meeting, the State Board was given a detailed history of the school and was advised of the need for such a program in the area. It was determined, because of the wide community interest, to allow the school to operate for one more year at the present location in the Crawford Recreation Building until the county officials were able to present the state with a detailed plan for the future meeting every requirement of the State Board of Nurse Examiners. In December 1966, the board of trustees of the then new Pine County Community College announced that it would be the home of the Practical Nursing Program. The

last Practical Nursing class graduated from the Crawford Area School of Practical Nursing in 1967.



*Figure 2.* Newspaper clipping of the last graduating class from the Crawford Area School of Nursing published in the Pine County Times August 29, 1967.

The Community College System of Pennsylvania was founded in the mid-1960s with a goal of facilitating less expensive and readily available higher education to people unable to attend traditional school. The Pine County Community College (PCCC) was founded in 1966 and was located in western, Pennsylvania. The school's campus was nothing more than 17 leased storefronts and a few floors of the local National Bank building. The Practical Nursing program was among the first higher-education programs offered at that time.

As PCCC grew and moved to a larger location, the Practical Nursing program remained a staple of the academic programs offered. Celebrating over 50 years of perseverance and success, the Practical Nursing program continues to hold strong to traditional academic values. Despite the extensive growth and technological advancements in healthcare and nursing education, the core organizational characteristics of the practical nursing program exhibited today hold steadfast to the meaningful human connections and community interest the program was built upon.

The findings of this study will both illuminate these characteristics and provide a better understanding of how these meaningful human connections within the organization relate to program sustainability and the exceptional decade-long success the program has had on the NCLEX-PN. Moreover, a focus on the intrinsic characteristics present within the members of the organization's community elicits a culture of commitment and a capacity for organizational growth and success concealed within a humble and frequently overlooked program. The significant impact of human characteristics and connections on the overall program success is brought to life through the narratives of the administration, faculty, staff, students, and alumni who embody the spirit of the Practical Nursing program. The collective voices of the participants present a story which addresses the all-embracing research question:

1. What factors contribute to the program's success on the NCLEX-PN in a top rated Practical Nursing program in Pennsylvania as perceived by the program's stakeholders?

Through the use of vignettes, the relationships between structure, behavior, and attitude appear and an understanding into the workings of a successful educational system unfolds. Each vignette blossomed from the analysis of interviews, artifacts, and observations collected during the study. In a culture of ever-changing and innovative educational technology, which many



times obscures the realm of human connectivity in higher education, these short vignettes present a unique picture of a successful and persistent program. Together, the participant's perceptions provide an understanding into how this particular system works and how it shifts patterns of behavior into continued improvement and success.

### **Vignette I: The Cream of the Crop**

*“Our students have to work hard academically to succeed. Our students really bring challenges with them when they enter the classroom.”* – Faculty Member

The Pine County Community College's Nursing Program offers a Diploma in Practical Nursing. Although the State Board of Nursing in Pennsylvania does not mandate a consistent curriculum for Practical Nursing education, PCCC's curriculum is similar to other Practical Nursing programs by requiring general education and basic nursing courses. PCCC students receive clinical laboratory experience in a variety of hospitals and health related agencies in Pine and surrounding counties as part of each nursing course. Students are required to maintain a grade of “C” or 74% or greater in all courses required in the nursing program which is comparable to other Practical Nursing programs across the state. When the faculty and administration were asked if they were only recruiting students with high academic performance standards, the responses were consistent. With surprised raised eyebrows and a negative head shake, one faculty member described the students enrolled in the Practical Nursing program as follows:

I was on the admission committee and our students are all over the place with their HESI scores and GPA (Q.P.A. 2.0) because we look at the entire picture. It is definitely not the cream of the crop. Our students have to work hard to succeed academically.

When a current student was asked to describe themselves as Practical Nursing students, he responded “we are all licking our academic wounds. Nine out of the 16 of us failed out of the RN program, so it’s hard, it doesn’t come easy for us.” Looking down, as if embarrassed, a current student described her academic situation by explaining that she “failed out of two other nursing programs and had a very hard time deciding to try it again.” Graduates of the Practical Nursing program also portrayed themselves as high-risk academically due to previous academic failures, socio-economic impediments, and life responsibilities. With a sense of pride in her voice, a former student detailed her class make-up in the following description:

A large group of our class in the PN program didn’t make it in the RN program. We have disadvantaged students in the PN program that makes it difficult regarding studying. Some are single mothers and working full-time as an [certified nursing] aide and trying to go back to school. Our class had many personal and life issues that they bring to the classroom. Just trying to work a job and raise a family and go to school creates challenges for us as students.

Coupled with the personal challenges the students bring, they are often faced with a negative opinion regarding Practical Nursing education. “There is a stigma associated with Practical Nursing” speculated one faculty member and it “impacts enrollment.” A student described her decision to enroll in the Practical Nursing program as “I thought it was a step backwards for me. Then I realized it was a steppingstone and I realized I should have done this route first.” The negative stigma associated with Practical Nursing education creates myths which hinders enrollment. “We have very small numbers in the PN program. If the students meet the enrollment criteria, they are accepted” stated the Dean of Allied Health Sciences. “I haven’t turned any students away [that meet the criteria] and our seats are not filled.” The Practical

Nursing program at PCCC enrolls class sizes typically less than 20; however, “if we got more than 20 qualified students I would gladly take them” the Dean explained. “This is a depressed area and unemployment is an issue due to the out of work steel mills,” explained a faculty member “it is a rural area and we don’t really have other practical nursing school competition.”

The analysis of the curriculum reveals that the only high-stakes testing related to student progression occurs during the first semester of the program where the students are given three attempts to achieve a 100% on the medication calculation examination. High-stakes testing are those assessments used to make critical decisions for student progression and graduation from the program. Other than the calculation exam, there are no other “eliminating high-stakes testing throughout” the program. Moreover, the following table outlines the past five year’s completion rate for the Practical Nursing program (Table 4).

Table 4

*PCCC’s Practical Nursing Program Completion Rate*

Year	Number of Students Enrolled	Number of Graduates	Students Removed for Academic Failure	Student Withdrawal for Personal/Health Reasons	Students Removed for Clinical Failure	Completion Rate %
2016	19	12	4	3	0	63
2015	14	7	4	3	0	50
2014	17	11	3	3	0	64
2013	13	10	3	0	0	76
2012	18	11	5	0	1	61

*Note:* Obtained from the PCCC Practical Nursing records.

The faculty in the Practical Nursing program utilize similar academic and NCLEX preparatory materials within their curriculum such as HESI, test banks, NCLEX books, and faculty created examinations. Following the examinations, faculty engage in statistical analysis to “evaluate the results” in order to determine which content to review with students. The use of

innovative technology is present within the curriculum; however, it is not a significant component. When asked about the use of instructional technology in the classroom, one faculty member explained “we do a little bit with the simulation manikin but it’s only a little bit here and there with that. I have done clickers but I’m not really that impressed with it. I could never seem to get the technology to work.”

The academic and personal challenges of the students currently and previously enrolled within the PCCC’s Practical Nursing program portray a similar picture of Practical Nursing programs across Pennsylvania. The fact that this small, rural program is not recruiting students with exceptionally high academic GPAs or admission testing scores, does not rely on high-stakes testing, and utilizes common instructional tools within nursing education, provoked the researcher to investigate an alternative explanation for the significant success of the Practical Nursing program.

## **Vignette II: A Culture of Communication**

*“As a leader, our Dean, is very approachable. If we have an issue we talk about it and share ideas and we’re open to listening to each other and willing to change.”* – Faculty Member

Effective communication within an organization acts as a pathway for the flow of information among each of the system elements. Garvin (2000) suggests that skillful communication is important for the smooth operation of the total system. Ross (2006) describes ineffective communication as an attempt to advocate for ideas from the standpoint of “winning” the discussion rather than the solving the problem. By spending time within the Practical Nursing program, it became evident that the members shared humbleness in their willingness to open the channels of communication during problem solving.

Members of the Practical Nursing program attribute their effective communication during decision making to their small size, as well as their advocacy towards the students. “There really is a sense of community. The way we communicate and listen to each other allows everyone to know they are equal.” The Dean explained how she implements purposeful communication within the program when issues arise.

We meet and talk about what we need to address and that is really important to me. I want to make sure the Practical Nursing program is treated equally. Everyone here is proactive and it is through discussion that problems are solved. It is more of a democracy here. People feel free to say what they believe and we come to an agreement. There might be times when we don’t agree but we make a decision and then we know our job is to always present a united front to the students.

In order for communication to intentionally lead the team towards closure of an issue, all members must actively engage in dialogue with an aligned focus on reaching solutions. “I rarely will go to a meeting with a problem unless I have a solution in mind and then we discuss the options.” Consistently throughout the research, conversations emphasized the openness of communication between administration, faculty, staff, and students. “We are definitely willing to talk about issues. If there is something that we can do better, everyone is open to listening to ideas.” The staff interviewed reiterated the sentiment by stating “everyone will listen with respect when others have an issue or problem.” The meaningful conversations focusing on the solution also involve the students. During a focus group conversation, students described the problem solving aspect of the school environment with the following sentiments. “I know I can talk to any of the faculty and they will listen and help me through any issue that I’m struggling with. They just don’t tell me what to do. They talk to you and help work through the issue and

together come up with a way to make it better.” Shaking her head in agreement, a fellow classmate explained “I don’t have any problem approaching a faculty member with a problem. They are strict in what they expect from us but yet I know I can talk to them about anything if I need to. Everyone is so supportive.” An alumni of the program recalled “the faculty insight was so meaningful. I would go to her [faculty] office and talk about my personal problems, not only school work, and she would listen. I never thought twice or intimidated going to them.”

Throughout the study, it became evident that the types of conversations that occurred among the members of the program were selfless. Consistently, the accounts offered by the members described the goal of conversations as improvement and student oriented. When the Dean was asked to reflect on an example of meaningful conversations, she responded “one year when our pass rate dropped, everyone jumped in and started making all of these changes. But now, instead of getting anxious and making quick decisions, we discuss the situation and look to see what is going on, to guide our decision making. By the next year we were back on track again.” When conversations have the intent to explore and discover, egos are silenced and effective collaborative solutions achieved.

### **Vignette III: Collaborative Intellect**

*“We took the PCCC mission statement and made it our [nursing program] own. We all had input into it.” – Dean of Allied Health and Sciences.*

The lack of ego present within the Practical Nursing program creates courteous behaviors which allow the members to perform everyday work tasks together while building on individual strengths. Conversations with the members of the Practical Nursing department reveals a sense that actions and decisions always fall under the broad umbrella of what is best for the collective organization. Moreover, the sentiments revealed during personal interviews collectively focus on

the student during decision making. “It’s about working with people you like and respect.” The Dean explained that during the self-study evaluation of the program “all faculty have a hand in it” further clarifying that “we are working on this as a team. It’s about all of us. They [faculty] won’t buy into it if I just give them what I want it to be. I think it’s important to include all of the key players, including the students, in the process because that is what we are here for. It’s about them.”

Analysis of the interview conversations also revealed a willingness of the participants to acknowledge that one person does not need to be in control. “We all pitch in 100% or a 110% during times of change” recounted a member of the staff, going on to say, “we all know the focus is on the students so we put aside any personal issues when it is time to work on something.” The Dean, with a sense of pride in her team, stated “the faculty members work together extremely well. They only pull me in when they need to and then we get together and talk about things. The faculty jump in to help wherever they can when something needs to be done.” The exceptional ability to distribute power among all members of the team fosters a sense of admiration for everyone’s contributions. Smiling, the Dean described the faculty as “cheerleaders for the Practical Nursing program...which makes a difference for the students knowing that someone is so supportive of them.”

The members of the Practical Nursing program exposed a willingness to show academic vulnerability which can be considered an essential precondition to learning and improving. Although the interviews suggested that all members “clearly understood their roles and expectations,” they also understood that there is a need for constant program evaluation and improvement. “We are now working on developing a systematic evaluation plan, which is part of the accreditation process, to begin regularly evaluating the program” explained the faculty. “The

accreditation process will allow us to make improvements to continue to offer the best education and we [the faculty] are all involved in the process.” The openness to do an internal investigation and self-reflect upon areas of strength, as well as weaknesses, allows the program to reveal uncertainties and offers a platform for continued growth with a meaningful focus.

#### **Vignette IV: Meaningful Purpose**

*“Simply put, our vision is to help every student achieve success.”* – Faculty Member

The goals and desires which fundamentally motivate an educational program may be different based upon the members or guiding mission statement. Therefore, it is essential to focus on the original initiative to help explain the program’s purposeful conceptualization. During the interview discussions, the ability for the program team members to identify the big picture of the program was apparent. During a conversation regarding the mission statement of the program, one faculty member explained that “it is important that we involve students on committees since they are the ones that our decisions ultimately affect. Students should feel as though they have ownership of the program. We want the students to understand this is their program.” The ability of the program to conceptualize the intent of the mission affords all members the opportunity to understand their role and guides their professional actions. Obscured beneath the written words of a mission statement, the researcher was able to recognize a deeper sense of purpose among the faculty members as portrayed in the following story. With a delighted smile and pointing to a graduation picture on her desk, the faculty member reminisced:

We had two sisters from Rwanda that were such an inspiration to me. It gives me a feeling that I am on a mission to help students be successful. I am so proud of them because they came here on scholarships and they wanted to be Practical Nurses, not Registered Nurses. They wanted to take these skills back to their country because they



only have Registered Nurses there. Their mother was a nurse and was killed in genocide and they wanted to be a nurse in her honor. These girls had a lot of things going against them. They had a very thick accent and spoke fluent French. I was so happy to have the chance to work with them in their nursing education.

The story demonstrates that the mission statement is more than an anecdote but rather a living document which is crafted and internalized by the faculty. Clearly stated within the mission of the program is the sentiment to “transform lives by providing quality education.” Unaware that she was echoing this statement, the Dean articulated her purpose of the program in the following manner. “I hope that when students leave the program they say we had the best experience, the best teachers, we’ve learned everything that we need to know and the quality was there.” The Dean went on to further explain that “I want them [students] to go out there and share that sense of pride about PCCC.” The essence of pride is rooted in a deeper sense of passion by the Practical Nursing Program members as they further described their experiences.

### **Vignette V: Passion**

*“Practical Nursing is an integral part of nursing.”* – Practical Nursing Program

#### **Philosophy**

According to the American Association of Colleges of Nursing (2013), almost two thirds of respondents to a survey of universities claimed that a nursing faculty shortage led to the turning away of qualified nursing student applicants. Therefore, finding qualified candidates to fill nursing faculty vacancies creates obstacles for nursing programs attempting to provide a quality education. Moreover, understanding that the success of a program lies among the team members, relying solely upon academic qualifications to fill vacant faculty positions will often deliver quick-fix results. On the contrary, cultivating passionate team members who exhibit a

commitment to the mission are pivotal to the sustained success of the organization. What ultimately emerged from the conversations with all participants involved in the study was the all-embracing theme of passion.

Although passion may be hard to quantify, the Dean expressed passion as one of the most important faculty attributes. “When you bring in just the right instructor with the right personality and the right amount of passion for valuing an LPN it is huge. You can have any instructor in there that can do the job but it is different when they value what the students are doing and what they are going to be.” The Dean further conveyed the struggles of finding passionate employees within the constraints of budgets and the realities of running a quality program.

It is a real tight rope to walk to find a happy balance between finding the right numbers of students in the classroom/clinical and the right instructor. It is something we are always thinking about. To me, one of the most important things we need to do to have a quality program is to have the right people. So when we are hiring, certainly we care about education and background, but there has to be the right fit, someone who genuinely cares about the students, the quality of education, and professionalism.

When further describing the faculty the Dean explained that the faculty “are champions of the Practical Nursing program and for Practical Nursing. They are not here just to teach. It is more than that. They go above expectations without being asked. There isn’t anyone here who is easily replaceable.” The premise that the success of the program lies within the intrinsic qualities of the individuals exposes a unique characteristic related to the patterns of interaction among the team members. The same passion extended down from the Dean and was expressed during conversations with faculty, staff, and students. As one member of the staff explained, “There is a

great quality of the faculty we have here. They are so committed to our program and to the students.” Looking around her office at the graduation pictures and tokens of appreciation received from the students, a faculty member described herself as an educator in the following way.

I am a cheerleader for Practical Nursing because they work so hard. We all want to make an impact in this world and I want to make an impact in this position. The longer I am involved in this the prouder I am to be involved with the LPNs. I sometimes forget I am a Registered Nurse because I am so much into the role of the LPN. I am here to nurture future nurses.

When asked to describe each other as members of the Practical Nursing team, the same passion exuded from the conversations. “She [faculty member] is so passionate, creative, and dynamic. If she would leave the program there would be a great hole left to fill.” “Our faculty have an open door policy. They are always there for students.” Passion also emanated from the faculty and staff as they described themselves and their positions within the program. “I absolutely love my job” proclaimed one faculty member, going on to explain “I think the students see how much we love what we do because they tell us all the time that they find it inspiring.” According to one staff member, “I have been in the same position for 26 years. I am so dedicated to this program, the people in the program, and the students.” Both current and former students responded with the following portrayals of the faculty. “The instructors have so much real world experience and a love of nursing. It gets us excited to see how much they love what they do that it makes us excited to be a nurse.” “The teachers in the program were very passionate about the program and teaching in in. Our teacher was very kind and you could just tell that she loved what she was teaching. It wasn’t just her job. It was more than that. All of the

teachers cared about what they were teaching as much as they wanted us to learn it.” The passion projected from the practical nursing program was palpable during discussions with a clinical site representative and current employer of the LPN graduates from PCCC. “There is something special about the clinical groups when they are here. The faculty are engaged with the residents and really set a great example for the students. You can tell they [faculty] enjoy what they do.”

When speaking with the individual members of the program, it became evident that there was an appropriate sense of fun coupled with passion. Although the faculty remained consistently professional, it was apparent that the program did not view fun, humor, or relaxation as the enemy of hard work but rather a necessary complement. The primary lecture classroom was small yet inviting offering a coffee and snack station as a gathering area for students. While observing in the classroom, the researcher was surprised by the multiple conversations and laughter erupting from the small gathering area in the back of the classroom. When students were asked about the learning environment, they responded, “It is relaxed in our classroom and in the lab and it makes it easier to learn. I feel like I have a network of people in our little group that I can reach out to because we are all going through the same thing and it’s not about competition.” The teaching tools utilized by the faculty member included storytelling, humor related to pop culture, and drawing students in with Socratic questioning. When later asked about the intentions of her teaching methods in the classroom, the faculty responded, “Not only do my students have fun but they are learning how to be a good nurse. When students are afraid from day one of class they burn out quickly. I tell my students that this is a happy place so you might as well start smiling now. My mentors in nursing had fun and I believe nursing is fun. So my sense of humor is done to relax them and I hope it does so to help decrease their anxiety and open them up to learning more. It is a family like atmosphere.” The portrayal of the program as a “family”

blossomed into a more prominent theme describing the unique relationship ties within the program.

### **Vignette VI: The Ties that Bind**

*“Nursing education is a continuous, student-centered, interactive process.”* - Practical Nursing Program Philosophy

When entering the Practical Nursing faculty offices, it immediately becomes apparent that there is a relationship between the staff and students that goes beyond academics. Consistently throughout interviews with administration, faculty, staff, students, and alumni, common themes of family, emotional support, friendship, and bonding reappeared. Imbedded in these conversations were patterns of interaction among the members of the program which offered solidarity to handle the typical occasional stressors associated with nursing education. A student explained her experience as “We are already like our own little family. We are all comfortable with each other and no one is judgmental. We spend so much time together during this one year that we become each other’s support.” “We [the students] try to keep things very positive by sharing motivational things with each other and just to say, hey, you’re not going through this alone.”

The unique relationship within the program was also obvious in the verbal exchanges with the faculty and staff. “I know anyone can replace me in my job and I know when I retire I will be replaced, but at this point, I feel like this is a family, this is my home, this is where I will end my career.” Another faculty member supported that emotion with a smile stating, “In one year, our program comes together as individuals, then as family and eventually friends. This is very valuable in this day and age. Students are not fighting for grades but yet are working to help each other. In my own little way, I am a bit of a mother and a friend to the students.” Alumni of

the program recalled “the faculty and staff were amazing. I couldn’t have asked for better mentors to support you through whatever it was you were going through at the time.” Current students enrolled explained “They [faculty] never talk down to us. They never make us feel that we are not as important as the RN students. The faculty really treats us with respect and in turn we give them respect back.” The validity of this statement was verified by faculty who describe their open door policy in the following manner, “I want to support students in any way I can. The students will come into my office and pour their hearts out to me about things that are going on in their life. That’s how close they feel to us.”

Members of the Practical Nursing program attribute the essence of relationship building to the mutual support, sense of appreciation, and the small size of the practical nursing program. “I feel so appreciated by all of the people here” expressed a member of the staff. “I have had many opportunities to retire or take another position within the college and the Coordinator has said to me ‘you can’t retire, you can’t leave, you have to stay here’ and that makes you feel so good to know that you are appreciated by your co-workers and administrators.” Students also verbalized their feelings of support during focus group conversations. “From day one, our instructors told us that everyone has the ability to make it through the program and that gives us confidence. They [faculty] are always willing to spend extra time after class going over material if we have any questions. They really care about our success.” When asked about the narrative description of the relationships forged and the mutual support within the Practical Nursing program the Dean explained the thoughtfully:

I think because the program is so small it gets overshadowed by the Associate Degree Registered Nursing program because they have so many students. So, we have to be very careful not to let the PNs get overlooked. We have to let the PNs know that they have

worth. All of our faculty are important regardless of the level they teach. Everyone is on equal grounds here. Everyone is as important as the other. The President and I have this mantra going ‘every student counts’ and I believe that and we work for that every day to make sure the students feel it as well.

Although the size of the program is not deliberate, the feelings of mutual respect and appreciation conveyed by the participants connect back to the importance and ability to develop personal connections within a small learning atmosphere. One member of the faculty group believes the size of the program plays a significant role in the ongoing success. “I credit the success to the individualized attention and smaller groups. Every student counts in the PN program so no one slips through the cracks.” Expressing a very similar sentiment, the Dean also attributed consistency to the long-term success. “Our classes are small and the faculty advocate for the students. There is a sense of comradery [among the students] or an idea that we are all in this together. The smaller class gives you that feeling of closeness. Plus, the faculty are consistent throughout the year.” Another faculty member agreed by stating “It’s the consistency of the instructor that makes such a difference. It is a family atmosphere within this program and the students learn to work together as a team and they support each other. I really believe there is something to the cohort environment.” Although the relationships formed among the members of the Practical Nursing program provide a solid foundation, as with any family there is a continual need for growth. The growth experienced by the program is not necessarily in physical size but rather intellectually.

#### **Vignette VII: Intellectual Aerobics**

*“We learn from the past, we learn from our mistakes, but we continue to move forward.” -*

Faculty Member

Traditionally, nursing education programs focus decision making on extrinsic factors, such as high-stakes testing, curricular changes, and prerequisite and nursing GPAs that may have an influence on licensure examination pass rates. Conversely, throughout this study themes related to intrinsic motivation for continued self-improvement and learning surfaced. Conversations exposed a sense that people like to improve and grow while consistently remaining engaged. In support of this finding, faculty described the college wide support for continued professional development. “It [professional development] is extremely important here. We have faculty development and professional development here for all nursing faculty.” Another faculty member explained “From the top down, administration is a huge cheerleader for faculty, staff, and students. Creativity is encouraged especially if it is something that will enhance student learning. Our program really believes in continuing education.”

One notable concept of how the program continued to engage in intellectual aerobics was through the stated desire to engage in reflection and continual improvement regardless of the successful history. “We are now going for program accreditation. The program has been around for over 50 years and even though we know it has been successful we want to make sure it stays that way.” “I think sometimes there is a fear to make changes, especially since we have been so successful, but we know it is for the future of the program and it is a mark of distinction.” Echoing this sentiment, the Dean stated “I feel they [faculty] still need to continue to focus on how to improve and always get better.” Engaging in intellectual aerobics not only requires engaging in professional development but also making the connection between learning and practice. In a story told by one faculty member, the desire for continual personal and academic improvement was revealed.

Almost every year I have had someone in the program that needed academic



accommodations. This one student had Dyslexia. I have sympathy and empathy for these students. So I worked with the student to try to find a way to be able to help them. I think it is important that these students come into the nursing profession. We need more nurses that are able to think outside the box. So I work with these students to find new ways to help them learn.

Remaining consistently engaged within the academic program trickles down and influences the student's determination and motivation to succeed. During a focus group discussion, the students described the high academic standard they experienced as part of the program. "From the first day of class we were told about the high pass rate for the program and what the faculty's expectation was for us." "We know that we are going to a program that is so successful so we know when we enter that we need to be on point." One alumnus from the Practical Nursing program elucidated "They [faculty] always seemed to push us a little further. Just when you thought you knew everything they would come back with another question and we needed to do more research." The "push" from faculty extends beyond the academic walls and infiltrates the community environment and demonstrates a genuine concern for the well-being of others.

### **Vignette VIII: Altruism**

*"Our faculty engender that spirit of cooperation with clinical agencies to support our PN program and the future role of the LPN."* – Faculty Member

Complementing the passion, relationships, and meaningful purpose exhibited by the members of the practical nursing program is a deeper sense of commitment to the Practical Nursing profession. Although most nursing education programs would boast of similar passion for the nursing profession, unlike the Registered Nurse, the Practical Nursing branch of the

profession is constantly threatened with future extinction. What makes this organization unique is that this sentiment goes beyond the traditional attitudes and beliefs associated with buying into the mission or vision of the organization but rather engages the collective community. An employer of the PCCC graduates explained that as newly Licensed Practical Nurses “the PCCC nurses are the ones we seek out first to hire. They are well prepared, inquisitive, and have good critical thinking ability. They are also excited to be nurses and provide care. That is exactly what we want when choosing the type of nurse that will work in our facility.”

The faculty also expressed a deeper desire to promote the role of the LPN by involving the program in community projects, as well as ensuring the stellar reputation of the graduate nurses. The evidence of the program’s belief that their program is making a difference and the desire to produce nurses that are good citizens of the community is captured within a story told by one faculty member.

The area where our school is located is surrounded by out of work steel mills. Maybe some day they will make a comeback but until then we need to figure out a way or what else we can do in the community to help. Our program can help get the word out. The administration is very supportive of community projects. I explained how much I would like to do in the community with the students, for example, in the local Food Bank, and he is very approachable.

The importance of establishing productive community relationships with the program was also echoed by the Dean who stated, “I think we need to get over the stigma associated with what it means to be a Practical Nurse. Our faculty clearly try to find many ways to promote the students and help out in the community. She [faculty member] takes them to career fairs and health fairs. This builds good relationships with our community partners who are so important to

us.” As a follow up question regarding the impact of program on the future professional role of the LPN, the Dean stated, “I hope when students leave here they have a real sense of pride. I want people to know that our graduates have gone on to do great things and that the role of the LPN is so important.”

### **Vignette Summary: Too Good to Be True**

Throughout the interviews the researcher did experience skepticism related to the positivity that emanated from the members. When asked about areas that needed change within the program and the Dean and a faculty member offered mirror responses as to the “need to hire a second consistent clinical instructor.” However, in relation to the interworking’s of the program the participants were unable to offer any negative statements. Cynical exploratory follow-up questions on the positive environment posed to the Dean, faculty, staff, and students elicited common responses related to “the small size of the program,” the “family-like atmosphere,” and the “mutual respect” among the members as contributing factors for the positivity and long-term program success.

### **Summary**

Through the qualitative thematic analysis of the participant interviews and artifact analysis eight vignettes revealed an academic program similar in curriculum yet grounded in the intrinsic characteristics of communication, collaborative intellect, meaningful purpose, passion, binding relationships, intellectual aerobics, and altruism. The preceding eight vignettes addressed the all-embracing research question which provides insight into the deeper patterns of success as experienced by those involved in the Practical Nursing program. Each vignette blossomed from the analysis of interviews, artifacts, and observations collected during the study. In a high-tech and low-touch educational culture, the vignettes unveil a unique glimpse into the human aspect

of creating and sustaining a highly successful program. In a time where educational theories are stammering to find the latest technological quick-fix solution for academic shortcomings, the intrinsic characteristics and systemic interpersonal connections uncovered within this study reveals a deeper explanation for long term program success. A further analysis of the themes that emerged within each vignette to address the literature and the all-embracing research question is examined further in chapter five. Moreover, chapter five will discuss the significance of this research within nursing education and the applicability of the results to other fields.

## CHAPTER 5

### CONCLUSIONS AND RECOMMENDATIONS

The purpose of this qualitative case study was to uncover the perceived factors contributing to the success of a top rated Practical Nursing program in Pennsylvania. To satisfy this purpose, the Pine County Community College's (PCCC) Practical Nursing program was selected for the case study based upon a NCLEX-PN success rate of 100% for the past 11 out of 12 years. Although the literature is saturated with specific academic elements such as admission policies, standardized testing scores, high stakes testing, or GPA in correlation with overall program success; this study brought forth the link between the human intrinsic characteristics present in the educational system of a program achieving exceptional success. Through the use of interviews, observation, and artifact analysis, eight themes emerged and were illuminated within vignettes to answer the all-embracing research question: What factors contribute to the program's success on the NCLEX-PN in a top rated Practical Nursing program in Pennsylvania as perceived by the program's stakeholders?

With higher education moving towards the continual stream of innovative and highly technological instructional strategies as academic problem solutions; this study offers insight into the significance of the human essence of an educational system on program success. The process of thematic analysis allowed the researcher to become immersed in the narratives and understand the experiences of the participants involved in a highly successful academic program. Each vignette engenders a story grounded in intrinsic characteristics and human relationships among the members. The conclusions presented in this chapter not only answer the research question, but also presents an educational systems model that may be implemented by not only other nursing programs but across multidisciplinary organizations as well.

## **Summary of the Findings**

The Pine County Community College's Practical Nursing program was the case study selected for this qualitative study. The results of the thematic analysis revealed eight themes within the narratives of the participants determining a link between the human essence of education and long-term program success. The fostering of the human essence of education was attributed to the subtleties of human interaction among the members of the Practical Nursing program.

The first of these findings revealed a program that was similar in academic curriculum, admission criteria, academic progression within the program, and instructional methods as compared to other Practical Nursing programs. The student population, both past and current, exhibit similar socio-economic hardships, academic struggles, and is mainly composed of non-traditional post-secondary students. These findings present a picture of a Practical Nursing program that is not utilizing any unique curricular, instructional, or academic tools resulting in the long-term program success.

The second theme that emerged was the culture of communication among the members of the Practical Nursing program. Within the narratives, the researcher identified a humbleness and willingness to keep the channels of communication open during problem solving. The members of the Practical Nursing program attributed their effective communication to their small size and advocacy towards the students as their primary focus. The researcher recognized that the members engaged in meaningful conversations that were selfless and focused on program improvement and were consistently student-oriented.

The lack of ego present within the Practical Nursing program cultivated the theme of collaborative intellect which allows the members to perform everyday work tasks together while

building on individual strengths. The actions and decisions among the members of the organization fall under the collective umbrella of what is best for the organization while consistently keeping the student as the center focus. Members within the organization acknowledged that one person does not need to be in control but rather they recounted a distribution of power among all members. The willingness to show academic vulnerability by conducting internal academic investigation and self-reflection is considered an essential precondition to learning and improving as an organization.

Throughout the narratives, it became apparent that team members experience the theme of meaningful purpose in their everyday work. The members were able to conceptualize the intent of the mission statement not only as a verbal sentiment but also internalize the meaning in their everyday practice. The thematic analysis uncovered that the members of the Practical Nursing program experienced a sense of significance and saw their work as beneficial.

One of the most common themes that surfaced related to passion. From the top down within the organization, cultivating passionate team members who were committed to the mission was identified as pivotal to the sustained success of the program. The theme of passion exposed the unique characteristics related to the patterns of interaction among the team members. Combined within the passion was a view that fun, humor, and relaxation was not the enemy of hard work but rather a necessary complement for student learning and achieving success. The sense of professionalism coupled with passion led to the uncovering of the next theme of relationship building.

Consistently throughout interviews with administration, staff, faculty, and students, common themes of family, emotional support, friendship, and bonding reappeared. Once again, the patterns of interactions among the members surfaced and provided explanation to the solid

foundation supporting the program during times of change or unavoidable stress. Embedded within this family atmosphere is a mutual sense of respect and appreciation among the members. The feelings conveyed by the participants connect back to the importance and ability to develop personal connections within a small learning atmosphere.

Although the program is small in physical size, there was a consistent expression among the team of the need to grow and exercise their mental muscles leading to the development of the theme of intellectual aerobics. Narratives among the participants disclosed a need for intrinsic motivation for continued self-improvement and learning while remaining engaged in the program. Moreover, the program demonstrated a desire to participate in intellectual aerobics by program self-reflection and improvement regardless of the successful history. Engaging in intellectual aerobics not only requires engaging in professional development but also making the connection between learning and practice.

The final theme of altruism flourished out of the deeper sense of commitment to the Practical Nursing profession and surrounding community. Displayed among the narratives was the members' beliefs about the profession that extended beyond the traditional attitudes and beliefs associated with buying into the mission of the organization and extended to engage the collective community. The evidence from the member's belief that their program was making a difference and the desire to produce nurses who were good citizens of the community was evident.

The themes revealed within this study have enabled the Practical Nursing program to experience success by tapping into the human essence of education. Where many higher educational programs are focused on the latest "quick fix" educational solution (Bridges, Herrin, Swart, & McConnell, 2014; Kern, Bush, & McCeish, 2006; Tower, Latimer, & Hewitt, 2014),



the Practical Nursing program holds steadfast to the interpersonal connections and intrinsic human characteristics which creates a system of learning. The findings are further discussed with interpretation of the findings as they relate to the theoretical framework guiding this study.

### **Discussion of the Findings in Relation to the Theoretical Framework**

The eight themes that emerged throughout the study recognized that a dynamic complexity exists between the invisible links within the intrinsic characteristics of the members and the overall success of the organization. Searching beyond the obvious components of an educational system and seeking explanation among the concealed relationships presents a nexus of systems thinking. Meadows' (2008) defines a system as an interconnected set of elements that is coherently organized in a way that achieves something. Contemplating an institution of higher education as a specific system, then, allows paradigms to be identified and predictive of both positive and negative outcomes. Understanding an educational program from a system's perspective creates a holistic view which manifests the impact of the invisible patterns influencing program outcomes.

### **Patterns of Meaning**

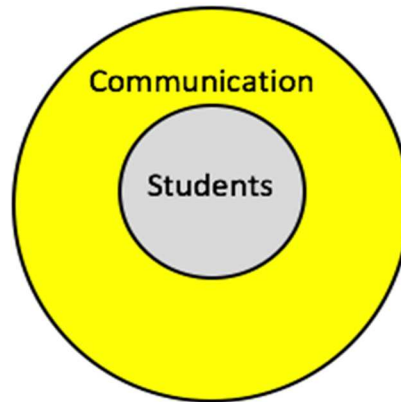
The natural instinct to view an outcome from a systemic perspective is one that has been suppressed by the inflammation of educational instructional approaches; the marketing of educational products promised to improve outcomes and the overall bottom line of the organization. Senge (1999) theorized that when organizations see the overall picture, they actively investigate deeper patterns of meaning and allow alternative views and explanations for outcomes to emerge. The Practical Nursing program at PCCC displayed an approach to thinking that consistently began with a center focus on the students and links of connectivity between each of the member's individual internal elements necessary to create positivity and ultimately

high program outcomes. When viewed together, the themes uncovered within the study creates a new system's model and demonstrates the patterns of meaning within a successful educational program. Meadow's (2008) recommends avoiding the instinct to dissect the elements of an organization and begin identifying the interconnections which bond the elements together. The following model development affords organizations the opportunity to avoid blaming the individual components for outcomes and begin formulating an understanding of the forces that compel action. Utilizing Senge's (1990) theory of system's thinking, an educational model portraying The Human Essence of Education: A System's Model is constructed.

### **System's Thinking**

According to Peter Senge (1999) when constructing a system, the starting point is the realization that there is no inherent end to the system. System's thinking portrays the patterns of interrelationships, which influence each other over time and ultimately function towards a consensual purpose. Senge (1999) suggests a systemic structure must remain aware of the underlying interdependence among members' and how that interdependence influences how the group moves towards the general purpose. Within a system, cause and effect are not necessarily close in time and space; therefore, it is not always apparent on the root cause of a negative outcome. Traditional analysis of educational units that focus on the quick fix problem solution endanger the possibility of overlooking the subtle human elements that may be a causative factor. The findings from this study led to the creation of the Human Essence of Education Model which begins its systematic construction with a key element of organizational effectiveness, communication. Communication then becomes the starting point for analysis when attempting to understand organizational outcomes. The following (Figure 3) demonstrates the

significance and core purpose of the organization as the students within a system of effective communication.



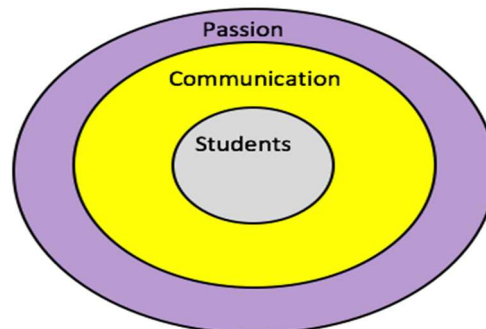
*Figure 3.* Structural level communication in the Human Essence of Education: A System's Model.

The circles of causality present a connection between the parts and prevents a fragmented view of the actions. With the students in center focus, they are embedded in a system of effective communication. Within the study, multiple themes emerged regarding the importance of effective communication among the members during problem solving and future planning. Effective communication begins with actively listening to a diversity of ideas from others. Senge (1999) suggests that multiple visions can easily co-exist within an organization if leaders are willing to listen and have the ability to then articulate common ground. Within the Human Essence of Education Model, effective communication is described as suspending assumptions, decreasing resistance to alternative ideas, and releasing tension on ideas set in precedence. Finally, Senge (1999) implies that problems occur when there is a delay between when a problem is recognized and when it is addressed. Therefore, communication must not only be effectively implemented but also timely in the reality of a situation. When communication is

effectively executed, individuals not only increase their own capabilities but also increase the capabilities of the other people around them. Personal mastery embeds passion which strengthens both individuals and organizations.

### **Personal Mastery**

Personal mastery is described by Senge (1999) as the continual clarifying and deepening of our personal vision by focusing individual energy on personal growth and learning. Senge (1990) further implies that those with high levels of Personal Mastery increase their capacity to produce the results in life they truly seek. Throughout the study, it became increasingly clear that the individuals working within the Practical Nursing program exhibited a palpable passion for the Practical Nursing profession, the students, their positions, and the community. The passionate spark was seen in conversations throughout all levels of the organization from the students up to the Dean. The theme of passion encompasses a thought process that cannot be taught or learned but rather found as an inherent quality within individuals. When individual members cultivate passion for their position and the organization's general purpose, the person will go beyond their workplace expectation and do what is necessary to keep the organization thriving. Therefore, the theme of passion becomes the third layer in the model (Figure 4) hosting effective communication and the focused outcome on students.

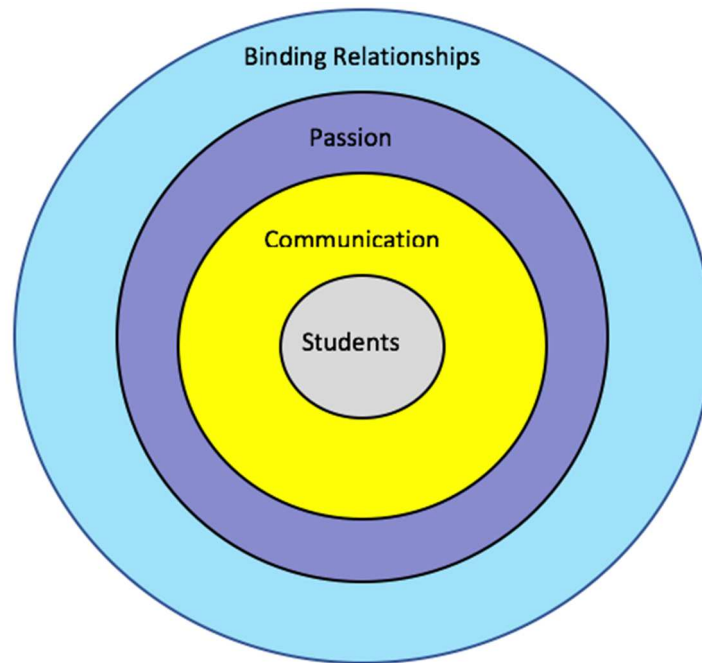


*Figure 4.* Structural level passion in the Human Essence of Education: A System's Model.

Although difficult to quantify, passion surfaced throughout the narratives within the study as members used descriptors such as “love,” “a champion for the program,” and “irreplaceable” to describe their feelings toward the program, the profession, and each other. When individuals experience value in their everyday work, intrinsic motivation is stimulated and work performance increased. When organizations begin to seek out employees that cultivate a passion for their work performance, employees are more likely to be enthusiastic and willing to fulfill the intent of the larger organization’s mission (Roberts, 2006). Passion then becomes the third layer embedding communication since without passionate employees the workflow becomes disjointed hindering an openness to new ways of thinking. As passion cultivates work that is valued among the members, a sense of Shared Vision is experienced by the team.

### **Shared Vision**

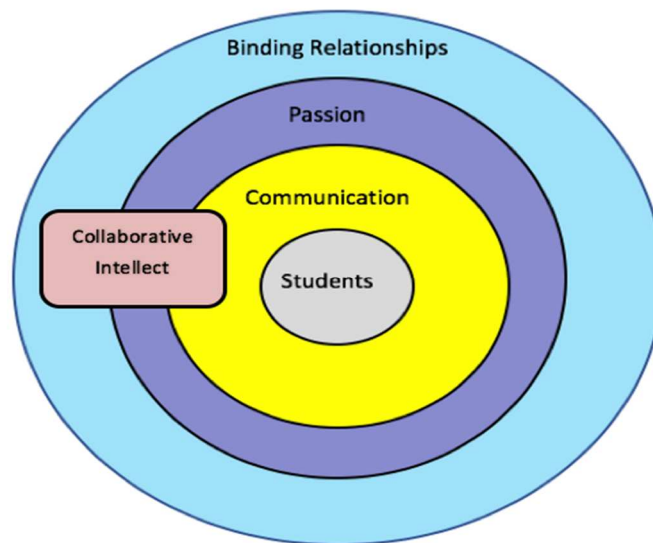
Senge (1990) explains that Shared Vision emerges from personal visions. When individuals experience passion-led visions the excitement to move in the same direction becomes contagious. Senge (1990) describes this process as the way in which organizations derive energy and foster commitment from the members. The two themes of binding relationships and collaborative intellect identified within the study meets the criteria of Shared Vision, noting, that the role of binding relationships outweighs the theme of collaborative intellect. Consistently throughout the narratives, it became obvious to the researcher that the descriptors of “family-like atmosphere” and “relationships” were more than just words expressed by the participants but rather the solid foundation the program was centered upon. Therefore, the theme of binding relationships was constructed as the largest pod within the Human Essence of Education Model supporting all the other interconnected elements (Figure 5).



*Figure 5.* Structural level binding relationships in the Human Essence of Education: A System's Model.

The second theme, collaborative intellect, was evident within the members of the Practical Nursing program as the narratives described a common desire to improve and grow as an organization. Furthermore, the members of the practical nursing program portrayed each other as a collective working towards a focused goal. The collaborative intellect was apparent as the members discussed remaining consistently engaged in program self-reflection and improvement despite the successful history. When individuals focus only on their position, they fail to feel responsibility for the entire organization. Moreover, it can be difficult to determine the reasons that problems are occurring. The study revealed that as a team, the members described themselves as proactive during times of problem solving. Senge (1999) describes "proactiveness" as reactivity in disguise and having the ability to look at the entire picture when problem solving.

The theme of collaborative intellect extends beyond seeing the entire picture and represents the ability to also learn from our own and each other's experiences. Collaborative intellect requires a willingness for individuals to be vulnerable to idea rejection and exploration of mistakes. The vulnerability that occurs during collaborative intellect requires the solid foundation of binding relationships, the support of passionate co-workers, and the art of effective communication offering an individual a level of comfort to uninhibitedly engage. As a result of this conclusion, the theme of collaborative intellect was created as a component (Figure 6) supported and surrounded by the leading three influences of binding relationships, passion, and communication.



*Figure 6.* Structural level collaborative intellect in the Human Essence of Education: A System's Model.

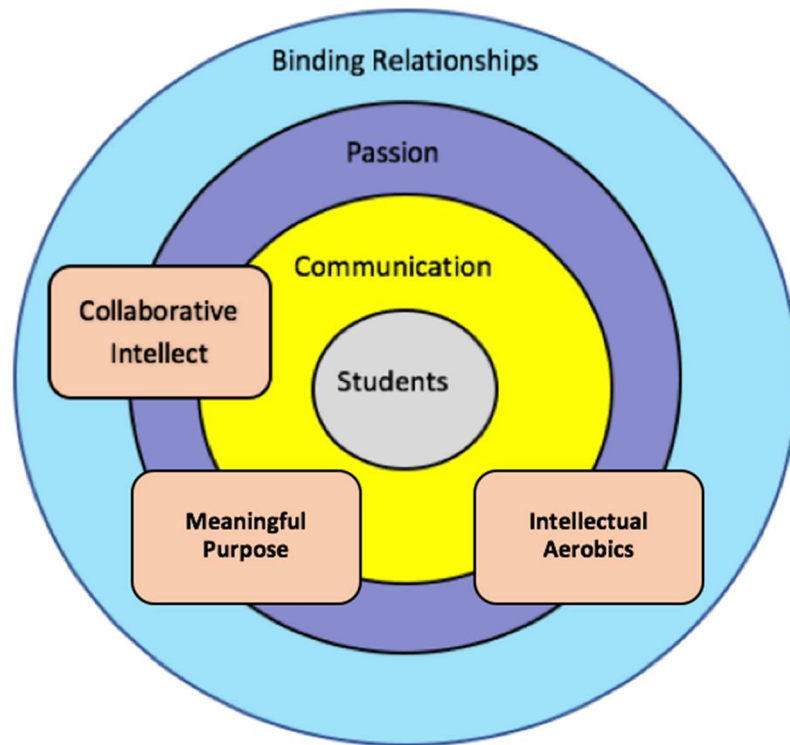
The study revealed that the administration of the Practical Nursing program understood that imposing a mission on the members rather than developing a purpose that was meaningful for all members would result in superficial ambition. On the contrary, by involving all team members in the planning and developing of the mission statement and appreciating each

member's unique contributions to the organization the Practical Nursing Program uncovered a method of using mental maps to navigate the program into the future.

### **Mental Models**

Mental models are deeply ingrained assumptions, generalizations, and images that influence how we understand the world around us (Senge, 1999). Within the work environment, people establish mental models in the form of impressions of themselves or puzzle pieces that fit within the organization. Mental models are formed and can be removed similar to looking through tinted eyeglasses altering the perception of what is seen. Therefore, mental models either require nourishment to grow and thrive in a positive direction towards the organizational outcome or proverbial starvation to emaciate the negative thought processes. The study of the Practical Nursing program identified two themes, meaningful purpose and intellectual aerobics, which cultivate positive mental models among the members. Once again, requiring the support of the three main pods of binding relationships, passionate co-workers, and the art of effective communication both meaningful purpose and intellectual aerobics were created as components (Figure 7) within the Human Essence of Education: A System's Model.





*Figure 7.* Structural level of meaningful purpose and intellectual aerobics in the Human Essence of Education: A System's Model.

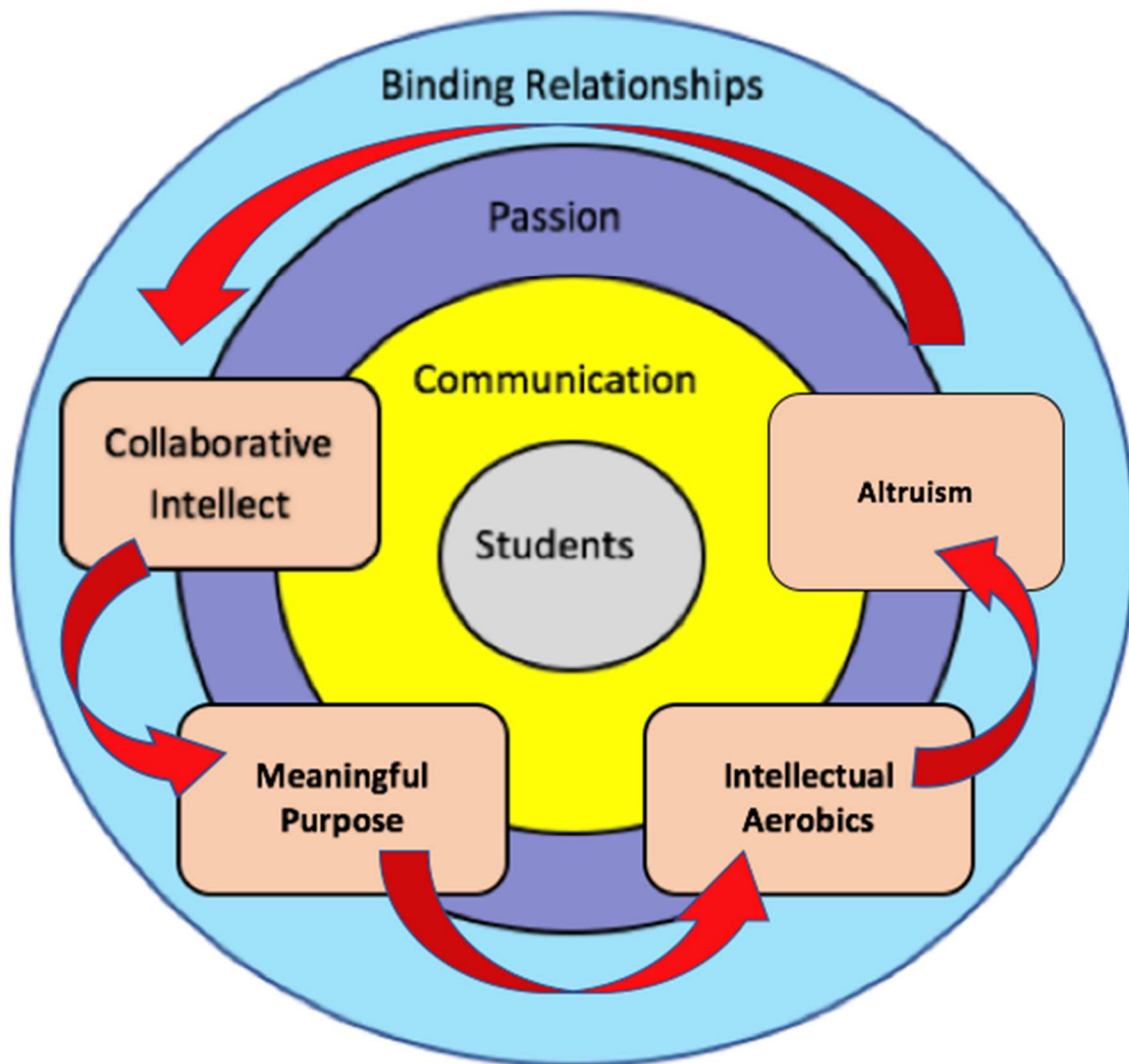
The theme of meaningful purpose supports Senge's (1990) concept of mental models in that the members of the Practical Nursing organization demonstrated a deeper purpose to their education program that extended beyond the classroom walls. Entrenched in the stories told by the faculty members, surfaced a pride and clear sense of a bigger picture for the educational system. Senge (2006) suggested that mental models shape how we act and what we believe about ourselves. Therefore, the Practical Nursing program's expression of meaningful purpose for their own positions and that of the organization creates a reciprocal relationship which fosters positive outcomes. Recognizing that meaningful purpose plays an integral role in outcome achievement, academic leaders must seek out and examine the meaning each team member experiences and cultivate them towards the desired outcomes.

The second element, intellectual aerobics, was described by the Practical Nursing program members as the intrinsic desire to continue to learn and grow both as an individual and as an organization. The study revealed that creativity was encouraged within the program, as well as continual self-learning. Faculty members described their intent to engage in ongoing professional development as a desire to grow professionally as an educator and ultimately find new ways to help students learn. As with any aerobic exercise for the body, intellectual aerobics stimulates the growth of innovative ideas and solutions to problems. It is from this growth in thought processes that the other elements of collaborative intellect and meaningful purpose are stirred creating a continual movement within the system. The movement within the system becomes so dynamic that it extends beyond the organizational walls and leaks into the community creating the final element of altruism within the model.

### **Team Learning**

The benefits of working together as a team to accomplish a desired outcome is not a novice idea. However, the concept of team learning is taken to a different level when the team boundaries are broken and learning is extended into community wide environment. Senge (1999) describes the process of team learning as the ability of individuals to suspend assumptions and enter into a team together where new ideas are arrived at. Furthermore, Senge (1999) suggests that team learning is not about the practice of learning about team dynamics but rather the process of alignment with each other and to function as a whole unit. The theme of altruism surfaced within the study as the participants discussed their role in creating a positive influence on the community environment and the profession of Practical Nursing. The altruism element placed within the model demonstrates a desire to move beyond boundaries of the organization with the understanding that the improvement, both individually and organizationally, is limitless.

When the organization and its members grow out of the physical confines and begin to contemplate growth on a broader scale a synergistic feedback (Figure 8) effect is created within the system.



*Figure 8.* The Human Essence of Education: A System's Model.

### **The Human Essence of Education: A System's Model**

The Human Essence of Education: A System's Model presents a guide to frame an organization that is centrally focused on one core outcome that describes what the organization

stands for and what the members create. Changes in the core outcome [students] may vary; however, the supportive elements of collaborative intellect, meaningful purpose, intellectual aerobics, and altruism must remain steadfast grounded in the solid foundation of communication, passion, and binding relationships. The feedback loops present a fluidity of the model, a dynamic continual process of movement fueled by changes or fluctuations in the core outcome. When change occurs to the core outcome, an evaluation of the entire mechanism is required. Focusing on the specifics of the model is counterproductive and neglects the identification of the patterns of connectivity influencing the goal.

The Human Essence of Education Model presents a new way of thinking about and evaluating educational systems. The focus on the human characteristics present within the makeup of the organization forces everyone involved in the system to view and interact with each other differently. The model recognizes that individuals must fit properly into the system for their absence would cause significant disruption to the system's flow. Furthermore, this model displays an alternative approach to thinking where everyone contributes as intellectual equals regardless of rank or position. Finally, the model respects the individual's continual human need to participate in meaningful work and intellectual growth. Although the creation of this model stemmed from a nursing academic program there are implications for multidisciplinary use.

### **Implications**

The findings from this study have implications throughout nursing education and other disciplines. When an organization is dissected through the lens of system's theory, there is a ripple effect since most organizations have relatable systemic properties. Because of the recent societal trends moving towards a high-tech and low-touch human environment, deconstructing

an organizational system on the foundational human characteristics presents a unique approach. This model analysis can be used at the most basic level of education and throughout departments of higher education. Stepping back and evaluating the entire systematic process occurring in any organization can lead to improvements. Therefore, as the model itself suggests, the implications for use can extend beyond the boundaries of education and infiltrate areas of business, commerce, and even trickle down to an individual family unit.

Educational administrators interested in building an optimal learning environment would need to understand the fundamental human characteristics necessary to create an optimal learning environment for faculty, staff, and students. Understanding and evaluating an educational program from this perspective may help to facilitate change, actively engage members in the mission or vision of the school, and influence general school improvement or planning efforts. Furthermore, educational administrators can use this model as a template guide during employment searches for new faculty or staff. Looking beyond academic accolades into the human essence of the individual may help to identify potential employees that are passionate, collaborative, altruistic, excellent communicators, and an overall good fit within the educational system. Finally, educational leaders can use this model as a template for guiding staff development activities that target the specific area identified in the model as part of team building effort.

The implications for nursing education extends beyond the Practical Nursing level into other pre-licensure professional nursing education programs. In a profession with historical roots firmly planted in the art of human connectivity, analyzing the educational systems producing future nurses through the lens of these findings permits educational programs to identify problem areas while avoiding a quick fix solution. Furthermore, when student nurses receive an education

firmly grounded in human essence, the nursing care they provide may reciprocate the characteristics. To that end, it must be noted that the ability to fully generalize the results on a broader scale are impacted by the limitations of the study.

### **Limitations**

Throughout the study there were limitations identified. The first limitation noted was the small sample size of the study. Although sample saturation was achieved with administration, faculty, and staff, only 6 out of the 16 current students and 2 out of the 4 alumni contacted agreed to participate in the study. Furthermore, the overall size of the program may have an influence on the ability of the participants to experience the findings as compared to larger educational organizations. The second limitation identified is the possibility of participant bias and exaggeration of interview responses. The scope of the study required that the participants be made aware of the researcher's purpose for studying the program. However, the researcher did take this into account and utilized open-ended probing follow up questions during the interview process to avoid superficial responses when possible. Additionally, the literature review guided the artifact analysis which added perspective into the similarity of the educational program to other nursing programs. The final limitation is the synchronous cohort structure of the Practical Nursing program. The results of the study may not be adaptable to asynchronous and self-paced distant learning environments.

A potential delimitation of the study is the narrow scope of the research study that is in opposition to the abundance of the literature surrounding professional nursing education. Though nursing education is diverse in entry level academic preparation and delivery methods, a delimitation of this study is the focus on Practical Nursing education. However, the narrow scope of this study allows for a Practical Nursing program model to guide program development to

better align with the narrow student population. The lack of any consistent curriculum or program model for Practical Nursing is an extensive problem but one that requires further investigation to avoid professional extinction.

### **Recommendations for Further Research**

As a result of this study, several areas requiring additional research have been identified. The following recommendations for additional investigation could build upon the findings of this study:

1. A replication of this study in other schools of Practical Nursing of comparable size would permit comparison of the results between and among school organizations.
2. Further research should build on the findings of this single case study by studying additional large, urban professional nursing programs. A larger sample would increase the level of transferability of findings to other educational settings.
3. A replication of this study within other successful organizations would increase the level of transferability of findings beyond the realm of education.
4. A study utilizing the findings from this study to correlate student motivation and faculty productivity would potentially provide more a more in-depth understanding of the relationship between the findings and academic success.

### **Conclusions**

The purpose of this qualitative case study was to uncover the perceived factors that relate to the long-term academic success within a top rated Practical Nursing program in Pennsylvania. To this end, the researcher conducted a review of the existing literature related to nursing program success and then conducted interviews, observation, and artifact analysis to collect data. Thematic analysis of the data unveiled eight themes of program similarity, communication,

collaborative intellect, meaningful purpose, passion, binding relationships, intellectual aerobics, and altruism which were presented in vignette form to tell the story of one program's success. The themes were then filtered through the theoretical framework of system's theory which ultimately organized and prioritized the themes into a dynamic new Human Essence of Education: A System's Model. The Human Essence of Education: A System's Model presents a new way of thinking about and evaluating educational systems. Further research on the use of the model within other disciplines and within larger educational programs is recommended to increase the generalizability of the findings. This study constitutes a starting point, an intentional and purposeful attempt to uncover the specific elements related to long-term academic success for nursing programs. A continuation of this research would provide insight for leaders interested in building successful organizations.



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## Appendix A

### Site Approval

## Confidential

### Institutional Review Board Decision Letter

The Institutional Review Board (IRB) has completed its review of the following project:

Principal Investigator: Lisa Shustack

Project Title: Perceived factors contributing to NCLEX-PN success rates: A Case Study of a High Performing Practical Nursing Program in Pennsylvania

Funding Agency: None

Proposal Number (if applicable):

The determination of the board is that

  X   This project **complies** with the Institution's Policy and Procedures regarding use of human subjects in a grant-funded research project (Common Rule Section 101 subsection b). The project may be conducted as planned subject to continuing review as outlined in the board's procedures.

       This project **does not comply** with the institution's Policy and Procedures regarding use of human subjects in a grant-funded research project. Concerns of the IRB are outlined in an attached document. The Principal Investigator has the right to modify and re-submit the proposal for another review.

  
Dr. Roger W. Davis  
Chair, Institutional Review Board

12/6/2016  
12/6/2016  
Date

*is Hall - RSW  
S. E. Givens  
Indicate  
15705-105*

## Confidential

## Appendix B

### Letter to Participants

# Indiana University of Pennsylvania

Department of Professional Studies in Education

724-357-2400

Internet: <http://www.iup.ed>

Davis Hall, Room 303

570 S. Eleventh Street

Indiana, Pennsylvania 15705-1087

#### Greetings:

You are invited to participate in a research study. This research will be conducted by me, Lisa Shustack, a Practical Nursing Coordinator with the Schuylkill Technology Center in Frackville, PA, and doctoral candidate in the Administration & Leadership Program at Indiana University of Pennsylvania. The following information is provided in order to help you make an informed decision whether or not to participate. You are eligible to participate because you are a faculty member, administrator, student, or staff member within the Practical Nursing Program at the Pine County Community College.

The purpose of this case study is to determine what perceived factors lead to student success on the NCLEX-PN within a high performing Practical Nursing Program within Pennsylvania. Accordingly, this study will explore each participant's stories of their own experiences and how they perceive the Pine County Community College successfully created a Practical Nursing Program that has achieved a 100% NCLEX-PN pass rate for nine out of the previous 11 years. The information gained from this study could provide an exemplar model that may be replicated by other Practical Nursing Programs across Pennsylvania. In addition, understanding current successful organizational components could provide a platform for future growth and expansion of Practical Nursing Programs.

Participation in this study will require: a) your permission for me to interview you individually and/or as a member of a group possibly up to 3 times lasting approximately 45 minutes each. The second and third follow-up interviews may be done via email or telephone. b) your permission for me to audio-record the interview sessions for the purpose of transcription at a later date. The audio tapes will only be listed to by me and I will be the only person transcribing the interviews. c) your permission for me to attend and silently observe classroom/lab sessions; d) your permission for me to attend and silently observe formal and informal faculty meetings. The researcher will only attend classroom/lab sessions or meetings in which the research obtained faculty informed consent. Additionally, I will ask to review certain program documents such as the Systematic Evaluation Plan, Student and Faculty Handbooks, Admission Policies, Faculty & Clinical Experience Evaluations, and Academic Progression Policies. These documents will be reviewed to identify unique elements that relate to program success. Anonymity during artifact analysis will be maintained by asking the program coordinator to permanently remove any identifiable information from documents provided to the researcher which may include grade

reports, score sheets from standardized test results, course syllabi, and faculty workload prior to researcher analysis.

The face-to-face interviews will all be conducted on campus and will last approximately 45 minutes. The questions asked during the interviews will related to your individual perceptions related to the success of the Practical Nursing Program. The researcher will not observe at any clinical site due to HIPAA regulations.

Students will have the option of participating in a focus group and/or in a one-on-one interview with the researcher. Focus groups will last approximately 45 minutes and will be held only with other students and will exclude faculty, staff, and administrators. If you choose to participate in the focus group, you may withdraw from participation at any time without penalty. Although the focus group will be audio recorded, your responses will remain confidential and no names will be mentioned in the study. All participants in the focus group will be asked to respect the privacy of the fellow participants and not repeat what is said in the focus group to others. Please be advised that although the researcher will take every precaution to maintain confidentiality of the data; the nature of focus groups prevents the researchers from guaranteeing confidentiality.

Your participation in this study is voluntary. You are free to decide not to participate in this study or to withdraw at any time without adversely affecting your status as a student, faculty member, or staff member at the Pine County Community College. Should you as a student decide not to participate; your decision will not result in any consequence related to academic or clinical grades. Faculty and staff who decide not to participate will not have any negative consequence to the salary or benefits they receive as an employee of the Pine County Community College. If you choose to participate, you may withdraw at any time by notifying the researcher, the project supervisor, or the Dean of Nursing and Allied Health. Upon your request to withdraw, all information pertaining to you will be destroyed. If you choose to participate, all information will be held in strict confidence and will have no bearing on your status as a student, faculty member, or staff. Participants of the study will have confidentiality maintained throughout the entire process through the use of assigning each participant a unique code and the use of pseudonyms when presenting participant responses in any research summary, research presentation, or within the published dissertation. The researcher will be the only person collecting and reviewing the data. Participants will have the right to review the transcripts of the interviews for accuracy or to withdraw any statement they choose to revoke. There is a minimal risk of breach of confidentiality associated with the focus group associated with this study. The information obtained from this study may be published in scientific journals or presented at professional nursing conferences but your identity will be kept strictly confidential. There will be no compensation for participation in this study. At the conclusion of the study, you will be offered an executive summary of the results.

**If you are willing to participate in this study, please sign the following consent to participate form and return it in the self-addressed stamped envelope provided by the researcher. Upon receipt of your signed consent, the researcher will contact you via email to clarify any questions you may have pertaining to the research and to provide instructions on how to schedule interviews. Thank you for your consideration.**

**Project Director:** Lisa Shustack  
Doctoral Student, Administration & Leadership  
IUP, Professional Studies in Education  
305 Davis Hall  
Indiana, PA 15705  
Phone: (570) 862-1638  
[l.shustack@iup.edu](mailto:l.shustack@iup.edu)

**Project Supervisor:** Dr. Kelli R. Paquette  
**Rank/Position:** Professor & Chairperson  
IUP, Professional Studies in Education  
305 Davis Hall  
Indiana, PA 15705  
Phone: (724) 357-2400  
[kpaquett@iup.edu](mailto:kpaquett@iup.edu)

## Appendix C

### Participant Consent Form

# Indiana University of Pennsylvania

Department of Professional Studies in Education  
724-357-2400  
Internet: <http://www.iup.edu>  
Davis Hall, Room 303  
570 S. Eleventh Street  
Indiana, Pennsylvania 15705-1087

#### **VOLUNTARY CONSENT FORM:**

I have read and understand the information on the form and I consent to volunteer to be a subject in this study. I understand that my responses are completely confidential and that I have the right to withdraw at any time. I understand that all of the data collected for the study will be stored for five years in a secure, fire-safe file cabinet in the researcher's home. I understand that data will not be shared and my privacy will be diligently maintained by the researcher. I have received an unsigned copy of this Informed Consent Form to keep in my possession.

Name (PLEASE PRINT): \_\_\_\_\_

Signature: \_\_\_\_\_

Date: \_\_\_\_\_

I am aware and consent to the audio recording of the interviews. I have been informed that the audio recordings will only be listened to by the researcher for the purposes of review, data analysis, and transcription.

**\*PLEASE INITIAL\* to indicate your consent for audio recording described above.** \_\_\_\_\_

I am aware and consent to the researcher's review of program artifacts such as the Systematic Evaluation Plan, Student and Faculty Handbooks, Admission Policies, Classroom & Clinical Evaluations, and grade reports, course syllabi and faculty workload. I am aware that anonymity during artifact analysis will be maintained through the permanent removal of any identifiable information from all documentation which may include the grade reports, score sheets from standardized test results, course syllabi, and faculty workload prior to researcher analysis.

**\*PLEASE INITIAL\* to indicate your consent for artifact analysis described above.** \_\_\_\_\_

I am aware and consent for the researcher to silently observe classroom/lab sessions and both informal and formal faculty meetings.

**\*PLEASE INITIAL\* to indicate your consent for the observation described above.** \_\_\_\_\_

Email where you can be reached: \_\_\_\_\_

*Please indicate any questions that you may have for the researcher which will be responded to upon the initial contact. (Please use the back of this sheet if necessary).*

**This project has been approved by the Indiana University of Pennsylvania Institutional Review Board for the Protection of Human Subjects (Phone: (724) 357-7730).**

## Appendix D

### Participant Information Form

# Indiana University of Pennsylvania

Department of Professional Studies in Education

724-357-2400

Internet: <http://www.iup.edu>

Davis Hall, Room 303

570 S. Eleventh Street

Indiana, Pennsylvania 15705-1087

Identify as one of the following: \_\_\_\_ Faculty (Full-Time) \_\_\_\_ Faculty (Part-Time)  
\_\_\_\_ Student \_\_\_\_ Staff \_\_\_\_ Administrator

Number of years associated with the program \_\_\_\_

Please describe your professional background:

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Please describe your educational background:

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#### Contact information:

Best number to reach you at: \_\_\_\_\_ Best time to call \_\_\_\_\_

Do you text? \_\_\_\_ If yes, which number \_\_\_\_\_

Best email address to contact you at \_\_\_\_\_

Office hours: \_\_\_\_\_ Time to avoid calling: \_\_\_\_\_

This project has been approved by the Indiana University of Pennsylvania Institutional Review Board for the Protection of Human Subjects (Phone: (724) 357-7730).



## Appendix E

### Focus Group Ground Rules

# Indiana University of Pennsylvania

Department of Professional Studies in Education

724-357-2400

Internet: <http://www.iup.ed>

Davis Hall, Room 303

570 S. Eleventh Street

Indiana, Pennsylvania 15705-1087

(Page 1 of 2)

**Introduction:** Hello and Welcome to this group discussion. My name is Lisa Shustack and I am here working as a researcher. I am working on a research study through the Indiana University of Pennsylvania. My role in this group is to help get a conversation going and to make sure we cover a number of important topics that I would like your opinion and thoughts on.

**Purpose:** First, I would like to thank you for your time and willingness to share your thoughts and ideas. The overall goal is to hear your thoughts about what has made the Practical Nursing program at the Pine County Community College so successful in regards to NCLEX-PN pass rates. In particular, I am interested in your viewpoint from a student perspective.

The purpose of the focus group format for this study is to allow for open with your peers, which may help to stimulate ideas and generate in depth discussion. This focus group is strictly voluntary and confidentiality will be maintained to highest standards. I will be taking notes during our discussion and will also be audio recording the group so that I do not miss anything important. Audio recording the group discussion will also allow me to go back and revisit the information if I need to.

**Housekeeping:** This focus group is expected to last 45 minutes.

#### Ground Rules:

1. As the facilitator, I may have to move you along in conversation. Since there is a limited amount of time, I'll ask that questions or comments off the topic to be answered after the focus group session.
2. I'd like to hear everyone speak so I might ask people who have not spoken up to comment.
3. Please respect other's opinions. There's no right or wrong answer to the questions I will ask.
4. It is fine to have a different opinion from others in the group. Please feel free to express your own thoughts and ideas.
5. I would like to stress that I want to keep the sessions confidential so I ask that you not use names or anything that directly identifies you when you talk about your personal experiences. I also ask that you not discuss other participants' responses outside of the focus group discussion. However, because we are in a group setting, the other individuals participating will know your responses to the question and I cannot guarantee they will not discuss your responses outside of the focus groups.

(Page 2 of 2)

**Questions:** Do you have any questions so far? Again, your participation here is completely voluntary. So, if you do not have any questions and would like to move forward, I would like to get your consent.

**Closing:** I think we have come to the end of our discussion. I would like to thank you for your honest opinions. You have been tremendously helpful in sharing your thoughts and opinions.

**This project has been approved by the Indiana University of Pennsylvania Institutional Review Board for the Protection of Human Subjects (Phone: (724) 357-7730).**

## Appendix F

### Focus Group Confidentiality Form

# Indiana University of Pennsylvania

Department of Professional Studies in Education  
724-357-2400

Internet: <http://www.iup.edu>

Davis Hall, Room 303

570 S. Eleventh Street

Indiana, Pennsylvania 15705-1087

You have been asked to participate in a focus group as part of a research study. This research will be conducted by me, Lisa Shustack, a Practical Nursing Coordinator within a Practical Nursing Program in Eastern Pennsylvania, and doctoral candidate in the Administration & Leadership Program at Indiana University of Pennsylvania. The purpose of the focus group is to try to determine what perceived factors lead to student success on the NCLEX-PN within the Practical Nursing Program at the Pine County Community College.

You can choose whether or not to participate in the focus group and stop at any time without penalty. Although the focus group will be audio recorded, your responses will remain confidential and no names will be mentioned in the study. The researcher would like to remind participants to respect the privacy of your fellow participants and not repeat what is said in the focus group to others. Please be advised that although the researcher will take every precaution to maintain confidentiality of the data, the nature of focus groups prevents the researchers from guaranteeing confidentiality. The researcher will keep the audio recordings for 5 years following publication of the research study and then they will be permanently destroyed. Each participant is asked to sign this non-disclosure consent form in order to maintain the highest levels of confidentiality.

I \_\_\_\_\_ give my permission for the researcher to audiotape the focus group discussion.

This study has been explained to me and I \_\_\_\_\_ volunteer to take part. I have had a chance to ask questions, but if I have questions later on, I can ask the IRB listed above. I will receive a copy of this consent form.

I \_\_\_\_\_ agree to maintain the confidentiality of the information discussed by all participants and researcher during the focus group session.

(If you cannot agree to the above stipulation, please see the researcher as you may be ineligible to participate in this study).

**This project has been approved by the Indiana University of Pennsylvania Institutional Review Board for the Protection of Human Subjects (Phone: (724) 357-7730).**

## Appendix G

### Administrator Interview Questions

1. Tell me about the Practical Nursing Program at your institution.
2. Describe your students, faculty, and staff.
3. Describe your role as an administrator of the program.
4. Talk about your priorities as an administrator.
5. Describe areas of strength as well as areas that need improvement within the current program.
6. Looking at the Practical Nursing faculty and staff as a team, describe the make-up of the team dynamics.
7. Describe how members of the Practical Nursing team interact with one another.
8. Think of a situation when something wasn't working for the program. Describe how you or the team went about resolving the problem.
9. Do you see the faculty as interchangeable?
10. Describe the process of programmatic change. When does it occur? How does the process work within the team?
11. Would you describe your team as proactive or reactive? Can you give an example?
12. Does your program have a vision statement?
13. How do you enroll the team into the program's vision? How do you get the team's commitment?
14. Describe a typical faculty meeting. Describe the communication between faculty when discussing issues.
15. Describe your role during faculty meetings when faculty are discussing issues.
16. Do you believe the team understands your expectations for them? Explain.
17. Describe the team's reaction to change.
18. Describe the culture of the organization when there is a need to discuss problems. Do you feel the team members are hesitant or willing to bring the issue to the table?
19. Explain why you show up for work every day.
20. What sense do you make out of the long-term success of the program?

## Appendix H

### Faculty Interview Questions

1. Tell me about the Practical Nursing program at your institution.
2. Describe your role as a faculty member within the program.
3. Describe the strategies that you believe are the most important related to the academic success of your program.
4. How does the program promote high-expectations for students?
5. Looking at the Practical Nursing faculty and staff as a team, describe the make-up of the team dynamics.
6. Describe how members of the Practical Nursing team interact with one another.
7. Think of a situation when something wasn't working for the program. Describe how you or the team went about resolving the problem.
8. Do you see the faculty as easily interchangeable?
9. Describe the process of programmatic change. When does it occur? How does the process work within the team?
10. Would you describe your team as proactive or reactive?
11. Does your program have a vision statement? If so, describe your role in relationship to fulfilling the vision.
12. Describe a typical faculty meeting. Describe the communication between faculty when discussing issues.
13. Describe the role of your administrators during faculty meetings or when discussing issues with faculty/staff members.
14. Do you believe you understand your administrator's expectations for you? Explain.
15. Describe the team's reaction to change.
16. Do faculty have time within their schedule to explore creative work?
17. Describe the culture of the organization when there is a need to discuss a problem. Do you feel the team members are hesitant or willing to bring the issue to the table?
18. Explain why you show up for work every day.
19. Can you tell me a story about a time when you felt extremely proud to be part of this program?
20. Can you tell me a story about a time when you felt challenged as a member of this program?
21. What sense do you make out of the long-term success of the program?

Appendix I  
Staff Interview Questions

1. Describe your role as a staff member within the program.
2. Describe the strategies that you believe have helped to make the program so successful.
3. How does the program promote high-expectations for students?
4. Looking at the Practical Nursing faculty and staff as a team, describe the make-up of the team dynamics.
5. Describe how members of the Practical Nursing team interact with one another.
6. Think of a situation when something wasn't working for the program. Describe how you or the team went about resolving the problem.
7. Describe the process of programmatic change. When does it occur? How does the process work within the team?
8. Would you describe the team as proactive or reactive? Explain.
9. Does your program have a vision statement? If so, what is your role in fulfilling the vision?
10. Describe the role of your administrators during faculty meetings when faculty or staff are discussing issues.
11. Do you believe you understand the administrator's expectations for you?
12. Describe the team's reaction to change.
13. Describe the culture of the organization when there is a need to discuss problems. Do you feel the team members are hesitant or willing to bring issues to the table? Explain.
14. Explain why you show up for work every day.
15. Can you tell me a story about a time when you felt extremely proud to be a part of this program?
16. Can you tell me a story about a time when you felt challenged as a member of this program?
17. What sense do you make out of the long-term success of this program?

## Appendix J

### Student Interview Questions

(Questions will be used for both focus groups and individual interviews with students)

1. Describe the experience of being a student within the Practical Nursing program.
2. Tell me about the faculty and staff within the Practical Nursing program.
3. From your perspective, what contributes to the success of the graduate nurses?
4. Do you feel the faculty/staff/administration genuinely cares about your success in the program? Explain.
5. Can you give an example of a time when the students may have experienced conflict and approached the faculty/staff/administration? Describe what that experience was like.
6. What are the specific areas of the program that have been most beneficial to you?
7. If you could change something about the program that would improve the overall success of the program for future classes what would it be?
8. Would you describe the Practical Nursing program as a team that works together? Explain your response further.
9. If you had a problem that you wanted to discuss with the faculty/staff/administration how would you handle it? Describe the communication process.
10. Tell me a story about a time when you felt proud to be a student within the Practical Nursing program.
11. What sense do you make out of the long-term success of the Practical Nursing program.