ADDRESSING A NURSING SHORTAGE: A JOINT ENTRY-LEVEL NURSING EDUCATION PROGRAM

by

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Abstract

The Affordable Care Act, through its Health Insurance Marketplace, has over 8 million participants and many questions have arisen about dealing with mandatory health care. Providing health care to all Americans requires an infrastructure of highly trained professionals including Registered Nurses (RN). A major barrier to increasing the number of RNs lies in the lack of capacity to educate them. Over 60% of the qualified applicants for California’s associate and bachelor degree pre-licensure RN programs are turned away.

The purpose of this qualitative study was to examine a joint entry-level nursing education program (the Paradigm Program) to determine if this approach could potentially help to address a nursing shortage. The Paradigm Program was unique in its design and extensive collaboration between local acute care hospitals and the community college. Data collection methods included semi-structured interviews with faculty and administrators from the community college, administrators from the local acute care facilities, and Paradigm Program graduates, review of archival documents, and graduate questionnaires.

Themes that emerged from the study included the students’ perceptions of feeling well equipped for the culminating NCLEX examination, as well as a sense of camaraderie with classmates in their cohort, and the perception by all participants that the program had a positive impact on reducing the local RN
shortage. Strengths of the Paradigm Program included students’ feelings of being supported socially, academically, and by their employers; stability in the administration; and an increased sense of personal contribution to the community in general. Several areas also were identified for program improvement.

Together the hospitals and community college created a partnership that infused over 600 Associate Degree Registered Nurses into the San Joaquin Valley over a 10-year period. This study showed that a hospital sponsored pre-licensure nursing education program (a Paradigm-like program) could help to address a nursing shortage by adding educational capacity and acceleration to existing pre-licensure RN programs.
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CHAPTER 1: INTRODUCTION

The current presidential administration has implemented a system that requires most United States (U.S.) citizens to maintain some form of basic health insurance coverage. The Affordable Care Act (ACA), through its Health Insurance Marketplace, has over 8 million participants (U.S. Department of Health and Human Services, 2014). Many questions arise when dealing with mandatory health care. What measures must be in place to provide good quality health care to the individuals who need and require it? Will the new healthcare insurance mandates increase the already overloaded hospital and emergency room system? If so, what needs to change in the current infrastructure to allow for increased hospital beds, more doctors and more nurses?

One of the barriers to providing consistent high quality health care is nursing shortages that have been in and out of the global, national, and local spotlight since before World War I (Moore & Simendinger, 1989), and a complete resolution to the problem is not forecasted in the near future (Cappelli, 2010). This study focuses on one community college nursing education program with a promising approach that rapidly infused skilled, nationally certified labor into the local health care of a state that ranks 49th in the United States for Registered Nurse (RN)-to-citizen ratio (Bradley & Pennbridge, 2003). California has fewer RNs per 100,000 citizens than almost all other states.

A review of the literature revealed a nursing shortage exists on various levels: the global shortage of registered nurses (Cappelli, 2010; Oulton, 2006), the national shortage for Registered Nurses (Capelli, 2010), a critical shortage for California (Keating & Sechrist, 2001; Wyly, 2009) and a registered nursing crisis in the San Joaquin Valley (Miltiades & Flores, 2008). Bates and Dower (2010)
reported that over 60% of employment for RNs in California is at the bedside in a hospital. Every patient who is admitted into a hospital has a RN overseeing his or her care. RNs act autonomously in the hospital setting by providing care and comfort, as well as anticipating basic needs such as cleanliness, safety, and activities of daily living. RNs also provide acute care expertise in many settings (Moore & Simendinger, 1989). The remainder of the RN population is vital to long-term convalescent care, rehabilitation, or clinic settings (Moore & Simendinger, 1989).

One solution to a nursing shortage is to educate more nurses; however, doing so is not a simple matter. California has 89 associate’s degree of nursing schools and 36 bachelor’s of science in nursing programs (Bates & Dower, 2010; Board of Registered Nursing, 2013b). Over 11,000 nurse candidates sat for the national boards in California in 2010 (Board of Registered Nursing, 2014). Yet, California’s nursing schools turned away up to 60% of qualified applicants due to a lack of capacity in their programs (Bates & Dower, 2010; Buerhaus, Auerbach, & Staiger, 2009; May, Bazzoll, & Gerland, 2006). The Fresno City College Registered Nursing Program in California documented over 900 qualified applicants on its waiting list in 2007-2008 (MAAS Companies, 2010).

In an effort to increase capacity while maintaining quality, Fresno City College partnered with most of Fresno’s acute care hospitals to form the Paradigm Program, which lasted from 2000 to 2010. This program was successful in infusing over 600 new RNs into the community over that time frame, in addition to the normal throughput of around 300 per year in 2010 (Board of Registered Nursing, 2014) from the Fresno City College RN program (FCCRNP).
Purpose of the Study

The purpose of this retrospective qualitative case study was to examine the Fresno City College Paradigm Program and to determine if a hospital sponsored pre-licensure nursing education program is an approach that could potentially help to address a nursing shortage.

The study was guided by four research questions:
1. What were the participants’ perceptions of the Paradigm Program?
2. What were the participants’ perceptions of outcomes of the Paradigm Program?
3. What were the participants’ perceptions of strengths of the Paradigm Program?
4. What were the participants’ perceptions of challenges in planning, implementing, and sustaining the Paradigm Program?

Significance of the Study

The review of literature revealed a lack of research studies that focus on occupational programs involving collaboration between community colleges and organizations in the local communities. This study has contributed to the body of knowledge by providing an in-depth examination of an entry-level nursing education program that was based on a 10-year partnership between Fresno City College and four hospital partners. In addition, the research may help to inform nursing administrators, faculty, and hospital administrators of an approach to addressing a nursing shortage that can simultaneously benefit the students, community colleges, health care employers, and the community.
Theoretical Framework

Human Capital Theory (HCT) served as the theoretical framework for this study. Becker’s description of HCT was based on the economic theory of investment and return; the caveat is the human element specifically refers to investment in a person through education. As stated by Becker (1993), one of the theory’s founders, HCT is the investment in education, job training, and health instruction of individuals with the expectation of a societal return of increased financial contribution through taxes and increased social awareness and contribution. Individuals also are making an investment in themselves, as the additional qualifications are expected to provide increased income. The investor in HCT may be the individual seeking to improve their education, or could be institutions such as hospitals and the local community college (CC), as was the case in this study. A third aspect of HCT, which was brought out in Becker’s model, is that as the market for human capital increases (e.g., the demand for nurses), students’ expectations for an increased return on investment are elevated, which drives up enrollments (e.g., an increased demand for access to nursing programs).

Human Capital Theory provided a framework for understanding the Paradigm Program and its community college registered nursing student population. The demographic characteristics of the students in the Paradigm Program are in line with Cohen and Brawer’s (1996) assertion that community colleges provide accessibility to education regardless of the average age, socio-economic background, language, or country of origin.

Operational Definitions

Associate Degree in Nursing (ADN): A nurse graduating from a typically 2- or 3-year program. The program can be in a private or public college (Lynaugh,
2008; Satterly, 2004). After completing the prerequisites for attaining an associate’s degree and the specialized courses for nursing, a candidate will be awarded an associate’s in sciences degree of nursing.

*Bachelor’s Degree in Nursing (BSN):* A nurse graduate of a typically 3- to 4-year program, which can be in a private or public college. After completing the prerequisites for attaining a bachelor’s degree and the specialized courses for nursing, a candidate will be awarded an bachelor’s in sciences degree of nursing (Lynaugh, 2008; Satterly, 2004).

*Board of Registered Nursing (BRN):* A department of Consumer Affairs that is a government-funded organization designed to provide protection and accessibility to the public through the regulation of the general practice and education of Registered Nurses (Board of Registered Nursing, 2013a).

*Community College:* Any institution that has the accreditation to grant an associate’s degree in either science or arts (Cohen & Brawer, 1996).

*Diploma Nurse:* A Registered Nurse with training and education provided at a 2- or 3-year primarily hospital-based diploma school (Lynaugh, 2008; Satterly, 2004). No college credit is associated with most diploma schools (Lynaugh, 2008).

*National Council Licensure Examination (NCLEX):* A nationally standardized computerized adaptive test that changes based on a candidate’s answers to each question. The questions are developed based on national entry-level Registered Nursing situations in acute care settings. The questions progressively increase in difficulty until a ratio of 1:1 is accomplished, one correct answer to one incorrect answer. The number of questions answered correctly is compared to a nationally standardized pass rate to determine baseline competency for safe practice (Benefiel, 2011; National Council of State Boards of Nursing,
After passing the NCLEX, the title Registered Nurse (RN) and a license number are registered with the respective state’s Board of Registered Nursing. The RN license is required to work as a Registered Nurse (Board of Registered Nursing, 2013a).

National Council of State Boards of Nursing (NCSBN): A board comprised of each state Board of Registered Nursing as well as any other interested governing board that has committed to follow the standardized practice set forth by the NCSBN. One major practice is the utilization of the standardized national entrance exams for the respective nursing practice level. The focus of the NCSBN is to ensure delivery of competent care by licensed nurses (National Council of State Boards of Nursing, 2013b).

Summary

The ACA will result in more people accessing medical care and increasing pressure on medical system personnel and resources. The current national nursing shortage will likely become more problematic and ultimately affect each citizen at some level, at some point. Finding ways to increase the number of qualified high-caliber registered nurses in the hospital pool is an essential part of the solving the problem. This study analyzed the Paradigm Program’s outcomes, strengths, challenges, and potential as a community college ADN approach for providing RNs that help to address a nursing shortage.
CHAPTER 2: LITERATURE REVIEW

This chapter provides a review of literature that serves as a road map for the evolution of nursing education in the United States and the formidable way in which solutions to nursing shortages through governmental interventions have influenced the practice of nursing today. The chapter also explores factors that exacerbate the current nursing shortage nationally and then examines aspects of California’s nursing shortage. Finally, the theoretical framework for this study, Human Capital Theory, is discussed, particularly in relation to addressing a nursing shortage.

Evolution of the Nursing Shortage and Nursing Education

Modern nursing has its origin in the theories and practice of Florence Nightingale (Bullough & Bullough, 1984). Nightingale, during the Crimean War and after, taught that dietary intervention, cleanliness, and basic comforts such as warmth and a quiet environment were conducive to proper healing (Bullough & Bullough, 1984). Because nursing has been a predominantly female profession, the westernized version of nursing education initially experienced some of the same limitations as were faced by the women in Florence Nightingale’s day. Most American women’s colleges of the late 1800s did not provide an avenue for women to learn nursing, but focused on the liberal arts to promote upper class women in the high society setting (Bullough & Bullough, 1984). Consequently, nursing shortages have periodically occurred in the U.S. (Moore & Simendinger, 1989) and policy makers have attempted to address the problem through legislation and funding, which have affected the training of nurses. Over time,
nursing education has evolved into three educational levels of RN: diploma, AND, and BSN.

The history of nursing shortages is presented by examining literature on each educational type of RN, and particularly the focus of this study, the ADN. The purpose of examining the history of nursing in the U.S. is to identify the past nursing shortage characteristics and solutions that may help to inform ways of addressing the current situation.

**Diploma Nursing**

In 1880, only 15 hospital-based nursing programs existed, but by 1910 there were over 1,000 (Christy, 1971; Lynaugh, 2008). The University of Minnesota supported the first university affiliated diploma-nursing program in 1909. This program was primarily hospital-based, required greater than 50 hospital hours per week, granted very few credits, and issued a diploma upon completion of the 3-year program (Bullough & Bullough, 1984; Christy, 1971; Health Resources and Services Administration, 2010). The demanding schedule of the diploma-nursing program was common throughout the diploma programs of the day; however, there was little government oversight or standardization between the programs across the U.S. (Benefiel, 2011; Bullough & Bullough, 1984; Christy, 1971). Until the late 1980s, the highest educational level for the majority of RNs was the diploma (Fairman & Okaye, 2011). Eventually, with the availability of degreed programs and the increased expense of running the hospital-based programs, the diploma method of nursing education waned (Eastaugh, 2004; Fairman & Okaye, 2011; Lynaugh, 2008; Yett, 1966). The Health Resources and Services Administration reported diploma nurses made up around 20% of all nurses in the U.S. as of 2008 and about 10% of the nursing population in California in 2010 (Bates & Dower, 2010; Spetz et al., 2009). In
2013, less than 2,500 diploma graduates passed the NCLEX (National Council of State Boards of Nursing, 2013a).

Early hospitals had welcomed the hospital-based diploma nursing schools, as the programs provided free high quality labor from nursing students who assumed the majority of nursing care within the hospital (Bullough & Bullough, 1984; Christy, 1971). The diploma-nursing students tended to be of lower socio-economic standing than their collegiate counterparts, and the hospitals would not hire the fully qualified nurses once their education was completed (Bullough & Bullough, 1984; Christy, 1971). Consequently, the fully qualified nurses would be forced to stop working in the hospital and move into the community to find work, often with room and board being their compensation (Bullough & Bullough, 1984).

The Goldmark Report of 1923, funded by the Rockefeller Foundation, was published and became a foundational report that examined the process of nursing education and offered recommendations for improving the conditions of student nurses (Bullough & Bullough, 1984). The recommendations and observations identified a need for additional funding to support the programs. The report also recommended a minimum number of fully trained nurses to manage and teach the nursing students (Bullough & Bullough, 1984). The need for standardization and advocacy within the nursing community gave rise to the first committees to evaluate and provide recommendations to government officials and philanthropists interested in the plight of nurses (Bullough & Bullough, 1984; Christy, 1971).

Also in the early 1900s, states began passing registration acts that required nurses to register with the county clerk in order to be recognized and use the title of RN (Benefiel, 2011; Bullough, 1976). By WWII, the ability to practice nursing began to be regulated by mandatory licensure, and the boards of registration for
Registered Nurses were the first in the United States medical field to have a standardized national test and minimum standards to practice for all licensed nurses (Benefiel, 2011; Mahaffey, 2002). The NCSBN was formed in the late 1970s to standardize the state registries that developed (National Council of State Boards of Nursing, 2013b). The NCSBN also facilitated the standardized national test, which has evolved into the NCLEX-RN. The number of licensed nurses is tracked by the NCSBN through each state Board of Registered Nursing, and surveys of all Registered Nurses in the U.S. are conducted every 4 years (Health Resources and Services Administration, 2010; National Council of State Boards of Nursing, 2012).

Congress passed the Bolton Act of 1943 to address a nursing shortage during World War II (WWII). The Bolton Act created the Cadet Nurse Corps and paid for nursing education in addition to providing a living stipend (Christy, 1971; Kalisch & Kalisch, 1976; Lynaugh, 2008). The Cadet Nurse Corps proved to be an effective measure to train nurses for WWII and continued until around 1950. The concepts and positive image created by this Corps influenced the political momentum that viewed nursing as an integral part of medicine with unique skills and responsibilities that differ from a medical doctor (Haase, 1990; Lynaugh, 2008).

In 1946, President Truman signed the Hospital Survey and Reconstruction Act, which increased the infrastructure of health care facilities and led to wider availability of benefits provided by employers, such as health benefits. This availability of facilities and benefits gave entitled Americans the first view of healthcare as it is known today (Lynaugh, 2008; Moore & Simendinger, 1989).

During the 1950s the Kellogg Foundation began its privately funded attempts to address the nursing shortage (Bullough & Bullough, 1984; Lynaugh,
Recommendations from the Kellogg Foundation influenced the Surgeon General’s report to President Kennedy and Vice President Johnson, which addressed the need for nurses and included a provision that the BSN be the entry level for nursing (Lynaugh, 2008). After the assassination of President Kennedy, President Johnson signed the Nurse Training Act; however, the provision to make a BSN the entry level for nurses was not upheld due to the dire nursing shortage (Lynaugh, 2008).

The 1964 Nurse Training Act infused monies into the degree programs after WWII as the Cadet Nurse Corps continued to assist in providing the much-needed nurses (Kalisch & Kalisch, 1976). Advanced Practice nurses also gained impetus from the Nurse Training Act funds, with a greater than 50% rise in nursing graduates having master’s degrees by the early 1970s (Bates, Keane, & Spetz, 2011; Buerhaus et al., 2009; Fairman & Okaye, 2011; Lynaugh, 2008), and more than 62,000 in 2013 (Board of Registered Nursing, 2013b). Many other pieces of legislation, as well as subsequent privately funded initiatives, continued to infuse funding into nursing and sustained efforts to refine the Hospital-Based programs, BSN, ADN, and higher nursing education that the legislation affected (Eastaugh, 2004; Fairman & Okoye, 2011; Lynaugh, 2008).

**Bachelor’s Degree in Nursing**

The BSN became a viable choice for nursing education in the early 1900s and 11 programs were available by the 1920s (Bullough & Bullough, 1984). By 2013, the BSN had grown to over 650 programs with more than 56,000 new graduates passing the NCLEX (National Council of State Boards of Nursing, 2013a). Prospective BSN students typically spend the first 2 years in general education studies, and have over eight additional prerequisite courses that must be completed with a grade of “C” or higher before applying for admission to the BSN.
program. Once accepted, the BSN program takes an additional 2 years to complete (Health Resources and Services Administration, 2010). At best, a BSN program typically takes 4 years to complete (Board of Registered Nursing, 2013a; Bullough & Bullough, 1984; National Council of State Boards of Nursing, 2013a). The cost of a BSN program varies by state and institution, but as an example, a California State University (CSU) would charge over $3,000 per semester, and tuition for the 4 years would be at least $24,000 (California State University, Fresno, 2014).

More than 80% of the traditional BSN students are younger than 30 years old (Kaufman, 2010), which is a younger demographic than the ADN (Health Resources and Services Administration, 2010).

In 1960, the American Nurses Association (ANA) took a stand by recommending the BSN as the entry level for nursing (Mahaffey, 2002). The ANA and the National League for Nursing (NLN) released position papers in 1965 recommending a differentiation between BSNs and ADNs as professional and technical nurses respectively. In 1983, the NLN again pushed for the BSN to be the entry level into nursing but did not receive much support from their constituents (Bullough & Bullough, 1984; Lynaugh, 2008; Mahaffey, 2002). The argument concerning entry-level nursing education continued to cause division in the nursing community for years to come (Lynaugh, 2008; Moore & Simendinger, 1989). Yet, financial support from legislation did not differentiate between the three entry levels of nursing education (Lynaugh, 2008), nor did employers differentiate between the entry-level degrees (Bullough & Bullough, 1984; Moore & Simendinger, 1989). However, the argument has increased awareness in the nursing community of the need to progress to the next higher degree or credential for nursing (Lynaugh, 2008).
The controversy continues today, as the Institute of Medicine of the National Academies (IOM), a formidable policy-setting organization within the medical community, issued a report recommending the educational level of practicing nurses should be at 80% BSNs by the year 2020 (Fairman & Okaye, 2011; IOM, 2010). The recommendations from the NLN and ANA differ slightly from the IOM, as the IOM acknowledges the ADN by recommending a “seamless academic progression” with the goal of having the majority of practicing RNs educated to the minimum of a BSN level and not excluding any particular entry-level program (Robert Wood Johnson Foundation, 2014). The seamless transition from ADN to BSN in California has taken a legislative route through Assembly Bill 1295. This bill has been the catalyst for the CSU and community college RN programs to standardize and create a common pathway (Legislative Analyst’s Office, 2011).

Nationally, there has been a consistent increase of ADN to BSN transition program growth over the last few years (American Association of Colleges of Nursing, 2014) and in California 35% of nursing programs have ADN to BSN transitions within the higher education institutions (Waneka, Bates, & Spetz, 2013). Nationally, 45% of RNs claim a BSN as their highest educational level (Health Resources and Services Administration, 2010; Robert Wood Johnson Foundation, 2014), and 60% of the same RNs started as ADNs (Robert Wood Johnson Foundation, 2014).

**Associate Degree in Nursing**

The ADN serves as the most common way to enter registered nursing (IOM, 2010). Associate Degree Registered Nursing programs are typically housed at the local public community colleges (Waneka et al., 2013) and began in the 1950s to address a nursing shortage (Fairman & Okaye, 2011; IOM, 2010;
Mahaffey, 2002). In the late 1950s, there were fewer than 60 ADN programs (Bullough & Bullough, 1984), and by 2002, 60% or greater of new graduate nurses were ADNs from one of more than 800 ADN programs nationwide (American Association of Community Colleges, 2014; Bates & Dower, 2010; Mahaffey, 2002). In 2013, over 70,000 ADN students passed the NCLEX successfully (National Council of State Boards of Nursing, 2013a). Moreover, the skill level for acute care nurses at the bedside in California has been predominantly an associate’s degree nurse, and the 2011-2012 BRN Annual School Report showed that greater than 60% of RN new graduates worked in the hospital setting (Board of Registered Nursing, 2013c). Of graduates from California pre-licensure programs, 6,162 were ADN students, compared to 3,896 BSN students (Waneka et al., 2013).

Historically, community colleges have drawn students from populations that had not usually attended college, resulting in increased enrollment of ethnic minorities and older, nontraditional students who have families and are vested in the surrounding community (Bates & Dower, 2010; Buerhaus et al., 2009; Cappelli, 2010; Cohen & Brawer, 2003; Eastaugh, 2004; Mahaffey, 2002). The average age of students in ADN programs is over 30 years old (Health Resources and Services Administration, 2010; Robert Wood Johnson Foundation, 2014). The NLN stated the community college has greater than 49% of the ADN students who are older than 30 years of age during or at completion of the ADN program compared to 25% of the national community college student population (Kaufman, 2010).

Community colleges are able to develop nursing programs that are less costly and have a faster throughput than BSN programs (Fairman & Okaye, 2011; Lynbaugh, 2008, Mahaffey, 2002). The community college nursing degree also
provides an ADN with the opportunity to take the NCLEX (Board of Registered Nursing, 2013a; Health Resources and Services Administration, 2010).

Registered Nurses have been researched extensively, but ADN programs specifically have not been studied much (Mahaffey, 2002); therefore, a gap exists in knowledge and understanding of what the ADN represents. Moreover, although tensions have historically existed regarding the desired entry level of nursing education, an argument can be made that a symbiosis between ADN and BSN programs has been emerging as more ADN nurses enter BSN programs after gaining professional experience as RNs. Increased cooperation between programs could support achievement of the IOM (2010) recommendation that 80% of the practicing RN population have a BSN by 2020. Support for increased cooperation also is found in a 2014 Joint Statement from the American Association of Community Colleges, American Association of Colleges of Nursing, National League for Nursing and the National Organization for Associate Degree Nursing: “We stand ready to work together to ensure that nurses have the support needed to take the next step in their education” (American Nurses Association, 2014, p. 1).

A Pseudo-Shortage Perspective

Some experts have argued the nursing shortage is actually a “pseudo-shortage,” meaning enough qualified nurses are available to fill the need, or that currently there is a balance in supply and demand of RNs (Bailey, Berg, Cardin, McFarland, & Orlowski, 2014; Spetz, 2011). The pseudo-shortage argument is based on several points: (a) the number of nurses is sufficient, but some do not desire to work under the imposed conditions within the acute care setting (Oulton, 2006); (b) there are enough nurses, but they are misallocated and not working in the areas of highest need (Fairman & Okaye, 2011); (c) the growth in new graduate nurses is projected to maintain pace with the exodus of geriatric nurses
and demands of the Affordable Care Act (Auerbach, Buerhaus, & Staiger, 2011); (d) the acute care facilities are adequately staffed; therefore, new graduate nurses are pushed into career settings outside of the hospital (Robert Wood Johnson Foundation, 2014); (e) the inaccurate counting of unfiled vacancies inflates the demand for nurses (Long, Goldfarb, & Goldfarb, 2008); and (f) an unprecedented number of Baby Boomer RN hospital staff have not retired and will remain in the workforce 14 years longer than expected (Auerbach, Buerhaus, & Staiger, 2014). Another point made by Buerhaus et al. (2009) was that during economic recessions, the nursing community comes alive and returns to work full time; in the recent 2007-2009 recession, nursing was the only employment field to add jobs.

Yet, the authors who support this pseudo-shortage argument are cautious in their projections and careful not to call the shortage problem resolved. Historically, nursing shortages have waxed and waned but remained a constant area of focus since the early 1920s and will continue to plague American healthcare into the foreseeable future (Buerhaus et al., 2009; U.S. Bureau of Labor Statistics, 2012).

Research by Buerhaus et al. (2009) and Auerbach et al. (2011) resulted in an almost prophetic caution against viewing any apparent reprieve in the nursing shortage after the recession of 2007-2009 as a complete resolution and warned against failing to prepare for the looming shortages of 2020 and 2030. They cautioned that many factors could further exacerbate the shortage, and recommended that hospitals and lawmakers use this time to further prepare.

Factors Affecting the Current Nursing Shortage

Several looming legislative and demographic factors could potentiate or exacerbate the nursing shortage. These factors include the Affordable Care Act, an
aging population, public health issues, and constraints on nursing education capacity.

**Affordable Care Act**

The ACA, signed by President Obama in 2010 (U.S. Department of Health and Human Services, 2014; U.S. House of Representatives, 2010), directly affected most Americans who did not have health insurance, and extended Medicare benefits to citizens who were previously not eligible (U.S. Supreme Court, 2012). The Henry J. Kaiser Family Foundation (2012) projected the ACA would increase accessibility to medical care for greater than 17 million individuals who previously were not able to afford coverage. The IOM (2010), which likened the ACA to the inception of Medicare, has stated that more than 30 million people will gain access to medical care through the ACA. With full implementation of the ACA, the need for nurses will continue to rise (Auerbach et al., 2011, 2014).

**Aging General Population**

The American Hospital Association issued a report in 2007 that focused on the complications associated with aging of Baby Boomers, the largest population segment in the United States. The Baby Boomers, born between 1946 and 1964, total more than 70 million U.S. citizens (Centers for Disease Control, 2011a; U.S. Census Bureau, 2008). The projected increase in the geriatric population draws awareness to the lack of geriatric nursing specialists. In 2011, less than 1% of the nursing population held geriatric specialty certification (American Geriatric Society, 2011).

The youngest Baby Boomers will reach the traditionally acceptable retirement age of 65 and Medicare eligibility (Social Security Administration, 2013 by 2029 (U.S. Census Bureau, 2008). Also, the population is living longer
than when Medicare was initially enacted. The average lifespan in the 1960s was 70 years, with women out-living men by more than 7 years (U.S. Census Bureau, 2003). In 2013, life expectancy was 78.7 years (Centers for Disease Control, 2011b; Social Security Administration, 2013); therefore, people will use Medicare longer than initially anticipated, and the greatest consumption of benefits will occur during the last year of life (Cuckler et al., 2011; Lubitz, Beebe, & Baker, 1995). According to The American Geriatrics Society (2011), 20% of Americans will be eligible for Medicare by 2030 and currently account for 35% of all inpatient admissions. Over 43 million people receive some form of Medicare assistance, and the majority of consumers are over the age of 55 (Cuckler et al., 2011; Riley, 2010). With the influx of consumers to Medicare, the demand for RNs will continue to increase. California in particular will be impacted as it has a disproportionately higher Medicare and Medi-Cal (California’s version of Medicaid) enrollment when compared to other states (Miltiades & Flores, 2008).

The normal aging process causes a natural deterioration of the body in many ways and is manifested through chronic illnesses. The American Hospital Association (2007) projected that by 2030, 60% of the Baby Boomer population will be dealing with at least one chronic medical condition, while the Centers for Disease Control (CDC) (2011a) reported 80% of older Americans deal with at least one chronic illness. Chronic medical conditions that commonly befall geriatric patients, as reported by the CDC (2011a), are heart disease, cancer, stroke, diabetes, and Alzheimers. Adding to the natural aging process is an emerging trend toward the preventable condition of obesity (Satterly, 2004), which also has become problematic in society as a whole.
Obesity

The American Hospital Association (2007) projected that 30% of the Baby Boomers may be obese by 2030. The classification of obesity is widely accepted as a body mass index (BMI) of 30 or higher (Centers for Disease Control, 2012). In 2012, the CDC reported over one-third of the adult population and greater than 15% of adolescents in the U.S. are considered to be obese. Obesity predisposes individuals to increased risk of chronic illness such as cancer, heart disease, stroke, diabetes, hypertension, sleep apnea, liver and gall bladder issues, and depression (Centers for Disease Control, 2011b). The first three illnesses are the highest causes of death in the U.S. (Centers for Disease Control, 2011a). The CDC (2011b) reported that $147 billion in healthcare spending was attributable to obesity in 2008. The growing number of people experiencing obesity-related illnesses has increased the demand for nurses (Keating & Sechrist, 2001; Leners, Sitzman, & Hessler, 2006; Oulton, 2006).

Retention of Trained Nurses

As stated in reference to the pseudo-shortage argument, some nurses may not want to work under the imposed conditions (Oulton, 2006). Retention of nurses who currently staff the hospitals could be another piece to addressing the nursing shortage (Cappelli, 2010; Spetz, 2011; Wagner, 2010). Nurse retention is an issue at most hospitals due to the difficult and stressful work environment and an outward expression of general dissatisfaction among the nurses (Satterly, 2004). The fiscal ramifications of hiring, training, and then losing a fully qualified nurse are felt deeply within any medical setting.

Once a newly graduated ADN has mastered the medical surgical floor, the nurse is encouraged to seek a higher acuity floor with more specialization in the area of interest, and transition into a BSN program (Lynuagh, 2008). The cost in
2006 to train a RN to care for specific populations that require specialized care, as estimated by Greenburg (2006), was $64,000. Examples of specialized care units are Neurology, Intensive Care, and Emergency Medicine. The $64,000 that Greenburg referred to in training a specialized nurse is most likely based on a nurse that already has the medical surgical baseline training; therefore, the estimated amount probably does not take into account the baseline medical surgical training investment made by the facility at the outset. The importance of nurse retention from a fiscal standpoint is further highlighted when the difficulty of training and retaining nurses is considered.

**Aging of the Registered Nursing Population**

The aging of the RN workforce poses issues that are multilayered within the nursing community and society. Not only does one third of the RN workforce fall into the Baby Boomer population category (Buerhaus, Auerbach, Staiger, & Muench, 2013) previously discussed, but these Baby Boomer RNs will begin retiring from the nursing field within the next 10 years creating large vacancies, gaps in knowledge and loss of expertise in the nursing field (Buerhaus et al., 2009; U.S. Bureau of Labor Statistics, 2013). Moreover, fewer RNs in the workforce could result in less RNs available to teach in the nursing education programs.

**Nursing Education Capacity**

For several years the limited supply of nursing instructors has placed constraints on the number of students that can be moved through pre-licensure registered nurse education programs (Bates & Dower, 2010; Buerhaus et al., 2009; Clark & Allison-Jones, 2011; Oulton, 2006). The BRN 2011-2012 Annual School Report found the highest percentage of faculty openings in the last 10 years at 7.9%. A deterrent to teaching in nurse education programs is salary. Jerde (2014)
conducted an interview with AACN’s chief communications officer, who described the disparity in compensation between the academic and clinical settings to be as much as 20%, favoring the clinical setting. The implication is that faculty salaries will need to be substantially increased to attract clinical RNs into academia (Unruh & Fottler, 2005).

However, another issue impeding the transition of a career RN into academia is having the required degrees to teach in the classroom setting (Bullough & Bullough, 1984)—a master’s degree for the ADN and a doctorate for BSN programs. In 2011, over 40% of applicants for master’s and doctoral degree programs in nursing fields were not accepted, thus further limiting future faculty availability (Kaufman, 2013). Another factor that could limit interest in teaching is the paradigm of being an expert in the clinical arena and a novice in classroom instruction (Brady, 2007). Although teaching is integral to nursing practice, the instruction is performed with either small groups or one-to-one as opposed to the classroom setting where an instructor may lecture to as many as 100 students.

In addition to faculty limitations, arranging clinical placements for students in the hospital for their practical experience is becoming more competitive due to the increased number of nursing students, a decrease in qualified nursing staff, the overloading of hospital nursing staff by the continuous flow of students, and other issues such as preference being given to BSN students (Waneka et al., 2013).

Given enough faculty and clinical hospital space, the next obstacle would be gaining entry into a pre-licensure program. After attaining the necessary prerequisites to apply for a pre-licensure RN program, a qualified candidate could be turned away (Bates & Dower, 2010; Leners et al., 2006). The National League of Nursing, as stated by Kaufman (2013), reported that over 80% of ADN and over 65% of BSN applicants nationally are denied entry into pre-licensure
programs (Kaufman, 2013). California’s pre-licensure program admissions average is slightly higher at 65% overall (Waneka et al., 2013).

**California’s Nursing Shortage**

A nationally accepted way of measuring the supply of nurses has been to compare each state based on the average working nurse to state population creating a ratio of nurse per 100,000 people or per capita ratio (Spetz, 2011). California continues to maintain one of the lowest per capita ratios in the nation; the national average is 860 nurses per 100,000 and California has 644 nurses per 100,000 residents (Bates & Dower, 2010; The Henry J. Kaiser Family Foundation, 2012). The U.S. has almost 5,000 hospitals; yet, California has less than 350 hospitals and the largest population in the U.S. (American Hospital Association, 2007; The Henry J. Kaiser Family Foundation, 2013). Fresno County has six hospitals, providing almost 1,600 acute care hospital beds (American Hospital Association, 2013) for 917,515 residents (U.S. Census Bureau, 2014).

California became the first state to implement nursing to patient ratios (Spetz et al., 2009) causing further stress on the limited nursing pool and driving up the need for more nurses at the bedside (Bradley & Pennbridge, 2003). The new ratios mandated a medical surgical nurse could care for a maximum of six patients at any given time during the 12-hr shift, and sicker patients or higher acuity patients would require smaller ratios (Spetz et al., 2009). The quantitative portion of a study conducted by Spetz et al. collected data from 410 hospital data bases over 8 years and analyzed the trends of staffing and patient outcomes shortly after the enactment of the California nurse ratios. Results of Spetz et al.’s study showed staffing and hours for RNs increased, hospital profits decreased, and ancillary personnel were reduced in order to uphold the ratios. Other research
conducted by Buerhaus et al. (2009) and Satterly (2004) found that when the nurse to patient ratio is decreased, patient complications also decrease.

To examine the implications of the California ratio mandates, Aiken, Clarke, Sloane, Sochalski, and Silber (2002) studied the nursing ratios of 232,342 patients and surveyed over 10,000 staff nurses in California, New Jersey, and Pennsylvania, as well as reviewing the hospital discharge databases. The purpose of the study was to examine whether a correlation existed between hospital nurse staffing ratios and patient morbidity, patient mortality, nurse burn out and nurse retention. The research found a 7% increase in mortality within 30 days of admission per patient added to a nurse’s load over four patients; the finding was considered groundbreaking. Moreover, this finding, along with Satterly’s (2004) discussion of increased burnout among nurses with high patient loads, further reinforced the argument for California’s nursing ratio mandates. Implementing nursing ratios in the hospital is a math equation that takes the condition of the patient into account.

**Approaches to Addressing the Nursing Shortage**

The literature does not provide much information about initiatives that have been implemented in an effort to address nursing shortages. However, the Magnet status and recruitment of foreign nurses have made contributions to reducing the shortages.

**Magnet Status**

The Magnet status was a quality certification program started in the 1980s by an AACN associated nursing taskforce to identify, encourage and support efforts that successful hospitals were implementing in order to retain RNs by achieving increased work place satisfaction (Hawke, 2004). Fourteen
characteristics were evaluated: Quality of Nursing Leadership, Organizational Structure, Management Style, Personnel Policies and Programs, Professional Models of Care, Quality of Care, Quality Improvement, Consultation and Resources, Autonomy, Community and Health Care Organization, Nurses as Teachers, Image of Nursing, Interdisciplinary Relationships, and Professional Development (American Nurses Credentialing Center, 2014). Magnet status is a highly sought after award, which enhances nurse recruitment for the hospital. Also, once Magnet status is achieved the hospital must continue to meet the requirements, submit reports, and be revisited in order to retain the recognition (Hawke, 2004). Achieving Magnet status requires strong commitment by the leadership of the hospital, as the implementation may necessitate organizational changes and can be costly.

**Foreign-Trained Nurses**

Recruiting RNs from other countries has been a common stopgap measure for dealing with nursing shortages in the U.S. (Auerbach et al., 2011; Bates & Dower, 2010; Cappelli, 2010; Satterly, 2004). However, many issues potentially lie in foreign nurse recruitment. Satterly drew attention to recruitment from the Philippines and South Africa where there is an availability of skilled labor and the majority of the nurses speak English. The downfall of this approach is that taking nurses from other countries does not solve the global nursing shortage. Yet, Satterly emphasized that the recruitment of foreign nurses provides an opportunity for qualified individuals willing to make the transition to the U.S. Buerhaus et al. (2009) found foreign nurses to be as high as 16% of the entire U.S. nursing workforce. They also noted concerns regarding the quality of care provided when effective communication is a necessity for patient care and safety.
Human Capital Theory

HCT served as a lens for analyzing the Paradigm Program, which resided in a community college Associate Degree Nursing (CCADN) program. The use of HCT enabled inclusion of both social and individual investment and benefit perspectives in the analysis. Figure 1 depicts the application of HCT in CCADN education.

Schultz (1963) and Becker (1993), two leading HCT theorists and Nobel Prize recipients, viewed education as an investment in self and, although education cannot be separated from the individual, it also results in increased dividends to society through individual contribution. Theodore Schultz (1977) argued “by investing in themselves, people can enlarge the range of choices available to them.”

Figure 1. Schematic of major concepts drawn from HCT and flow of cost and benefits for the CCADN. Adapted from “ADN to BSN: Lessons from Human Capital Theory,” by C. M. Graf, 2006, Nursing Economics, 24(3), p. 136.
It is one way free men can enhance their welfare” (p. 121). While the economic theory of capital investments can be itemized and empirically measured, human capital is deeply rooted in intangibles that cannot be measured by simply calculating individual return on investments (Paulsen & Smart, 2001). Yet, many human capital economists do not factor in qualitative elements. Although one theory cannot completely explain the nuances of human behavior, especially in the arena of personal investment, HCT sheds light on the process of obtaining a CCADN education and the related struggles. The individual return on investment is best demonstrated through financial cost and benefit of a CCADN education.

The California community college education coupled with the ADN is a fiscally smart investment. For a direct investment of less than $8,000 over four semesters of education, which includes tuition, fees, uniforms and equipment, the return is substantial. In California, RN’s reported an average annual income of $80,000 (Spetz, 2011; U.S. Bureau of Labor Statistics, 2013), with 22% reporting annual incomes of greater than $100,000 per year in 2010 (Spetz, 2011). As pointed out in HCT, the total return on investment over a lifetime depends on the individual’s age when completing their educational program (e.g., the CCADN) and how long they stay in the workforce (Becker, 1993).

The student population of a community college tends to mirror the ethnic composition of the community it serves, and provides opportunities for more minorities to enter the medical field (Bates & Dower, 2010; Buerhaus et al., 2009). As a social benefit, the ability of community colleges and the ADN programs to attract minority students results in increased diversity in the nursing field and improved socioeconomic status for the graduates.
Summary

This review of literature has discussed the waxing and waning of nursing shortages in the U.S. and how legislation and government funding have influenced the evolution of RN pre-licensure education. The Goldmark Report, Bolton Act, Hospital Survey and Reconstruction Act and Nurse Training Act were responses to a national need for nurses at various times, and related funding increased the quality of the pre-licensure nursing education programs. The Goldmark Report and legislative acts also drove a change in levels of education from primarily diploma nursing education to the now majority ADN, as well as BSN program availability.

Most recently, the ACA legislation has been enacted. The ACA, together with other factors including Baby Boomers moving into retirement age, national obesity issues, aging of nursing faculty and capacity limitations experienced by pre-licensure nursing education programs provide evidence of a current nursing shortage and the potential for an increased demand for nurses in the future. These factors also cast a shadow on the notion that there is currently a balance in the nursing supply and demand, or a pseudo-shortage. Other demands that the nursing community experiences are directly from within the medical community. The NLN and ANA have advocated for the entry-level nurses to have a BSN education. In 2010, the IOM suggested that 80% of bedside nurses should be at the BSN level with Magnet quality status. Adoption of this suggestion would further exacerbate the nursing shortage. Moreover, this review of literature has demonstrated the socioeconomic benefits of CCADN education as seen through the lens of HCT.

When reviewing the literature, only two non-legislative approaches were found that aimed at addressing the nursing shortage: Magnet status and foreign
nurses. The current research study will help to fill this void in the literature by examining the Paradigm Program as one potential CCADN initiative for addressing the shortage of nurses.
CHAPTER 3: METHODS

This chapter begins with a review of the purpose of the study and research questions, followed by an explanation of the research design. Next, the Paradigm Program setting, sampling procedure, participants, and research instrument are described. Finally, explanations of the data collection methods and procedures, ethical considerations, data analysis, trustworthiness, and research limitations are provided.

Review of the Purpose and Research Questions

The purpose of this retrospective qualitative case study was to examine the Fresno City College Paradigm Program and to determine if a hospital sponsored pre-licensure nursing education program is an approach that could potentially help to address a nursing shortage.

The study was guided by four research questions:

1. What were the participants’ perceptions of the Paradigm Program?
2. What were the participants’ perceptions of outcomes of the Paradigm Program?
3. What were the participants’ perceptions of strengths of the Paradigm Program?
4. What were the participants’ perceptions of challenges in planning, implementing, and sustaining the Paradigm Program?

Research Design

This study used a qualitative methodology and case study approach. The qualitative methodology provided a means to gain understanding of the Paradigm Program through the experiences and perspectives of individuals who were
involved in it. As stated by Creswell (2009), qualitative research “is a means for exploring and understanding the meaning individuals or groups ascribe” to the phenomenon of interest (p. 4). Utilizing the multiple perspectives and insights of individuals involved in the Paradigm Program enabled a holistic understanding of the context and the scaffolding that provided the program with a 10-year partnership between FCC and four local hospitals that educated over 600 RN graduates.

A case study approach was selected to examine a unique program that could provide insights for nursing education to help address the impending nursing shortage. As stated by Creswell (2009), a case study enables the researcher to explore a program in detail and depth. The case helps to bound a phenomenon as an “object rather than a process” and learn about the case within the boundaries, “tracking its issues, pursuing its patterns of complexity” (Stake, 1995, p. 2). Moreover, a case study approach allows for deep study through interviews and thick rich description. The case in this study was the Paradigm Program.

**Setting**

The setting of the Paradigm Program had four contiguous sectors: the city of Fresno, Fresno City College (FCC), the FCC Registered Nursing Program (FCCRN), and the medical facilities within the surrounding community. Fresno, the 5th largest city in California, is ethnically diverse with residents comprised of more than 80 different nationalities (City of Fresno, 2014). The 2010 Census, which was the last year of the Paradigm Program, showed Fresno’s population to be over 496,000 with only 20% of the population 25 years and older claiming an educational level of a Bachelor’s degree or higher. The median annual household income in Fresno is $42,276, well under the state median of $61,400 (U.S. Census Bureau, 2014).
FCC was established over 100 years ago as the first community college in California (Fresno City College, 2014a) and second in the nation (MAAS Companies, 2010). FCC’s enrollment for the period of 2005-2010 ranged from 20,000 to over 24,000 students (Office of Institutional Research, 2010). The FCCRNPNP is a 4-semester program with a mandatory load of 9 or more units per semester (Fresno City College, 2014b). In 2010 the FCCRNPNP was one of the largest in the United States (MAAS Companies, 2010) and had over 300 graduates (Board of Registered Nursing, 2014).

The acute care hospital institutions that participated in the Paradigm Program included the largest acute care facilities in Fresno, and one specialty acute care facility. Each institution was an established clinical site prior to the Paradigm Program, providing hospital experience for the FCC traditional nursing program as well as other nursing programs in the area. Among the skill levels provided by these facilities were a Level 1 trauma center (including emergency, burn and surgical care), Level III neonatal intensive care, and bariatric, orthopedic, maternity, pediatric and neurology care.

**Participants and Sampling**

The participants in this case study were selected using purposeful and criterion based sampling. Merriam (1988) defined purposeful sampling as choosing participants that would provide the greatest amount of detailed information regarding the phenomenon of interest. Creswell (2007) stated “criterion sampling works well when all individuals studied represent people who have experienced the phenomenon” (p. 128). Merriam (1988) also recommended use of criteria for the purposeful sample in order to allow for the greatest inclusion of participants with the greatest knowledge of the subject matter. A criterion is selected to narrow the candidate pool to those who could provide context to the
case based on their personal experience within the case itself. The criterion for selection in this study was participation in the Paradigm Program for at least 2 years (administrators and faculty), or graduation from the Paradigm Program (former students).

To gain a multifaceted view of the program, participants included approximately five previous students (graduates), two hospital administrators, two FCCRNP Paradigm Program instructors, and two administrators of the FCCNP. The selections of specific graduates were made based on recommendations from former instructors, FCCNP administrators, or hospital administrators in the Paradigm Program. Each administrative participant was asked to suggest the names of three former graduates of the Paradigm Program who would likely provide informative interviews. The five graduate participants were selected based on semester of graduation to avoid duplication of participants from the same cohort, number of recommendations (e.g., recommended by more than one administrator), and availability and willingness to participate. Hospital administrator participant selections were based on those most knowledgeable of the program and willing to participate.

**Researcher as the Instrument**

In qualitative research, the researcher is the instrument used to collect, analyze and synthesize the data (Bailey, 2007). Berg (2009) defined interpretative approaches to data analysis through interviews and observational data as an interpretive bent that reflects the researcher’s orientation. I was the last faculty advisor to the Paradigm Program, an instructor within the Paradigm Program, and a tenured nursing faculty member at Fresno City College, as well as a former graduate of the FCCRNP. I also work as a RN in the level one trauma center emergency department that was one of the hospital experience sites. In addition, I
personally knew and worked as an RN with each of the graduates interviewed. My questions and interest in the research are based on the past and impending nursing shortages and the desire as a nursing educator to provide high quality RNs for the community.

Data Collection Methods and Procedures

Methods

The primary data collection methods were semi-structured interviews, post-interview field notes and document review. Semi-structured interviews give the freedom of conversation and allow the participant the ability to dictate the flow of the interview while the interviewer still maintains the continuity of questions between multiple participants (Bailey, 2007). The strength of these interviews is they offer structure but also flexibility in allowing each interview to be a unique unscripted experience; this type of interview also allows for probing (Bogdan & Biklen, 2007). Interviews lasted from 45 to 60 min. Two participants were asked to answer follow-up clarifying questions in a subsequent interview lasting about 30 min.

Post-interview field notes, following the protocol in Appendix A were utilized to augment the digitally recorded interviews. Field notes allow for reflexivity by triangulating the researcher’s inquiries, research participants’ perspectives and the audience’s needs to deliver context to each theme as it evolves (Bailey, 2007; Glesne, 2006). The field notes were written following the interviews to allow for observation and reflection. As stated by Bogdan and Biklen (2007), “fieldnotes are supposed to contain observer’s comments” (p. 163). Field notes also allowed for notations concerning the context while reviewing individual interviews.
Archival documents from the Paradigm Program, including spread sheets, curriculum, and reports, provided information valuable for answering the first two research questions. Merriam (1988) stated “documentary data are particularly good sources for qualitative case studies because they can ground an investigation in the context of the problem being investigated” (p. 109). Merriam (1988) also warned about the weaknesses of documents, such as being written without context or in a format that was not intended for research thereby causing difficulty in the interpretation of the data.

One additional data gathering method was a questionnaire related to educational and professional characteristics of the Paradigm Program graduate participants (Appendix B). The purpose of the questionnaire was to gather specific information about these participants.

**Procedures**

After receiving IRB approval from California State University, Fresno and Fresno City College, participant recruitment began by reviewing Paradigm Program archival documents, which contained contact information for the graduates, FCCRNP administrators, FCCRNP faculty and hospital administrators. Prior to conducting interviews, the interview questions were piloted with individuals who are similar to the participants in the study to ensure that the questions are clear and would elicit responses that are useful to the study. All interviews were conducted utilizing the protocol in Appendix C.

An email requesting participation in an interview (see Appendix D) was sent to the FCCRNP administrators, hospital administrators and selected faculty if unavailable in person or by phone. If a response was not received within 1 week, a phone call was made to confirm contact information and interest in participation. After the date, location and time of the interview had been established, the
interview questions (Appendix E), were emailed to those with a current email address.

The same procedure was followed to recruit graduates of the program (see Appendix F). After the date, location and time of the interview had been established, the interview questions (Appendix G), Questionnaire for Paradigm Graduates (Appendix B), and an interview confirmation were emailed to the participants 1 week prior to the interview for participants with a current email address. The questionnaire was collected at the time of the interview. If the participant did not complete the questionnaire prior to arrival, the participant was asked to complete a hard copy questionnaire before starting the interview.

**Ethical Considerations**

Strict compliance with university and college IRB policies and procedures were maintained throughout this study. A Participant Consent form (Appendices H and I) ensured that participants were fully informed concerning the purpose of the study and conditions of their participation. In addition, Bogdan and Biklen (2007) outlined seven ethical considerations that were adhered to in this study: avoid coercion to participate, respect participant’s privacy, be respectful of interview time commitment agreements, protect the identity of participants unless otherwise agreed upon, keep contracts made with participants, and be honest. Also, all information is kept in a locked cabinet that only I can access.

**Data Analysis Procedures**

Merriam’s (1998) constant comparative method was used to analyze the multiple forms of data in this case study. The constant comparative method allows for a comparison of data to generate themes that are developed into categories and is accomplished by “comparing one segment of data with another to determine
similarities and differences” (Merriam, 1998, p. 18). The similarities within the types of data were coded to enable identification of common themes. After the interviews were transcribed, data from the interviews, field notes, and relevant archival documents were organized using Merriam’s (1998) step-by-step process to allow for data analysis.

Step 1 category construction, is accomplished by reading through the first bits of collected data and taking notes by writing questions and observations in the margins of the transcripts or documents. As recommended by Merriam (1988), I read through the material several times while taking notes and coding in the margins. The codes were grouped into themes, which were then coalesced into categories. Step 2 is to name the categories based on the overarching idea in the themes and consistency with the orientation of the study, which is established by the research questions. Step 3 begins after the categories have been established and includes going back through the data to make the categories more robust.

The data management procedure facilitated accomplishment of each step. Each research question was entered on a separate page and the themes were listed under the corresponding research question(s). The number of participants that mentioned each theme was noted as an indication of the frequency with which the idea occurred. The themes were then integrated into overarching categories. Quotes from the interviews and archival documents that best exemplified a category or provided the unique explanatory voices of participants were pasted under the related category. The quotes were labeled with the participant’s pseudonym or the name of the originating document. After completing this process, the categories were examined again to determine if further convergence into a smaller number of categories was possible. Merriam (2009) suggested that
the fewer the number of categories “the greater level of abstraction,” which facilitates communicating the findings (p. 187).

**Trustworthiness**

Bailey (2007) described trustworthiness as an “embedded set of evaluative criteria, closely related and interdependent: credibility, transferability, dependability, and conformability” (p. 181). Shenton (2004) echoed Bailey and further itemized a list for each of the desired criteria. Shenton’s (2004) method of establishing credibility was through the use of widely accepted research methods. Credibility was established in this study by using an interview protocol, Merriam’s (1998) constant comparative method of data analysis, and triangulation of data. The archival data sources were used to confirm information from the interviews. Also, interviewing several different types of participants in the Paradigm Program allowed for further triangulation and confirmation of the data and findings.

Dependability and conformability were established using reflexivity and objectivity. Reflexivity means I reflected on how my “biases, values, and personal background” might influence my interpretations in the study (Creswell, 2009, p. 233). Objectivity was accomplished through peer review, triangulation of data sources, and revealing affiliations and possible sources of bias. As suggested by Creswell (2003), direct wording from participants has been provided in the study, and “personal values, assumptions and biases” of the researcher as the primary instrument have been identified (p. 200). I also utilized reflexivity in my field notes to assess impressions of the overall interviews. In addition, a FCCRN faculty member that had no prior knowledge of the Paradigm Program conducted a peer review of the research study. Finally, rich thick description has been used in explaining the context and findings. Shenton (2004) asserted that thick description of themes demonstrates credibility through establishment of context and thereby
allowing for greater opportunity for transferability. Merriam (1998) further explained that rich, thick description means “providing enough description so that readers will be able to determine how closely their situations match the research situation, and hence, whether findings can be transferred” (p. 211).

**Limitations**

The study has some limitations. The research is not generalizable, as it is a qualitative case study; however, the rich thick description enables transferability by readers to their own context. Also, I was the final faculty advisor for the Paradigm Program, which could result in some bias. To address this potential limitation, a nursing educator with no connection to the Paradigm Program conducted a peer review of the research. Time limitations also were a factor in carrying out the interviews and conducting the study; yet, the data collected were comprehensive.

**Summary**

This study used a qualitative methodology and case study approach. Data were collected through semi-structured interviews, field notes, archival document review, and a graduate participant questionnaire. The selection of participants was accomplished through purposeful criterion-based sampling, with the sole criterion being participation in the Paradigm Program. The participants in this study included five previous students (graduates), two hospital administrators, two Paradigm Program instructors and two administrators of the FCCNP. Merriam’s (1998) constant comparative method was utilized to conduct the data analysis.
CHAPTER 4: FINDINGS

This chapter presents the findings of the study as related to the research questions, and reflects the perceptions of the research study participants, which included five Paradigm Program graduates, two FCCRNP administrators, two FCCRNP faculty and two hospital administrators. The chapter includes a description of the FCCRNP traditional nursing program, the Paradigm Program, and student selection criteria for the Paradigm Program. Also included are results of the Paradigm Graduate Questionnaire, and a description of the overarching themes that emerged from the analysis of participant interviews. Table 1 provides pseudonyms and roles within the Paradigm Program for all of the research study participants.

Table 1

<table>
<thead>
<tr>
<th>Participant Pseudonyms and Associated Roles in the Paradigm Program</th>
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<td>Name</td>
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Traditional FCCRN Program Description

To identify differences between the traditional FCCRN and Paradigm Program, both were examined. The traditional FCCRN was a cohort model, 4-semester associate-degree nursing program that divided the 18-week semesters into two different sessions. Between 45-60 nursing students were selected via a lottery system every spring and fall. The lottery had as many as 900 qualified students on the waiting list each semester (MAAS Companies, 2010). Prior to the Paradigm Program, the traditional FCCRN did not operate during the summer session (Lester, personal communication, December 2, 2014).

The course work for the traditional program was intense. The students met for a large group nursing theory class lecture 2 days per week and 1 day for a hospital clinical experience with between 10 and 12 students and one instructor. Generally, clinical groups were maintained as cohorts. The program operated in 9-week sessions for each major content section. The grading scale was higher than traditional academic grading scales. The FCCRN grading scale for both the traditional and Paradigm Program was a 100-92%-A, 91-84%-B, 83-76%-C, below 76% was considered a failing grade (Fresno City College, 2009). If the minimum pass rate was not achieved by the end of the course, the student was held back and allowed one more opportunity to pass the class. If 76% was not obtained by the second attempt in the same course, the student was removed from the program (Fresno City College, 2009). The program’s cost in 2009 was $5,204, including all fees, books and tuition (Fresno City College, 2009).

Paradigm Program Description

Based on research study participant interviews and archival data, the Paradigm Program was an 18-month associate degree-nursing program created by the FCCRN dean and a local hospital administrator to help address a critical
nursing shortage in the Valley. After full implementation of the program, staffing was comprised of the FCCRNP administrators, tenured faculty, a liaison from FCCRNP, nursing administrators from five local hospitals and hospital sponsored adjunct clinical instructors. The partnership began in 1999 and ended in 2010. During an interview, Thomas said approximately 600 students graduated from the Paradigm program over 10 years. The Paradigm Program was supplemental to the daily operation of FCCRNP’s traditional Registered Nursing Program and Licensed Vocational Nurse articulation programs. FCCRNP had the largest nursing program in the Valley even before the Paradigm Program was added (MAAS Companies, 2010).

Each fall and spring semester the number of student names submitted to FCCRNP for the Paradigm Program varied based on each hospital’s need and capacity. The number of students provided by each hospital was tallied and the hospital was given their percentage of use. A hospital having more students in the program incurred a higher load and would provide a clinical instructor or payment for a clinical instructor when the percentage of use warranted.

Clinical instructors provided by the hospitals were staff nurses in the respective hospitals. The nurses were paid by the respective hospitals to do the clinical rotation with the students, instead of working on the ward with a team of patients. The nurses were clinical experts and instructed the students on the ward with which the nursing instructor was most familiar. If for some reason, a hospital was not able to provide an instructor, another hospital could provide one and receive credit. In instances where no instructor was available, FCCRNP provided a clinical instructor paid for by the hospital partner that did not have an instructor. Theory instructors were always provided by FCCRNP. The hospital partners,
based on their percentage of use incurred each semester, paid the FCCRNPNP tenured theory instructor’s salary for the course.

The Paradigm Program administration included a liaison FCCRNPNP faculty member that would communicate with the hospital partners, and provide billing statements and progress reports for each student to the hospitals. Later in the program, as liaisons were replaced due to FCCRNPNP staff turnover, an accountant was hired to provide billing and percentage of use statements.

Differences between the Paradigm Program and the traditional program emerged from interviews with FCCRNPNP administrators, FCCRNPNP faculty and hospital administrators. The curriculum and daily operations were the same for both programs, but the curriculum for the Paradigm Program was accelerated to fit into 18-months including summer sessions. The FCCRNPNP grading scale also was applied in the Paradigm Program; however, if a Paradigm student did not achieve the minimum 76% to pass a course, the student was removed from the Paradigm Program and placed into an existing traditional program cohort, based on space available, for theory and clinical courses. The student then was considered a traditional student with one failure in a course and was given another opportunity to pass before being completely removed from the FCCRNPNP. The previous Paradigm student no longer enjoyed the benefits of hospital sponsorship, which included full funding for all educational expenses, and other benefits provided for the Paradigm students.

Archival data collected by FCCRNPNP from 2003-2010 showed that 419 Paradigm students completed the FCCRNPNP program and took the NCLEX. The average NCLEX pass rate for the Paradigm Program participants during that time was 81%. The average for ADN programs in the San Joaquin Valley from 2004-2010 was 83.7% (Waneka, Bates, & Spetz, 2015). The average age of the
Paradigm students was 36 years old, and 20% were male. The racial demographic of the Paradigm program during that time frame was 51% White, 28% Hispanic and 21% self-reported to be a race other than Hispanic or White. By comparison the 2004-2010 BRN data showed California RN programs averaged 47% White, 18% Hispanic, and 35% other race demographics (Waneka et al., 2015).

According to FCCRNPs administrators, faculty and hospital administrator interviews, the majority of the graduates stayed and worked within the Fresno medical community, even if they left the sponsoring Paradigm Program hospital after their initial pay back contract.

**Student Admission Criteria**

The traditional FCCRNPs admission occurred through a lottery type system. Once the admission criteria were met, the qualifying candidates’ names were submitted for the bi-annual lottery in which there were as many as 900 names awaiting approximately 60 seats per semester (MAAS Companies, 2010). The requirements were a minimum 2.0 GPA in the following prerequisites: Human Anatomy, Human Physiology, Humanities, Intermediate Algebra, (2) Physical Education Classes, Introductory General Chemistry, Microbiology, English 1A, General Psychology, and Sociology/Anthropology and Speech.

As revealed in the interviews, Paradigm Program applicants met the minimum academic FCCRNPs admission requirements, as well as additional requirements established by each hospital partner. The hospital partners had the freedom to increase requirements, as the hospitals provided funding for the students’ education and Paradigm Program. For example, a hospital administrator interviewed each Paradigm candidate from their respective hospital prior to selection for entrance into the program, while in the traditional program’s lottery system students were accepted solely based on academics and prerequisite
completion (Erickson, personal communication, October 4, 2014). Once the Paradigm students were selected, the names were submitted to FCC and the students attended classes and hospital clinical rotations for the following 18 months, including a summer session.

Toward the end of the Paradigm Program, the hospital partners adopted similar entrance requirements. Each hospital generally admitted the same number of students each year based on the size of the hospital and the prospective need. One example of the screening tool used to select Paradigm students can be found in Appendix J.

**Paradigm Graduate Questionnaire Results**

The graduate interviews began with the participants writing responses to the nine questions on the questionnaire when not previously accomplished (Appendix B). The data were analyzed to develop a profile of the Paradigm graduate participants in this study. The participants were comprised of two females and three males. All took some form of NCLEX examination preparation course after graduating from the FCCRNPs, and prior to sitting for NCLEX. Most took the NCLEX exam within a month of graduating; however, one student waited 10 weeks prior to taking the NCLEX exam. All participants passed the NCLEX on their first attempt. Most participants in the study had remained an ADN, although one went on for a MSN, and another was a Juris Doctoral Candidate. All had maintained a form of certification such as Advanced Cardiac Life Support, and most had Pediatric Advanced Life support or other certifications related to additional skill levels post-NCLEX. Most of the participants continued to work for the sponsoring hospital, and two continued to work in the San Joaquin Valley as RNs. The graduates worked for the sponsoring facilities between 7 and 10 years prior to their selection for the Paradigm Program. Roles held by these Paradigm
Program graduates prior to becoming an ADN were clinical nursing assistant, unit clerk, extern, instrument technician, operating room core technician, anesthesia technician, or Spanish interpreter.

**Research Question 1**

Research Question 1 sought to understand the participants’ perceptions of the Paradigm Program. Based on graduate participant interviews, two themes emerged: (a) all graduates expressed feeling well equipped for the NCLEX and (b) students experienced a spirit of camaraderie and increased teamwork while in the Paradigm Program. The single theme that emerged from the program administrator and faculty interviews was the highly desirable employee character traits found in the Paradigm students.

**Graduate Perspectives**

The participants that were interviewed in this study unanimously stated they felt the Paradigm Program prepared them well for NCLEX and real world nursing. Ramirez stated the Paradigm Program was “tailored . . . to the participant needs” by taking into account the students’ medical backgrounds which provided them with a good foundation of medical knowledge and enabled the teaching to be calibrated at a higher level. Lopez, another graduate, stated the Paradigm students were “self-motivated and more serious.” He attributed the higher-level teaching to the type of student that he felt the Paradigm program brought in.

Several of the graduate interviews revealed a cohort culture that was team oriented. The students leaned on each other’s strengths in order to succeed by “pairing up” the academically strong but clinically weak with the clinically strong and academically weak. Ramirez stated,

For us, it took the people that hadn’t been exposed to the clinical setting, and we pulled them aside and we would pair up, and it took somebody with
knowledge of bedside nursing as far as a nursing assistant, and we passed it on to the people that didn’t know, so I think that was the benefit in having a program like this in place.

**Faculty and Administrator Perspectives**

All the FCCRNPs faculty members involved in instructing the Paradigm students, FCCRNPs administrators and hospital administrators described the Paradigm students as highly intelligent, talented and motivated. Erickson stated the students she encountered were “quite high functioning and capable.” Thomas, an FCCRNPs administrator, stated “We were able to provide excellent registered nurses, so then they could work at the institutions that needed those registered nurses.” Smith went on to say, “We were really giving them good nurses in the workforce.”

**Research Question 2**

Research Question 2 explored the participants’ perceptions of Paradigm Program outcomes. Two themes emerged from the participant interviews: (a) the Paradigm Program had a positive impact on addressing the local nursing shortage, with the added benefit of retention of RNs in the San Joaquin Valley and or the supporting hospital; and (b) the NCLEX pass rate for the Paradigm Program was perceived as being high.

**Positive Impact on the Nursing Shortage**

Archival data showed an estimated number of new graduate RNs infused into the community during the 10 years of the Paradigm Program was over 650. As this number is somewhat higher than the administrator’s statement of 600 graduates, triangulation of the data suggests the number was at least 600.
The participants also described ways in which the program helped to address the nursing shortage by increasing educational capacity and retention at the hospitals. Smith stated,

I think we'd have to term it very successful. It put nurses into the mainstream of nursing that probably wouldn't have gotten there otherwise simply because of the lottery, number one. Number two, the support of the hospital paying all the fees and that type of thing for them. Number three, I think that it did instill some loyalty. The people that went through it, they didn't seem to move on as fast as a lot of the other new grads who ended up working here and then moving on either to another hospital.

Erickson and several graduate participants stated that the program provided a sense of loyalty and thereby contributed to nurse retention, if not with the sponsoring hospital then within the community. Thomas, an FCCRNp administrator, spoke of the statewide attention the Paradigm Program received:

It was something that was a model throughout the state of California and it was highly acclaimed at the time as a great way of bringing in more nurses in the workforce, so that was very strong positive thing the Paradigm Program had to offer.

High NCLEX Pass Rate

FCCRNP administrators, FCCRNp faculty, hospital administrators and graduates all touted the high NCLEX pass rate for the Paradigm Program. Riley, FCCRNp faculty, best described the overall perception: “The percentage of NCLEX pass rate for the Paradigm was pretty high. In fact, what I remember is they carried the traditional program in bringing up the general overall pass rate.” However, based on archival data, the actual pass rate for the Paradigm Program overall, as described in the beginning of this chapter, was slightly below the state average.
Research Question 3

Research Question 3 was aimed at ascertaining the participants’ perceptions regarding strengths of the Paradigm Program. Three major themes emerged from the interviews: (a) support, (b) stability and (c) a sense of community. The theme of support had three prominent subthemes: social support, academic support and employer support.

Support

Social support. All graduate participants described Paradigm students as being stronger and more serious than traditional program students. As expressed by Richards, “I don't think there's a difference in the quality of the instruction, but I think there's a difference in the environment of who you're studying with. That helps kind of lift you, I think, a bit.” The graduates also felt a sense of community within the cohort and caring about each other. Ramirez described the relationships built during the program by stating,

We were all supportive of each other, all from different backgrounds, and different lives, different times in our life. Young, married, children new, so we clung together, and we were in it for the long haul. Everybody got along and we’re all very supportive of each other.

In addition, the graduate participants described having increased social support from their work colleagues and their management as well. The support was described as creating a stronger drive to succeed. Richards also explained some of the professional motivations underlying the sense of community within Paradigm cohorts: “One we all lived here and worked here, two, we had an interest already in our job, in our hospital, and they were investing in us to uplift them.”

Academic support. The graduate participants stated they had resources outside of FCCRNP to reinforce and build upon knowledge acquired in the
classroom. The bridge between theory and practice was their experiences in extern type programs that different facilities set up to support the students. Externships, a type of on-the-job training, were positively mentioned by 4 of the 5 graduates interviewed, as well as by each of the hospital administrators, FCCRNPs administrators and faculty. Externship type programs existed prior to the Paradigm Program for the traditional nursing students; however, participation in externships was expected of the students who were selected into the Paradigm Program. Richards described how his externship experience prepared him for the real world of nursing: “I felt like the externship that I did, and the background I had of just being familiar with the department kind of allowed me to hit the ground running versus other people that came in and were new grads that had never been in the environment before.”

**Employer support.** Interview participants described multiple avenues of employer support. The three subthemes that emerged were: clinical instruction, fiscal support and new graduate positions upon completion of the Paradigm Program.

Most of the Paradigm Program’s clinical instruction came from the working pool of RNs within each hospital. The majority of the graduates noted having instructors whose employment was from the hospital was one strength of the Paradigm Program. Tyler, a graduate participant, stated, “Having people that we knew from our facility teaching us, you see each other a lot, like in the cafeteria, but you may not know who that person is but you recognize their face. But when they become your instructor, then you get a whole other viewpoint of the hospital which really I think allowed us to see the bigger picture of our facility and see what our facility was about.

Clinical instruction provided by the hospital partner served a dual role for the hospital administrators: (a) providing instructors for the students and (b)
providing staff development for the RNs. Clinical instruction was touted as giving an RN who did not have formal teaching experience an opportunity to try something new, providing the nurse and the hospital with another mode of staff development. Smith, a hospital administrator stated,

> We had some great adjunct teachers that came out of it. A lot of them have gone on and are teaching now and doing things, so that’s really important. It was a really good opportunity for the hospitals to help their staff develop.

Erickson, another hospital administrator, spoke of her own experience stating, “It personally opened my personal eyes to academia and the opportunity to explore that, which I’m grateful for because it is something that I like and will pursue in my future.”

An additional facet of employer support was funding for the students’ education. According to Smith, the support also included a coveted new graduate RN position as part of the contract with completion of the Paradigm Program and passing of NCLEX. A 2-year contract as a RN was extended to most graduates. Jordan explained the 2-year commitment; “They will already have a job after they graduate, because they need to work there at least 2 years because they [the hospital] paid for their education.” Each of the FCCRNP administrators, FCCRN faculty, 4 of the 5 students and each of the hospital administrators touted the commitment as a positive side benefit for both the Paradigm graduates and the hospital partners. By comparison, Thomas stated the average hire rate for FCCRN traditional new graduate students in all areas including acute care and skilled nursing was about 80%.

**Stability**

The overarching theme of the hospital administrator interviews was the stability of the FCCRN program. Each hospital administrator made reference to the positive reputation and long standing history of the FCCRN prior to the
inception of the Paradigm Program. Smith stated “the stability of the college [FCCRNP] was probably one of its [the Paradigm Program’s] biggest assets. They were very stable. Their leaders came and stayed for a long time.” Smith went on to say, “They [FCCRNP] had a very good reputation and they were doing very well. Paradigm was a very creative, innovative ahead of its time thing.”

**Builds Sense of Community**

Graduates and hospital administrators described participation in the Paradigm Program as building a sense of community between the FCCRNP Paradigm Program, the participating hospitals and in the San Joaquin Valley. Based on research study participant interviews, a sense of community meant the sense of belonging to the San Joaquin Valley and the feeling of being able to contribute and fill a need in their own hometown. Tyler, a graduate, stated “I really liked being a part of something that I felt was really a part of the community.” The hospital administrators both referenced the perception that Paradigm graduates had a sense of loyalty if not to the hospital, then to the community. Smith said,

> For me, in this community, the way I see it, having been in it such a long time, you’re still winning even if your nurse that you take as a new grad, she works for you 2 years, or 1 or 1½ years, and then moves on to somewhere else in the community. We’re still winning. It’s still an investment, because she is still here.

The research study participant interviews and Graduate Questionnaires revealed new graduates stayed in the San Joaquin Valley and were loyal to the hospitals that sponsored them. FCCRNP administrator Thomas stated “I think it really helped to build the nursing staff in the healthcare institutions, so that when they needed someone, they knew they were doing home-grown registered nurses who then would be able to work when they needed them.”
Research Question 4

Research Question 4 explored the participants’ perceptions of challenges in planning, implementing and sustaining the Paradigm Program. Four major themes emerged as challenges within the Paradigm Program: (a) instructor issues, (b) disorganization, (c) financial issues, and (d) separation of the FCCRNP traditional students from the Paradigm Program students.

Instructor Issues

Graduate perceptions. The graduates described instructors that did not treat the students fairly, had unreasonably high expectations or were generally inflexible. All but one of the graduates spoke of negative encounters with instructors. Richards stated “A lot of our clinical professors seemed irritated with us because they thought we were know-it-all’s.” Gonzalez used the cliché, “nurses eating their young” to describe her experience with some of the instructors. Gonzales commented that some instructors would not listen to a student’s point of view: “I did find that with a couple of instructors in terms of their ability to be open-minded and listening to the students. It was a little frustrating in that aspect, because you’re at the mercy of the instructor.” Other students described instructors as “burned out” and taking it out on the students.

Erickson, a hospital administrator, described her students’ negative experiences with tenured FCCRNP faculty’s lack of standardization when delivering instruction: “That might have been challenging for a student, OK, so now I have you and it's your way, and now I have her and it's her way, versus this is the way and you adopt this, I adopt that and we all do it the same.”

FCCRNP administrator and faculty perceptions. The dean, director and two faculty members described initial resistance from FCCRNP tenured faculty
when expansion of the FCCRNP through the Paradigm Program was initially discussed. Riley, a tenured faculty member at FCCRNP stated,

Not all faculty bought into the philosophy of fast tracking students no matter how qualified, so that you don’t destroy the perception of fairness. Not everybody wanted to teach. Some of our faculty who are very good and experienced, they did not teach the regular courses.

**Hospital administrator perceptions.** Both hospital administrators described having issues with the management not supporting release of nursing staff to teach, as a nursing shortage existed at that time. Smith said,

Well, we had a difficult time there for awhile getting adjunct people. It seemed a little difficult for some of them. A lot of it didn’t have to do with the college, it had to do with the hospitals and how they resented taking that person from patient care into being . . . you know, we didn’t get the support we needed for those people to be teachers, and yet some of them were fabulous.

**Disorganization**

**Graduate perceptions.** Graduates described lack of organization in program planning as a challenge. Two graduates spoke of having personal experience with short notice scheduling. Ramirez described his experience of receiving instructions regarding which hospital the group was scheduled to have their clinical rotation: “It was mostly the scheduling of the clinical groups at individual sites, sometimes we didn’t find out until the Sunday before the Monday [clinical] hit.”

**Hospital administrator perceptions.** The hospital administrators said the loss and transition of a key FCCRNP liaison created issues with organization in the Paradigm Program. Erickson described a time when the FCCRNP liaison was retiring and recalled, “The school [FCCRNP] got a little more disorganized if you will, and that created some chaos.” Erikson also described the general void that was created by the liaison’s retirement by stating,
The college never took it as serious as she did, and so the different people who ended up being coordinators did whatever they could do with, in my opinion, limited [information], not getting context from where do we go or helping bridge with the service partners the idea that there’s a new person now, here’s the expectations, here’s the disc, it kind of got a little loose.

Financial

Hospital and FCCRNPs, as well as one FCCRNPs, acknowledged that the Paradigm Program was expensive and attributed the closure of the program to the recession. Smith, a hospital administrator, contended, “The first thing to go when you have economic downturns is education.” Erickson, another hospital administrator, stated “Really it wasn’t just the program that fixed the shortage, you know, that whole economy tank helped put people back in the work force, but that really was a factor for why it kind of sunnetted.” Thomas, an FCCRNPs, stated “it’s very expensive to provide contract education.”

Graduate perceptions. All of the graduates described the separation of Paradigm students from the traditional students in a negative way. The descriptions generally spoke of underlying resentments that were built into being separated and being treated differently due to selection into the Paradigm Program. According to Tyler,

It seemed like we thought we were better than them because we had this experience and they didn't. . . . In my younger self, that was a rude behavior. I think a lot of us felt we were better than them because we were in the Paradigm Program. I think that maybe, not integrating us, but some sort of a meet and greet or some kind of a thing that really encouraged discussions between us or having us all work together would have been helpful. It felt like a rivalry almost.
**FCCRNP administrator, faculty and hospital administrator perceptions.** One of the FCCRNPs faculty and both hospital administrators spoke of the separation of the Paradigm students from the Traditional students as an area to be looked at for improvement. Smith, a hospital administrator, viewed the separation as a challenge in the program that could be addressed for future programs. As stated by Smith,

> I see the biggest drawback of the program was not the college's fault. It was, I think that the RNs who said you can do this program and have it accredited, but you can't put them in with mainstream. They wouldn't let them mix, and that was the big deal with that. I think they [Paradigm students] would have been a good influence over the other students, too. It built up in the school, I think, some resentment.

**Summary**

The Paradigm Program was similar to the tradition FCCRNPs program, but had additional admission requirements, ran for 18 months including summers instead of 2-years, and provided financial support from the hospitals. The findings revealed that Paradigm students were well prepared to take and pass the NCLEX, and the program developed a sense of camaraderie within the Paradigm cohorts. The administrators of the program acknowledged the students’ character traits were those of highly desirable future employees. Participants thought the Paradigm Program had a positive impact on addressing the nursing shortage in the San Joaquin Valley, and resulted in a high pass rate on the NCLEX. Strengths of the program were in the support, stability and sense of community that it provided. The primary challenges faced by the program were in assignment of clinical instructors, disorganization in scheduling, lack of administrative continuity after a staff member retired, financial issues when faced with a recession and separation issues resulting from not allowing any integration of Paradigm and traditional students.
CHAPTER 5: DISCUSSION, CONCLUSIONS AND RECOMMENDATIONS

This chapter provides a review of the study’s background, purpose, and research methods. The findings for each research question also are summarized and discussed. In addition, the findings are analyzed through the lens of Human Capital Theory, the theoretical framework for this study. The last part of the chapter offers recommendations for practice and future research.

Background

The nursing shortage has waxed and waned since formal nursing schools were established in the United States. Although legislation and different approaches have been implemented as stop gap measures to assist in providing high quality RNs into the work force as rapidly and efficiently as possible, the literature does not identify any local, programmatic initiatives. The Paradigm Program was developed to assist with providing additional pre-licensure RN education during a critical shortage of nurses in the San Joaquin Valley. This contract education program was based on a successful 10-year partnership between FCCRNP and five local hospitals to educate specially selected hospital employees to become RNs in 18 months.

Purpose

The purpose of this retrospective qualitative case study was to examine the Fresno City College Paradigm Program and to determine if a hospital sponsored pre-licensure nursing education program is an approach that could potentially help to address a nursing shortage.

The study was guided by four research questions:

1. What were the participants’ perceptions of the Paradigm Program?
2. What were the participants’ perceptions of outcomes of the Paradigm Program?

3. What were the participants’ perceptions of strengths of the Paradigm Program?

4. What were the participants’ perceptions of challenges in planning, implementing, and sustaining the Paradigm Program?

Community college occupational programs are typically hands-on and the instructors that provide the education in the community college setting are experienced specialists in the field in which they teach. As practitioners, these instructors typically do not conduct research or publish; therefore, the review of literature unsurprisingly revealed a lack of research studies that focus on occupational programs involving collaboration between community colleges and organizations in the local communities. This study has contributed to the body of knowledge by examining a pre-licensure nursing education program that was a successful 10-year partnership between Fresno City College and five hospital partners.

**Research Design**

The study utilized a qualitative methodology and case study approach. Data were gathered using interviews, graduate questionnaires, and archival documents. Eleven FCCRNP Paradigm Program participants were interviewed: five graduates of the program, two FCCRNP administrators, two FCCRNP faculty and two hospital administrators. The interviews were triangulated with archival program data and questionnaires (Appendix B) completed by the graduates who were interviewed.
Summary and Discussion of Findings

Research Question 1

Research Question 1 asked, what were the participants’ perceptions of the Paradigm Program? Based on graduate participant interviews, two themes emerged: (a) all graduates expressed feeling well equipped for the NCLEX and (b) graduates expressed experiencing a spirit of camaraderie and increased teamwork while in the Paradigm Program. The single theme that emerged from the program administrator and faculty interviews was the highly desirable employee character traits found in the Paradigm students.

All graduates expressed feeling well equipped for taking the culminating national requirement for RN licensure, the NCLEX. The student questionnaires revealed that each of the graduate participants passed the NCLEX on the first attempt and all took an external NCLEX review course such as Hurst or Kaplan reviews. Most students took the NCLEX exam within a month of graduation from the Paradigm program. Also, all graduates expressed feelings of camaraderie with their fellow Paradigm Program colleagues, which may, in part, have resulted from the program’s cohort type structure with small groups of 10-12 going to the hospital sites together for the entire 18 months of the Paradigm Program. All theory courses were taken with the larger group of at most 40 students for the same 18 months of instruction, which was the larger cohort.

All of the study’s participants mentioned the Paradigm Program’s stringent selection process. Prospective students were carefully evaluated and selected by each hospital administrator prior to their selection into the Paradigm Program. The selection process, as described in the hospital administrator interviews, involved several components. The candidates applied at their respective hospitals for the Paradigm Program, then interviewed, wrote self-declarations regarding their
personal history and work intentions and competed to obtain the coveted Paradigm Program seat. After selection by their respective hospital, the candidate names were submitted to the FCCRNP. The FCCRNP checked each student for the minimum prerequisites. The hospital selection process was independent of the FCCRNP. One criterion for selection was that the employee had maintained a good reputation for collegiality on their ward and demonstrated a good work ethic in their ancillary role within the hospital for at least 2 years prior to their application for the Paradigm Program.

The Graduate Questionnaire revealed the graduates were employed by the sponsoring hospital for at least 7 years prior to the Paradigm Program with 2 students claiming over 10 years of employment in the same hospital. Based on Graduate Questionnaires, hospital administrator interviews, and graduate interviews, these students were literally home grown and selected because they possessed an outstanding employee work ethic. The hospital and FCCRNP administrators, as well as the FCCRNP faculty noted positive employee character traits such as good work ethic, timeliness and professionalism to be more developed in the Paradigm Program students as compared to the traditional FCCRNP students.

**Research Question 2**

Research Question 2 asked, what were the participants’ perceptions of outcomes of the Paradigm Program? Two themes emerged from the interviews: (a) the Paradigm Program had a positive impact on reducing the local nursing shortage, with the added benefit of retaining RNs in the San Joaquin Valley and supporting hospitals; and (b) the NCLEX pass rate for the Paradigm Program was perceived as being high.
Study participants thought the Paradigm Program helped to address the local nursing shortage by infusing more RN graduates into the workforce and local communities at a faster rate than would have been possible with the FCCRN alone. The Paradigm Program was successful in accomplishing its originators overall goal of providing additional capacity to educate RNs in an impacted nursing program during a critical nursing shortage in the region. The program lasted 10 years and built up to the point of accepting 30 students two times a year. The Paradigm Program infused over 600 nurses into the local community, which was in addition to the traditional nursing program’s throughput.

The interview participants perceived the Paradigm Program had a higher NCLEX pass rate than the traditional FCCRN program. The actual average NCLEX pass rate of the Paradigm Program over the years covered in the archival data were lower than the state average. One possible explanation for the perceived high NCLEX pass rate is the hospital partners, prior to the student admission into the Paradigm Program, preselected the students for success based on their work performance. Also, if Paradigm students received less than 76% in a course, they were removed from the Paradigm Program and placed into the traditional FCCRN program. The students that were sitting for the NCLEX as Paradigm Program graduates were representative of students that did not fail any course in the mandatory curriculum at any point in the program. Interestingly, although all research study participants thought the NCLEX pass rate was higher than for FCCRN students, no evidence was found in the archival data to indicate that a comparison of pass rates had been done. Only one of the research participants, Lopez, gave an NCLEX pass rate for the Paradigm Program as “92%” based from his recollection.
Research Question 3

Research Question 3 asked, what were the participants’ perceptions of strengths of the Paradigm Program? Three major themes emerged from the interviews: (a) support, (b) stability and (c) a sense of community. Three subthemes were social support, academic support and employer support.

Social, academic and employer support were interwoven in the graduate participants’ responses. The graduates described their cohort classmates as being more serious than traditional students in the FCCRNP. This perception of seriousness bred a sense of closeness and support in the cohorts. Also, there was a type of support that bridged between Paradigm students’ work and academic areas. The RNs that students worked with as colleagues also provided on-the-job training during the students’ extern experiences. Tyler, a graduate, noted the sense of community she felt while going through the Paradigm Program that related to seeing her colleagues in a different light through externing and having them as her instructors, instead of as her boss when working as a patient care assistant on the ward. She also noted feeling as if the Paradigm Program was bigger than just her. The employers were the key providers of extern positions, but the RN colleagues provided the instruction for the day. The main source of employer support was fiscal. In addition to covering educational costs, the hospital employers provided the security of a job both while the students were participating in the program and as a new graduate once they passed their boards.

Another theme that emerged under strengths was also considered a weakness. The hospital administrators described the FCCRNP administration as stable. Smith noted the administration at the FCCRNP had a long and well established history. But with a long and well-established history, staff will eventually retire. According to hospital administrator interviews, the change in
liaisons seemed to shift the priorities of the program. The dynamics of interaction between the hospital administrators and the FCCRNP administrators, including the liaison, became a challenge. Therefore, longevity and stability were considered strengths, but staff turnover of longstanding contacts without any succession planning created challenges.

Another strength of the Paradigm Program was the opportunity to reach a new pool of instructors. As noted in chapter 2, one of the issues underlying a nursing shortage is the lack of training capacity due to the difficulty of attracting nurse instructors to teach at the colleges (Bates & Dower, 2010; Buerhaus et al., 2009; Clark & Allison-Jones, 2011; Oulton, 2006). The Paradigm Program provided an opportunity to try teaching for nurses that had an aptitude or interest in teaching. In addition, the nurses had an opportunity to teach in the hospital, instead of a college context. Both hospital administrators gave their own personal accounts of teaching in the clinical setting for the Paradigm Program, an opportunity that had not previously presented itself in their many years as an RN and hospital administrator. Erickson discussed her desire to pursue a career in education. The administrators also noted that some of the RNs who started teaching in the Paradigm Program have continued to teach for one of the local college or university RN programs.

Nationally, there continues to be a shortage of nursing instructors and instructional facilities (Bates & Dower, 2010; Buerhaus et al., 2009; Clark & Allison-Jones, 2011; Oulton, 2006). The Paradigm Program coupled the staffing resources available in the acute care hospital with teaching opportunities. Experienced RNs were able to stretch themselves in trying something new and outside of the normal hospital ward experience. Teaching in an occupational
program as specialized as Registered Nursing is challenging and increases the knowledge base and confidence of the instructor, both in teaching and practice.

The Paradigm Program was unique in increasing communication between hospitals and the local community college. This Paradigm partnership that connected the local hospitals with FCCRNP demonstrated a relationship that had not previously existed, and has not been common during the history of nursing schools. The Paradigm Program provided instructional opportunities for new RN instructors and a steady stream of high quality new graduate RNs. Study participants viewed the Paradigm Program as a successful community-building endeavor.

**Research Question 4**

Research Question 4 asked, what were the participants’ perceptions of challenges in planning, implementing, and sustaining the Paradigm Program? Four major themes emerged: (a) instructor issues, (b) disorganization, (c) financial issues, and (d) separation of the FCCRNP traditional students from the Paradigm Program students.

Instructor issues ranged from student complaints regarding instructor content and general approachability to FCCRNP costs of providing a tenured instructor. FCCRNP administrators spoke of initial faculty resistance to teaching within the Paradigm Program that quickly subsided when the program was fully operational. This resistance seemed to be a change and growing pain issue that resolved over time.

The hospital administrators due to a retirement of the FCCRNP liaison perceived disorganization late in the program. The graduate participants described the disorganization on a different level with regard to their hospital clinical schedules, which were either not received or were changed on short notice.
However, these types of scheduling issues are not unique to the Paradigm Program; they also occurred in the FCCRNPs. As noted by the FCCRNPs and hospital administrators in this study, as well as numerous authors in the literature (Bates & Dower, 2010; Buerhaus et al., 2009; Clark & Allison-Jones, 2011; Oulton, 2006), one of the capacity issues in nursing education is the unavailability of hospital clinical rotations; consequently, scheduling becomes a challenge. In addition, with the FCCRNPs program being one of the largest in the region prior to adding the Paradigm program, it is reasonable to assume that when a Paradigm student failed to maintain the 76% minimum course pass score and was moved into the traditional program, the short time between semesters would have exacerbated challenges with the administrative portion of scheduling. However, according to archival data, a Paradigm student failure was a rare event.

Reduction of financial support from the hospital administration became an issue toward the end of the Paradigm Program. FCCRNPs administrators described contract education as being very expensive, and hospital administrator Smith noted when money becomes tight, education supplementation is typically the first thing to be eliminated from the budget within the acute care setting. During the last several years of the Paradigm Program, the U.S. was experiencing the Great Recession. Auerbach et al. (2014) noted one of the nuances in the nursing workforce during a recession is that RNs actually go back to work, or work more hours; therefore, the hospital budget replaced staffing as the primary challenge.

A theme expressed by all research study participants was the negative impact of separating traditional students from the Paradigm Program students. Study participants thought the separation created animosity between students of the different programs within the FCCRNPs. This finding begs the question of why the students were separated? First, the Paradigm program was very expensive and
funded by the hospitals; therefore, the program had its own budget tracking system that included direct billing and interaction with the hospital partners. Second, the Paradigm Program received grants and, due to the nature of the grants, the students had to be segregated for better tracking.

**Theoretical Framework**

Human Capital Theory (HCT) served as an analytical lens for understanding the phenomenon of interest in this study, and Paradigm Program participants. Becker (1993) spoke of HCT as investment in education for the benefit of the individual and betterment of society. FCCRN in general, with its low-income students, rural surroundings and ethnic diversity reflects key components of HCT. The return on investment in education increases when high quality graduates are more rapidly infused into the community, as was done by the Paradigm Program. Health promotion was twofold as the graduates were healthcare consumers, as well as healthcare workers whose role was to educate the public, improve the health of community members, and produce a higher individual and societal return on investment. In the case of the Paradigm Program, return on investments in human capital went beyond the individual, the hospital partners and even the FCCRN Paradigm Program. The greatest beneficiary was the San Joaquin Valley community, as the Paradigm graduates stayed in the Valley.

One aspect of HCT is not explanatory of the Paradigm Program. The theory refers to students making a financial investment in themselves by paying educational expenses and having to defer income while attending college. The Paradigm students’ expenses for tuition and books were subsidized. The theory postulates that the investment in self is a driver of success. As the Paradigm students did not face this fiscal demand, the expectation would be that Paradigm
students might not be strongly motivated. However, as noted by the research participants, students in the Paradigm Program were highly motivated to succeed. The Paradigm students continued to experience the same HCT elements that are shown in Figure 1 including the cost of time for leisure and recreation. Although the students did not have to pay direct and opportunity costs, they were motivated and self-disciplined. Possibly the added rigor of the selection process and the prestige of being selected into the Paradigm Program, coupled with a guaranteed position after graduation inspired the students to work harder to succeed.

**Conclusion**

Community colleges have historically been designed to meet the needs of their local communities; therefore, they “take on many shapes and functions, depending on local socioeconomic conditions and traditions” (Tschechtelin, 1994, p. 103). The colleges can respond to local conditions with expansion and contraction of programs, and the Paradigm Program is a good example of this capability. As the local nursing shortage became critical, FCCRNP stepped in and identified a way to partner with local hospitals to accelerate the educational output of high quality new graduate RNs into the local workforce. The founders of the Paradigm Program did not set a numerical goal at the inception of the program but the study found that over 600 new graduate RNs were infused into the San Joaquin Valley hospitals over a 10-year period, which is a positive outcome.

After the recession began, funding became more problematic and the supply of nurses appeared to be coming into balance. The Paradigm Program was ended, but had a history of positive outcomes and potential for reimplementation if needed. The caution was strong from a 20-year FCCRNP faculty member when she said, “I really think that we have not come up with a lot of strategies for covering this bigger than the tsunami nursing shortage that’s coming. We tend to
forget planning for that event.” Factors such as baby boomer RN retirements, obesity (American Hospital Association, 2007), lack of capacity in teaching sites and facilities for pre-licensure programs (Bates & Dower, 2010; Buerhaus et al., 2009; Clark & Allison-Jones, 2011; Oulton, 2006), the Affordable Care Act (Auerbach et al., 2011, 2014) and RN acute care hospital retention issues (Cappelli, 2010; Spetz, 2011; Wagner, 2010,) indicate that a nursing shortage is on the horizon. This study shows that a hospital sponsored pre-licensure nursing education program (a Paradigm-like Program) could help to address a nursing shortage by adding educational capacity and acceleration to existing pre-licensure RN programs. If a Paradigm-like Program were to be reinstituted, this study points to changes that could make the program more effective.

**Recommendations for Practice**

Four recommendations are made to help enhance the overall positive outcome of the Paradigm Program. These recommendations are based on results of the research study.

The first recommendation is to standardize the admission requirements at the hospital level. The hospital partners working with the FCCRNP administrators should create a list of common pre-admission requirements to be used, starting with the first cohort. Personal interviews and written statements, as well as the pre-requisite of being a hospital based employee for a two-year minimum proved to be important to student success.

The second recommendation is related to program design. Separation of students in different programs should be eliminated, as flexibility in integrating the students would minimize costs for the hospital partners and reduce animosity between traditional and Paradigm Program students. Integration would also reduce the workload of scheduling for the administrative staff. Although this change
could create more difficulty in tracking costs per student, the benefits would be worth the effort.

The third recommendation is related to program administration. The assignment of a capable staff member to serve as the program liaison is imperative to maintaining communication and collegiality, which are essential to the success of the program. The liaison needs to have clearly delineated roles and responsibilities in conjunction with hospital partners, students and FCCRNPs. According to the research study participants, communication with the students, having town hall meetings a couple of times a semester to allow the students a voice, monthly progress reports of student status within each course, and monthly staff meetings with hospital partners and program administrators are essential. The liaison or program director also should conduct frequent and consistent program evaluations, and share the results with stakeholders. Thorough program evaluation would be enhanced by use of the nursing process, which includes a continuous cycle of assessment, diagnosis, planning, implementation and evaluation. Assessment of the program would include tracking the NCLEX pass rates and formal testing in each semester throughout the program. Diagnosis would be accomplished by having town hall meetings, as well as meetings with faculty, program administrators and hospital administrators to identify problems and solutions at the point of instruction and in administration of the program. Planning would involve communication and coordination with all partners to ascertain how changes resulting from evaluations would be implemented effectively and efficiently. Finally a continuous evaluation of processes would be maintained by tracking the students and graduates. The tracking would include individual student status during the program, graduate work history, city of residence, and participation in further education and career progression. Also,
performing exit interviews with each graduate would further enrich evaluation of the program. Overall, the data sharing could lead to program improvement by identifying deficits, receiving group recommendations for changes, implementing changes, and continuing the assessment cycle.

The final recommendation would be to get ahead of the impending nursing shortage. This would be accomplished by preparing to increase educational capacity through new initiatives like the Paradigm Program, training more nursing instructors, creating more clinical site placements and increasing classroom availability by creatively and efficiently using existing college facilities for program instruction.

**Recommendations for Research**

Suggestions for future research are to compare the traditional students that went through summer courses and graduated after the Paradigm Program ended to see if the NCLEX pass rate and program retention were different from the Paradigm Program, which had higher admission and retention requirements implemented by the hospital partners. Also, the FCCRNP has the potential to expand by offering summer sessions, as evidenced by the Paradigm Program. Riley, a FCCRNP faculty member, and Lester, a FCCRNP administrator said FCCRNP traditional students started going through summer sessions after the Paradigm Program ended. It would be interesting to see if there is a disparity in the NCLEX results and retention in the traditional program with those students who went through the summer sessions when compared to the Paradigm Program students. From a broader view, more research is needed on ways to increase nursing education capacity while maintaining high standards of training.
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APPENDIX A: POST-INTERVIEW FIELD NOTE PROTOCOL

1. List the three most important findings from the interview.

2. What are the implications of these three findings?

3. List other observations that are relevant to the research.

4. What are the implications of these observations?
APPENDIX B: GRADUATE QUESTIONNAIRE

Name: _____________________________________________ Date: __________

1. Sex: Male___ Female____

2. How soon after the program did you take the NCLEX?

3. Did you pass the NCLEX on first attempt?

4. Did you take an additional post graduation review course?
   If so, which one?

5. Highest educational level obtained:
   If higher than ADN, what was the educational focus of your degree and what year did you obtain it?

6. Current certifications held (e.g., ACLS, TNCC):

7. Which hospital supported you through the Paradigm Program?

8. How long did you work in that facility?

9. What roles did you fulfill in the supporting facility?
   Thank you for providing this information.
APPENDIX C: INTERVIEW PROTOCOL

1. Greet the participant.

2. Go over the informed consent, obtain a signature, and provide a copy to the participant. (For Graduates) Collect the demographic questionnaire.

3. Ask the participant for permission to record the interview.

4. Start both digital recorders and note the time when the interview should end.

5. Ask participants if they have any questions before beginning the interview questions.

6. Ask the interview questions.

7. Ask the participant if there is any additional information that would be helpful in examining the program and if there were any other questions that should have been asked.

8. Ask the participant for permission to contact him or her again by phone or email if any additional follow-up questions arise.
APPENDIX D: EMAIL TO HOSPITAL/FRESNO CITY COLLEGE ADMINISTRATOR AND FACULTY RESEARCH PARTICIPANTS

XXX,

My name is Alicia Lozano and I am a doctoral candidate in the Educational Leadership Doctoral Program at California State University, Fresno, as well as a nursing instructor at Fresno City College. Currently, I am conducting dissertation research on the Paradigm Program at Fresno City College, which ended in 2010. As you were a [hospital administrator, Fresno City College administrator, faculty] of the Paradigm Program, your participation in the study would be very helpful.

The purpose of the research study is to examine the experiences of graduates, faculty, and administrators that participated in the Paradigm Program to (a) identify challenges and promising practices that would help to gain a better understanding of the program and (b) determine if a hospital sponsored pre-licensure nursing program could potentially help to address nursing shortages.

Based on your experience as a [faculty member or administrator], you have been selected to participate in an interview regarding your impressions of the Paradigm Program, including its strengths, weaknesses, and potential in nursing education. The interview will last between 45 minutes to 1 hour. The date, time and location are open to your convenience. If you are willing to participate please respond with an email to aliloz@msn.com or you may call or text my cell at XXX-XXX-XXXX and propose a time, date and location that would suit you.
Thank you for your time and consideration of this opportunity to contribute your knowledge and experience in shaping the future education of RNs.

Alicia Lozano
Doctoral Candidate, California State University, Fresno
aliloz@msn.com
XXX-XXX-XXXX
APPENDIX E: SEMISTRUCTURED INTERVIEW QUESTIONS
[HOSPITAL/FCC] ADMINISTRATION/FACULTY

1. Briefly describe the Paradigm Program.

2. What was your overall impression of the Paradigm Program?

3. How did the Paradigm Program compare to traditional pre-licensure programs?

4. What was your perception of the culture within FCCRNp at the time of the Paradigm Program?

5. Retrospectively, what is your impression regarding the Paradigm Program’s ability to prepare students for NCLEX and real world nursing?

6. What were the weaknesses of the Paradigm Program?

7. What were the strengths of the Paradigm Program?

8. What are your observations regarding the impact the Paradigm Program has had in relation to the nursing shortage and the local community?

9. What challenges arose when planning the Paradigm Program?

10. What challenges occurred when implementing the Paradigm Program?

11. What challenges were experienced in sustaining the Paradigm Program?

12. Would you recommend reinstating the Paradigm Program? Please explain.

13. What additional thoughts do you have about the Paradigm Program?
APPENDIX F: EMAIL TO RESEARCH GRADUATE PARTICIPANTS

XXXX,

My name is Alicia Lozano and I am a doctoral candidate in the Educational Leadership Doctoral Program at California State University, Fresno, as well as a nursing instructor at Fresno City College. Currently, I am conducting dissertation research on the Paradigm Program at Fresno City College, which ended in 2010. As you are a graduate of this program, your participation in the study would be very helpful.

The purpose of the research study is to examine the experiences of students, faculty, and administrators that participated in the Paradigm Program to (a) identify challenges and promising practices that would help to gain a better understanding of the program and (b) determine if a hospital sponsored pre-licensure nursing program could potentially help to address nursing shortages.

Based on the recommendation of a faculty member or administrator, you have been selected to participate in an interview regarding your impressions of the Paradigm Program, including its strengths, weaknesses, and potential in nursing education. The interview will last between 45 minutes to 1 hour. The date, time and location are open to your convenience. If you are willing to participate please respond with an email to aliloz@msn.com or you may call or text my cell at XXX-XXX-XXXX and propose a time, date and location that would suit you.
Thank you for your time and consideration of this opportunity to contribute your knowledge and experience in shaping the future education of RNs.

Alicia Lozano
Doctoral Candidate, California State University, Fresno
aliloz@msn.com
XXX-XXX-XXXX
APPENDIX G: SEMISTRUCTURED INTERVIEW QUESTIONS

GRADUATES

1. Briefly describe the Paradigm Program.

2. What was your perception of the culture within FCCRNP at the time of the Paradigm Program?

3. Retrospectively, what is your impression regarding the Paradigm Program’s ability to prepare you for NCLEX? Please explain.

4. What is your impression regarding the Paradigm Program’s ability to prepare you for real world nursing? Please explain.

5. What were the weaknesses of the Paradigm Program?

6. What were the strengths of the Paradigm Program?

7. What are your observations regarding the impact the Paradigm Program has had in relation to the nursing shortage and the local community?

8. What challenges did you notice in program implementation during the Paradigm Program?

9. If you were going to recommend a nursing education program to a friend or family member, would you recommend the Paradigm Program or a traditional pre-licensure program? Please explain.

10. What additional thoughts do you have about the Paradigm Program?
APPENDIX H: PARTICIPANT CONSENT FORM FCCRNP
FACULTY/ADMINISTRATORS

Thank you for agreeing to participate in this study that will take place from October 2, 2014 to December 1, 2014. This form outlines the purposes of the study and provides a description of your involvement and rights as a participant.

The researcher is Alicia E. Lozano, a doctoral student at California State University, Fresno located in Fresno, California. The study is entitled Addressing the Nursing Shortage: A Joint Entry-Level Nursing Education Program. The purpose of this qualitative case study is to examine the Fresno City College Paradigm Program and to determine if a hospital sponsored pre-licensure nursing education program is an approach that could potentially help to address a nursing shortage. Specifically, this study will address four questions based on the perceptions of the research participants: What was the Paradigm Program? What were the outcomes of the Paradigm Program? What were the strengths of the Paradigm Program? What were the challenges in planning, implementing and sustaining the Paradigm Program?

Your participation will consist of an audio taped interview lasting 45-60 minutes in length with a possible second, follow-up interview lasting 30 minutes or less in length. You will receive a copy of your transcribed interview and may make changes to clarify information.

Your participation is voluntary and can be discontinued at any time until the completion of the research project.
Only the researcher, Alicia E. Lozano, will have access to a secured file cabinet in which will be kept all transcripts, taped recordings, and field notes from the interview(s) in which you participate.

The results of this study may be published or otherwise reported to scientific bodies, but your identity will in no way be revealed.

There are no anticipated risks or benefits to you, no greater than that encountered in daily life. Further, the information gained from this study could be used to better understand the Paradigm Program’s strengths and challenges, and contribute to the potential development of new programs that address a nursing shortage.

In the event you have questions or require additional information you may contact the researcher: Alicia E. Lozano; 1101 E. University Ave, Fresno, CA 93741; XXX-XXX-XXXX; or E-mail: aliloz/msn.com.

If you have any concerns or questions before or during participation that you feel have not been addressed by the researcher, you may contact my Primary Advisor: Dr. Diane Oliver, CSU Fresno, 5005 North Maple Avenue (M/S ED303), Fresno, CA 93740-8025. Phone XXX-XXX-XXXX or E-mail: doliver/csufresno.edu. Any questions regarding the rights of research subjects may be directed to Constance Jones, Chair, CSU, Fresno Committee on the Protection of Human Subjects, XXX-XXX-XXXX.

You will be given a copy of this form to keep.

You are making a decision whether or not to participate. Your signature indicates that you have decided to participate, having read the information provided above.

Participant’s Signature: __________________________ Date: __________

Researcher’s Signature: __________________________ Date: __________
APPENDIX I: PARTICIPANT CONSENT FORM HOSPITAL ADMINISTRATORS/ GRADUATES

Thank you for agreeing to participate in this study that will take place from October 2, 2014 to December 1, 2014. This form outlines the purposes of the study and provides a description of your involvement and rights as a participant.

The researcher is Alicia E. Lozano, a doctoral student at California State University, Fresno located in Fresno, California. The study is entitled *Addressing the Nursing Shortage: A Joint Entry-Level Nursing Education Program*. The purpose of this qualitative case study is to examine the Fresno City College Paradigm Program and to determine if a hospital sponsored pre-licensure nursing education program is an approach that could potentially help to address a nursing shortage. Specifically, this study will address four questions based on the perceptions of the research participants: What was the Paradigm Program? What were the outcomes of the Paradigm Program? What were the strengths of the Paradigm Program? What were the challenges in planning, implementing and sustaining the Paradigm Program?

Your participation will consist of an audio taped interview lasting 45-60 minutes in length with a possible second, follow-up interview lasting 30 minutes or less in length. You will receive a copy of your transcribed interview and may make changes to clarify information.

Your participation is voluntary and can be discontinued at any time until the completion of the research project.
Only the researcher, Alicia E. Lozano, will have access to a secured file cabinet in which will be kept all transcripts, taped recordings, and field notes from the interview(s) in which you participate.

The results of this study may be published or otherwise reported to scientific bodies, but your identity will in no way be revealed. Also, the name of your employer will not be published.

There are no anticipated risks or benefits to you, no greater than that encountered in daily life. Further, the information gained from this study could be used to better understand the Paradigm Program’s strengths and challenges, and contribute to the potential development of new programs that address a nursing shortage.

In the event you have questions or require additional information you may contact the researcher: Alicia E. Lozano; 1101 E. University Ave, Fresno, CA 93741; XXX-XXX-XXXX; or E-mail: aliloz@msn.com.

If you have any concerns or questions before or during participation that you feel have not been addressed by the researcher, you may contact my Primary Advisor: Dr. Diane Oliver, CSU Fresno, 5005 North Maple Avenue (M/S ED303), Fresno, CA 93740-8025. Phone XXX-XXX-XXXX or E-mail: doliver@csufresno.edu. Any questions regarding the rights of research subjects may be directed to Constance Jones, Chair, CSU, Fresno Committee on the Protection of Human Subjects, XXX-XXX-XXXX.

You will be given a copy of this form to keep. You are making a decision whether or not to participate. Your signature indicates that you have decided to participate, having read the information provided above.

Participant’s Signature: ______________________________ Date: _______

Researcher’s Signature: ______________________________ Date: _______
APPENDIX J: HOSPITAL PARADIGM CANDIDATE EVALUATION FORM

The following is a replication of a questionnaire that was utilized late in Paradigm Program as a selection tool.

1. Expresses self in a clear, concise and logical manner.
2. Demonstrates empathy towards others using active listening techniques.
3. Takes direction well, and is open to feedback and suggestions from others.
4. Demonstrates a willingness to adjust to changing demands and shifting priorities.
5. Appropriately manages time to meet performance expectations and deadlines.
6. Consistently and thoroughly follows through with delegated tasks and responsibilities.
7. Actively seeks out new learning opportunities for his/her own development.
8. Actively and independently seeks opportunities to help others, and/or willingly helps others when requested.
9. Takes initiative to make improvements within parameters of hospital policy on his/her own.
10. Actively seeks opportunities to meet and exceed customer needs to ensure their satisfaction.

As a Future RN:

12. Would recognize inconsistencies between facts and/or data and draw correct inferences.

13. Would identify and collect relevant information and use sound judgment to solve problems.

14. Would adapt to pressure and change in a calm, secure and appropriate manner.

15. Overall, how successfully would this candidate be expected to perform as an RN?
Fresno State

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**Alicia Espericueta Lozano**

Type full name as it appears on submission

[ ] November 25, 2015

Date