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## **GENERAL EDUCATION REQUIREMENTS IN A**

## **COMMUNITY COLLEGE BACCALAUREATE RN-TO-BSN PROGRAM**

by

Jason Bentley Krupp B.S. August 1995, University of Florida M.S. December 1996, University of Florida

A Dissertation Submitted to the Faculty of Old Dominion University in Partial Fulfillment of the Requirements for the Degree of

## DOCTOR OF PHILOSOPHY

## COMMUNITY COLLEGE LEADERSHIP

OLD DOMINION UNIVERSITY May 2012

Approved by:

Mitchell R. Williams (Director)

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#### ABSTRACT

## GENERAL EDUCATION REQUIREMENTS IN A COMMUNITY COLLEGE BACCALAUREATE RN-TO-BSN PROGRAM

Jason Bentley Krupp Old Dominion University, 2012 Director: Dr. Mitchell R. Williams

Increasing demand for nurses with bachelor degrees, the growing culture of accountability in higher education, and the community college baccalaureate phenomena provided the impetus for this study. This ex-post facto quantitative study examined the graduation rates and time to degree of 240 students who were enrolled in a bachelor of science in nursing (BSN) program at a community college in Florida between Fall of 2002 and Spring of 2004. The general education course enrollment patterns of the students were analyzed to determine if they impacted student graduation rates and time to degree of students who completed all general education requirements before entering the program were compared with the graduation rates and time to degree of students who completed any general education requirements after entering the program.

A Pearson Chi-square test for independence indicated the difference between the graduation rates of the two groups was statistically significant, X2(1, N = 119) = 6.268, p<.05. Students who completed all general education requirements before entering the program were more likely to graduate in three years than students who completed some general education requirements after entering the program. Additional studies to include schools throughout Florida should be conducted to confirm the implications of these findings may be generalized to other RN-to-BSN programs throughout the region.

#### ACKNOWLEDGEMENTS

Many people contributed in various ways to the successful completion of this dissertation. To my committee members, Dr. Dennis Gregory and Dr. Meg Delgato, I extend my appreciation for your hours of and time and energy guiding my research and editing the manuscript. My committee director, Dr. Mitchell Williams, deserves special recognition for his untiring efforts to lead me through the dissertation process amidst many additional job responsibilities.

To the love of my life, Kelly Krupp, thank you for believing in me and supporting me every step of the way. Without you, this would not have been possible. Thank you for your encouraging words, acts, and notes to keep me focused and motivated to achieve this goal. I am truly blessed by you, and I am grateful to share this milestone with you.

I would like to thank Dr. Rachel McArdle, who helped me better understand the application and interpretation of statistical analyses in my study. Thank you for your guidance and support.

Professor Benjamin R. Wiley, thank you for your time and interest in my work. Your literary talent and passion inspired me to improve my writing. I appreciate your input and value our friendship.

To my parents, Barbara and Henry Nadig, and my wife's parents, Joe and Ginny Stewart, thank you for spending time with our children so Kelly and I could preserve our marriage and maintain a social life.

To my grandfather, John Bradley Bentley, thank you for teaching me to have a strong work ethic, and for your life-long support. You are my role model and hero.

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## GENERAL EDUCATION REQUIREMENTS IN A COMMUNITY COLLEGE BACCALAUREATE RN-TO-BSN PROGRAM

#### INTRODUCTION

While community colleges have historically been known for workforce training and two-year degrees to help students transfer to four-year institutions, some community colleges now offer their own four-year degrees. A bachelor's degree awarded by a community college is referred to as a community college baccalaureate (CCB) degree (Floyd, Skolnik, & Walker, 2005). From the 1970s to 1993, four states authorized community colleges to offer CCB degrees. By the year 2008, seven more states added the CCB degree. In addition, five other states have authorized associate-degree-granting institutions to offer bachelor's degrees (Floyd & Walker, 2009). The growth of the CCB can be partially attributed to the increased demand for baccalaureate-level workforce training programs which could not be met by existing universities (Winn & Armstrong, 2005).

As more community colleges offer CCB degrees, classifying the types of institutions becomes challenging (Floyd, Skolnik, & Walker, 2005). In Florida, the community college system changed to a state college system. Although the title of the system changed, the state colleges maintained open-admissions policies for students entering the lower division. The programmatic changes in the community college system seem to merit a modification of the traditional definition of the community college. For the purpose of this study, a community college is defined as any post-secondary institution having an open-admission policy for students entering into lower-division courses and/or programs. Community colleges may or may not offer bachelor's degrees, depending on the state in which they exist.

In 1999, the state of Florida was the eighth largest state in the United States, and it ranked 38<sup>th</sup> in the proportion of residents with bachelor degrees (Education Commission of the States, 2000). Recognizing the need to increase the number of bachelor degrees produced, Florida legislators approved Senate Bill 1162 (now statute 1007.33) in 2001, allowing community colleges to offer baccalaureate degrees in limited areas with approval of the State Board of Education (Florida Senate, 2001). Holcombe & Smith (2010) reported 17 of Florida's 28 colleges offered a total of 110 baccalaureate degrees in 2010. In 2008-2009, Florida colleges awarded 1,042 baccalaureate degrees. Of the degrees awarded, 60 percent were Bachelor of Applied Science (BAS) degrees, while 40 percent of degrees awarded were Bachelor of Science (BS) degrees in education and nursing (Holcombe & Smith).

Prior to the concept of the CCB degree, the Florida Department of Education (FLDOE) established the Statewide Articulation Agreement to ensure all Associate in Arts (AA) degree graduates opportunities for admission as juniors to universities in the State University System (SUS) (FLDOE, 1971). The FLDOE also created Career Ladder Agreements (CLAs) for specific Associate in Science (AS) degrees to articulate into related baccalaureate degrees in the SUS. Although the CLAs created upper-division tracks for AS graduates to complete bachelor's degrees, AS graduates were required to complete more credit hours than AA graduates (FLDOE). The higher number of credit hours for AS graduates can be attributed to the general education requirements. The state of Florida requires all public baccalaureate degree programs to include a minimum of 36 credit hours from the lower division. These 36 credits are included in the AA degree, and AS degrees typically include 15 to 21 credits of general education courses.

While the transition of AS graduates to traditional baccalaureate degree programs at universities often leads to excessive credit hours earned by students, the CCB option provides opportunities for AS degree graduates to earn their baccalaureate degrees at community colleges in more efficient and cost-effective ways. Rather than requiring 60 additional upper-division credits in addition to any remaining general education requirements, the CCB is typically comprised of 42 upper-division credits. Students must also complete any remaining general education requirements before earning their bachelor's degrees.

One of the most popular CCB programs in the nation is the Bachelor of Science in Nursing (BSN). In 2002, St. Petersburg College (SPC) implemented a CCB program for Registered Nurses (RNs) to complete BSN degrees and help meet workforce needs for more BSN-level nurses to serve as managers and educators of future nurses. From 2005 to 2009, enrollment increased from 221 students to 502 students (St. Petersburg College, 2010). The trend of increasing enrollment is likely to continue. The registered nurse occupation is expected to have the largest national growth of any occupation, with a projected a 22.2% increase, or 581,000 new jobs between 2008 and 2018 (BLS, 2009).

Although many RNs in today's workforce have associate's degrees, recent federal legislation may increase the number of students entering or returning to BSN programs. President Barack Obama initiated efforts to reform the United States (US) health care system by enacting the *Patient Protection and Affordable Care Act* (PPACA) and the *Health Care and Education Reconciliation Act of 2010* (United States Government

Printing Office, 2011). While some components of the reform are being debated among government officials, other tenants of the reform laws led to positive changes for community colleges. The *Health Care and Education Reconciliation Act of 2010* provided \$750 million for grants to states to increase college completion rates. In addition, \$2 billion was allocated to community colleges to help provide education for more students. The underlying goal of the Obama administration's initiative to increase graduation rates appears to be aligned with the desire to improve the economy by strengthening the workforce. In general, colleges offering CCB degrees focus on workforce and applied science majors to provide skilled graduates to meet local labor market demands (Floyd & Walker, 2009). Because most CCB degrees were designed for students who completed workforce-related AS degrees, they seem to be well-aligned with the federal initiative for more graduates.

In response to a changing health care system and patient needs, the Institute of Medicine (IOM) (2010) stated RNs must increase their levels of training by earning bachelor's degrees before or soon after entering the workforce. Currently, there are three educational options to becoming a registered nurse - a nursing diploma, an associate degree in nursing (ADN), and a BSN. The most popular educational option is the ADN program, which is found in community colleges (Institute of Medicine, 2010). ADN programs are typically two to three years in duration, and they prepare students to take the National Council Licensure Examination for RNs (NCLEX-RN). There are two types of BSN degrees – the pre-licensure BSN program and the RN-to-BSN program (DeBrew, 2010). Pre-licensure BSN programs are typically four years in duration, and they also prepare students to take the NCLEX RN exam to become RNs after graduation. The RN-

to-BSN program allows RNs who completed Associate Degrees in Nursing to return to college and earn BSN degrees by completing additional general education courses and junior/senior-level non-clinical nursing courses. The RN-to-BSN program may also be referred to as a BSN-completion program. According to the Health Resources and Services Administration (HRSA) (2010), about 50 percent of all RNs had a BSN or higher degree in 2010. The IOM proposed a goal of having 80 percent of the RN workforce with BSN degrees by 2020. With only 21 percent of ADN graduates continuing their education to earn a bachelor degrees (HRSA, 2006), there appears to be a large potential for growth in RN-to-BSN programs.

### Purpose of the Study

The state of Florida requires all baccalaureate students to complete 36 credit hours of general education requirements to graduate. However, the state did not mandate these requirements to be completed *prior to* taking upper-division courses. Rather, students in many CCB programs may enroll in junior and senior-level courses prior to, concurrently with, or after completing lower-division general education courses. The purpose of this study was to determine if there were significant differences in the graduation rates and time to degree completion between students who completed all general education requirements before entering an RN-to-BSN program and students who completed any general education requirements after entering an RN-to-BSN program. If students who completed all general education requirements before entering the program had higher graduation rates or graduated at a faster pace, administrators of RN-to-BSN programs and departments of education may benefit from adopting admission or progression policies accordingly.

### **Research Questions and Design**

This study was designed to answer the following three research questions about students in one of Florida's RN-to-BSN community college baccalaureate programs:

- 1. When do RN-to-BSN students complete general education requirements?
- 2. Does completion of general education course requirements before entering an RN-to-BSN program have a significant impact on graduation rates?
- 3. Among RN-to-BSN graduates, does the pattern of general education course completion have a significant impact on time to degree?

To answer these research questions, a quantitative Ex post facto research design was employed. Data were extracted from the student information database of a CCB-granting institution in a major metropolitan area. Descriptive statistics were used to explain the graduation rates and time to degree completion of students who entered the BSN program between the Fall semester of 2002 and the Spring semester of 2004. Student data were divided into the following two groups:

- Students who completed all general education coursework before entering the RN-to-BSN program.
- Students who completed any general education coursework after entering the RNto-BSN program.

**Research question 1. When do RN-to-BSN students complete general education requirements?** To answer the first research question, descriptive statistics and tables were used to illustrate the distribution of general education enrollment patterns of RN-to-BSN students.

Research question 2. Does completion of general education course requirements before entering an RN-to-BSN program have a significant impact on graduation rates? To address the second research question, statistical analyses were performed to determine if there were significant differences between the graduation rates of students who completed general education requirements before entering the RN-to-BSN program and students who completed any general education requirements after entering the RNto-BSN program. The three-year graduation rate was calculated for each group of students. The three-year graduation rate was measured in accordance with the state of Florida's accountability model for community college baccalaureate programs, which assesses graduation rates at three years after initial enrollment (FLDOE, 2008). Because two groups were compared in this study and the data were categorical, a Pearson Chisquare test was an appropriate statistical test to determine if there were statistically significant differences (Sprinthall, 2007). IBM SPSS Statistics 19 was used to perform a Chi-square test to determine if there were statistically significant differences in graduation rates between the two groups.

Research question 3. Among RN-to-BSN graduates, does the pattern of general education course completion have a significant impact on time to degree? To answer the third research question, only the records of students who graduated within three years were analyzed to determine if there were differences between time to degree of students who completed all general education requirements before entering the program and time to degree of students who completed any general education requirements after entering the program. Of the students who graduated within three years, the number of semesters from initial enrollment to graduation was calculated. The mean number of semesters from initial enrollment to graduation was calculated for each group of students. IBM SPSS Statistics was used to perform a t-test to determine if there were differences in time to degree between the two groups.

### Significance of the Study

As the community college is redefined by offering baccalaureate-level coursework and programming, some critics argue the CCB will cause community colleges to lose sight of their mission of providing two-year degrees and open access to the community. However, the legislative language permitting the CCB in Florida also mandated Florida community colleges to maintain their two-year degree offerings and open-access policies (Winn & Armstrong, 2005). While Florida's colleges maintained open-access policies for admission to lower division courses and programs, they enacted new admissions policies for access to the upper-division courses and programs. The Florida Department of Education (FLDOE) established some minimum requirements for students to be admitted to CCB programs as juniors. Once admitted, students progress through the programs with varying levels of success.

As federal and state initiatives continue to promote degree completion, community colleges will likely experience increasing levels of accountability for their student graduation rates. If federal and state funding of community colleges moves towards a performance-based model, programs with low graduation rates may be at risk of being cancelled. To promote graduation rates, community college program administrators should consider many variables related to student success. This study examined the impact of general education course enrollment patterns on student graduation rates and time to degree completion. The projected occupational growth of RNs combined with the potential to require more RNs to earn BSN degrees makes a compelling argument for BSN administrators to closely monitor and adjust programs to ensure high graduation rates. If significant differences in graduation rates are found between the groups in this study, program administrators may consider adopting their admission and/or progression policies accordingly. If BSN students in this study graduate at a significantly higher rate when they complete their general education requirements before enrolling in upper-division courses, program administrators should consider adopting related admissions and/or academic progression requirements.

The pattern of general education course completion is one variable to consider when examining factors contributing to student graduation rates. The results of this study will contribute to the growing body of knowledge of students in community college BSN degree programs. The implications of the study will increase the opportunity for community college leaders and program administrators to make informed decisions about the general education components of their programs.

## Delimitations

This study focused specifically on students in a Community College Baccalaureate (CCB) program at a state college in Florida. With the exception of the authority to grant baccalaureate degrees, the state college model in Florida is comparable to the community college model in other states. Students are not classified in a baccalaureate program in Florida's college system until they have completed at least 60 credit hours. Student graduation rates and time-to-degree calculations began from the time students enter the program as juniors, not as freshmen. While the majority of CCB degrees offered by Florida community colleges were BAS degrees, this study focused on students in a college's BS degree in nursing program. Although the BS designation typically designates a traditional bachelor's degree in a university, the BS in nursing program in the Florida state college system was designed for registered nurses (RNs) who already completed associate degrees in nursing (ADN).

## Limitations

This study focuses on a specific population of RN-to-BSN students who enrolled in an RN-to-BSN program within the first two years after the program was implemented at a state college in Florida. The program at this college was designed for students to take the upper-division courses one at a time, with courses lasting between five and six weeks each. Students participating in the program were free to choose between online and face-to-face course formats. However, during the first year the program was offered, upper-division nursing course options were limited to only the face-to-face format. Therefore, students who began in the first two cohorts had fewer opportunities to choose the online course format than students admitted in later cohorts. Furthermore, the format (online or face-to-face) of the courses completed was not a controlled variable in the study.

To gain admission to the RN-to-BSN program, students were required to have completed at least 15 credit hours towards a 36-credit-hour general education component. To graduate with the BSN degree, students were required to complete all remaining general education courses to fulfill the 36-credit-hour general education requirement in addition to 40 credit hours of upper-division courses in the BSN curriculum. If foreign language requirements were not met by prior credits in high school or college, up to 8 credits of foreign language courses were required to be completed as well. In addition to the 40 upper-division credit-hour requirement, students entering the program without first completing all general education requirements could potentially be required to complete up to 29 lower-division credits, including general education and foreign language courses. Students who completed all general education requirements and foreign language prior to entering the program were required to complete only 40 upper-division credits to graduate with the BSN degree. Compared to students who entered the program with unmet general education and/or foreign language requirements, students who entered the program with all general education requirements previously completed were inherently more likely to graduate at a faster pace because they had less total credit hours remaining to graduate.

During the timeframe when the sample of students were enrolled, faculty advisors promoted student completion of upper-division courses, and some students may not have been aware of remaining general education requirements until after upper-division courses were completed. In later cohorts, faculty advisors began encouraging students to complete remaining general education course requirements before enrolling in upperdivision courses. Because of the difference in faculty advising provided between the earlier and later cohorts, the findings from the study of earlier cohorts may be different than studies of later cohorts.

Results from this study may provide useful information about the impact of general education courses enrollment patterns of RN-to-BSN students. As evidenced by Jeffreys' (2004) Nursing Undergraduate Retention and Success (NURS) model, nursing students have a unique combination of characteristics which may influence student success, graduation, and time to degree. While the framework and experimental design of the current study may be used to replicate the research in other disciplines, the results of this study may not be generalized to students in programs other than RN-to-BSN programs.

## **Definition of Terms**

- Community College: Traditionally, a community college is defined as "Any institution regionally accredited to award the associate in arts or associate in science as its highest degree" (Cohen & Brawer, 2003, p.5). The terms "junior college" and "community college" are used synonymously. Because some community colleges now offer baccalaureate degrees, this researcher defines the community college as any public post-secondary institution having an open-admission policy for students entering into lower-division courses and/or programs.
- Lower Division Courses: College-level courses numbered 1000 to 2999.
- Upper Division Courses: College-level courses numbered 3000 to 4999.
- Community College Baccalaureate (CCB) Degree: A baccalaureate degree offered by a community college. The terms "Baccalaureate degree" and "Bachelor's degree" are synonymous.
- General Education Requirement: A concentration of liberal arts courses required for students to complete Associate in Arts degrees and Bachelor's degrees.
- Graduation Rate: The percentage of students who graduated within a specific time frame.
- Time to degree completion: The number of semesters elapsed between a student's first term of enrollment and graduation.

• First term of enrollment: The first term of enrollment in at least one class while classified as a BSN degree-seeking student.

#### **CHAPTER II**

#### LITERATURE REVIEW

This summary of professional literature pertaining to graduation rates and time to degree of RN-to-BSN students was developed by a thorough review of databases available through Old Dominion University and St. Petersburg College. The databases used to identify literature included, but were not limited to CINAHL, ERIC, Dissertations & Theses Full Text, and Education Research Complete. Boolean searches were implemented using key words such as community college baccalaureate, graduation rate, nursing education, general education, patterns of enrollment, and predictors of success. Various combinations of terms were applied with appropriate operators. The summary of the literature review includes a historical perspective of higher education, community colleges, and the emergence of community college baccalaureate degrees. A review of prior retention studies progresses from a global perspective of higher education to a more narrowly-focused analysis of studies specifically examining factors impacting retention and success of students in RN-to-BSN programs.

### **History of Community Colleges and Degrees**

Post-secondary education in the United States has become increasingly accessible over the past century. Prior to the 1900s, higher education consisted of liberal education offered through universities, and it was limited primarily to the elite class (Geiger, 2005). In 1901, the president of the University of Chicago, William Rainey Harper, established Joliet Junior College, which is often recognized as the first junior college in the United States. As junior colleges became increasingly prevalent throughout the 1900s, access to higher education became more readily available to the general population. By the 1990s, nearly 40% of all post-secondary students were enrolled in junior colleges (Cohen and Brawer, 1996). Because the programs offered in junior colleges were typically designed to meet the needs of their communities, they were also known as community colleges (Vaughn, 2006). Cohen and Brawer (2003) defined the community college as "any institution regionally accredited to award the associate in arts or associate in science as its highest degree" (p. 5).

Typically, an associate degree is considered a two-year degree because two years is the standard amount of time for a full-time student to graduate. Aligned with the original mission of the community college, the associate degrees of the early 1900s consisted primarily of liberal arts courses and were designed to prepare students for transfer towards bachelor degrees at universities (Vaughn, 2006). This type of transferdegree is known as an associate in arts degree. Throughout the second half of the 1900s, community colleges broadened their scope by offering more workforce- and communityoriented programs (Vaughn).

A bachelor's degree may be called a four-year degree because it should take about four-years for a full-time student to earn such a degree. Courses taken in the first two years may be called "lower division" courses, and courses taken in the second two years may be called "upper division" courses (Garcia Faconetti, 2009). Lower-division classes include a combination of liberal arts/general education and elective courses. Within the lower-division curriculum, students must meet specific admission criteria for entry into the remaining two years of upper-division study to earn baccalaureate degrees. While community colleges have historically been known for workforce training and two-year degrees to help students transfer to four-year institutions to earn bachelor degrees, some community colleges now offer their own bachelor degrees. A bachelor degree awarded by a community college is referred to as a community college baccalaureate (CCB) degree (Floyd, 2005).

#### **Increased Demand for Efficiency**

While enrollment in community colleges and public universities has grown, state funding of those institutions has diminished (Mercer, 2003). Consequently, many institutions have focused more energy on raising funds from other sources (e.g. alumni associations, foundations, research grants, philanthropic donations, etc.). However, fundraising efforts have fallen short, and several institutions have not been able to sustain budget reductions without making significant changes. Many institutions have discontinued low-enrollment programs, left vacant positions unfilled, increased class sizes, reduced salaries, and laid-off staff members (Shieh, 2009).

While fund-raising efforts have not kept pace with state budget reductions, many states and local higher education administrators have made organizational changes to increase efficiency and maximize productivity. Governing boards and legislatures have requested institutions to develop and implement cost-saving programs. In January 2009, the Pennsylvania State Board of Education recommended the commonwealth create a new kind of college to offer a low-cost, "no-frills" bachelor degree (Selingo, 2009). By reducing amenities such as athletics, dining halls and residential or recreational facilities, the premise is that colleges could charge less for tuition and be more cost-effective in producing graduates. The model they describe strongly resembles the new state college model in Florida. According to Petry (2003), the programs in the new Florida state college model "are cost effective for the state, less costly to establish and run than other

available options, and less expensive for students" (p. 146). The Southern Regional Education Board reported Florida has the lowest tuition and fees of all institutions in the southern region (2008).

## Growth of Community College Baccalaureate Degrees in Florida

The state of Florida and its community colleges have made progress in offering accessible and affordable bachelor degree programs. In 2001, the state of Florida enacted a bill allowing St. Petersburg College (SPC), formerly St. Petersburg Junior College, to offer limited baccalaureate degree programs to meet the needs of specific labor market demands. In 2002, SPC began offering bachelor degrees in Nursing, Education, and Technology Management. It has gradually added more programs and now offers over fifteen bachelor degree programs.

Soon after SPC transformed into a four-year institution, other Florida community colleges started offering baccalaureate degrees. By December 2004, Chipola Junior College, Miami Dade Community College, and Okaloosa-Walton College joined SPC as the first four community colleges in Florida to make this transition. In July of 2008, Florida Senate Bill 1716 created the Florida College System and designated nine state colleges (formerly community colleges) to participate in the pilot program (Floyd, 2009). The bill required the state colleges to offer more cost-effective bachelor degree alternatives than those offered by the universities in the State University System (SUS). Furthermore, these state colleges were required to continue providing open-access admission policies for students entering lower-division programs.

In 2009, 17 of Florida's 28 colleges offered a total of 110 baccalaureate degrees (Florida Department of Education, 2010). From 2006 to 2009, student enrollment in

Florida's CCB programs increased 188%, from 2,834 students to 8,155 students. In 2008-2009, Florida colleges awarded 1,042 baccalaureate degrees. According to the Florida Department of Education (FLDOE), 65% of full-time students who enrolled in a Florida CCB program as juniors in 2005-2006 graduated within three years (2010). In addition, 35% of part-time students graduated within the same timeframe.

## Nature of Community College Baccalaureate Degrees

Many of the baccalaureate degrees offered in the state colleges of Florida are classified as Bachelor of Applied Science (BAS) programs, which were designed for students who completed Associate of Science or Associate in Applied Science degrees. The concept of the BAS degree was first implemented in 1986 when the University of Texas at Brownsville designed a Bachelor of Applied Arts and Sciences (BAAS) degree to meet the needs of students who completed programs at accredited technical schools and wanted to pursue bachelor degrees (Arney, Hardebeck, Estrada, & Permenter, 2006). Although there were initially some doubts about the feasibility of the program and concerns about the employability of its graduates, there were no significant differences between the salaries of BAAS graduates and Bachelor of Science (BS) Business graduates (Arney, et al.).

Townsend, Bragg, & Rund (2008) defined the applied baccalaureate as "a bachelor's degree designed to incorporate applied associate courses and degrees once considered as 'terminal' or non-baccalaureate level while providing students with the higher-order thinking skills and technical knowledge and skills so desired in today's job market" (p. 9). Bragg, Townsend, & Rudd (2009) performed a 50-state survey to assess the condition of applied baccalaureate degrees in the United States. Of all the states surveyed, ten offered the applied baccalaureate degrees at community colleges, while 39 offered them at traditional four-year institutions (Bragg, et al.). The two states having the most community colleges offering applied baccalaureates were Texas and Florida; Texas had fifteen and Florida had nine. When found in a community college, the BAS and other bachelor degrees are also known as community college baccalaureate (CCB) degrees (Floyd, Skolnik, & Walker, 2005).

### **Funding and Accountability**

As CCB programs continue to grow and gain popularity, it is important to closely monitor student retention and completion rates in order to ensure programs are aligned with federal, state, and local accountability measures. Graduation rates are often used as performance indicators for community colleges (Bailey, Crosta, & Jenkins, 2006). Bailey, et al. defined graduation rate as "the ratio of all students who completed a certificate or associate degree at that college within the 150% time period to the total number of students in the initial cohort" (p. 493). In 1999, the Student Right-to-Know and Campus Security Act required colleges and universities to publish their graduation rates, known as Student Right-to-Know (SRK) data.

As the transparency of institutional graduation rates and security increased, the federal government increased funding to states and students to promote higher education. In 2010, the Obama administration provided \$750 million in grants to states to increase college completion rates (Field, 2010). In addition, \$2 billion was allocated to community colleges to help provide education for more students. Although the \$2 billion came with no conditions, the original proposal tied the funds to increased graduation

rates, job placement, and workforce readiness. From 2008 to 2010, the federal government increased spending on financial aid to students almost 50% (Field).

While the federal government increased the amount of financial aid to students, it concurrently increased regulations to prevent fraud and abuse of such aid. Federal standards of academic progress do not allow students to receive federal financial aid after attempting 150% of the degree program's credit-hour requirements (McCullough & Klock, 2010). Additionally, students who do not successfully complete 67% of their coursework or do not maintain a 2.0 minimum grade point average run the risk of losing federal financial aid eligibility (McCullough & Klock).

In addition to federal standards, some states passed legislation to encourage students to avoid taking excessive hours and be more efficient in degree completion. In 2005, the Arizona legislature implemented statute 15-1626, requiring public universities to charge undergraduate students additional fees for each credit of enrollment beyond 145 attempted credits towards degrees. In 2009, the North Carolina legislature enacted statute 116-143.7, requiring all undergraduate students at the University of North Carolina to pay an additional 25% tuition charge for credits exceeding 110% of the credits required. In 2010, the fee increased to 50%. In 2009, Florida passed similar legislation (S. 1009.286) requiring state university students to pay additional fees for each credit after attempting 120% of the credits required for bachelor degrees. Although this legislation exists in only a few states and does not currently apply to community colleges, such practices may become more common as community college enrollments continue to grow.

According to Cohen and Brawer (2003), federal and state governments will continue to influence the performance of community colleges. Although recent federal

dollars were allocated with no performance outcomes defined, Cohen and Brawer purported funding will become increasingly dependent on specific outcomes. As the federal and state governments continue to focus on increasing graduation rates, it is critically important for community college leaders to proactively identify and implement strategies and policies to promote student retention and efficiency to graduation.

#### **Graduation Rates and Retention**

In 2009, President Obama introduced the American Graduation Initiative (AGI), which promoted the goal of graduating five million additional community college students by 2020. In order to meet this goal, community colleges must increase the number of graduates each year by 16% (Kotamraju & Blackman, 2011). To accomplish this objective, it is important to review the professional literature and understand factors impacting student attrition, retention, and graduation. Tinto (1993) explained student attrition or withdrawal from college as a result of "the unwillingness and/or inability of the individual to become integrated and therefore establish membership in the communities of the college" (p.121). Tinto's theory has been widely accepted, and it has been supported by other studies indicating higher student persistence rates among students who are more academically and socially involved with other students and faculty members (Astin, 1984; Pascarella & Terenzini, 1980).

Although researchers have performed studies with results indicating social integration is a predictor of student retention, social integration may be less important among non-traditional students. Metzner and Bean (1987) illustrated the relative dearth of research through the early 1980s specifically focusing on non-traditional students, and they performed the first study structured by a theoretical framework intended to

understand attrition among non-traditional students. In their study of 624 part-time, freshman commuter students at a university, they found no significant relationship between social integration and attrition (Metzner & Bean). Rather, the top three predictors of attrition among non-traditional students were GPA, intent to leave, and number of credit hours enrolled.

Gutierrez & Dantes (2009) purported graduation rates did not give an accurate description of student success, and they developed a more comprehensive method of measuring student success by examining multiple student outcomes. They examined retention, graduation, transfer, baccalaureate degree attainment, and successful course completion students attending the City College of Chicago over a six-year period. Gutierrez & Dantes (2009) found a positive correlation between student GPA in the first semester and overall student success. Students who finished their first semester of community college with high GPAs were more likely to be successful.

Fike and Fike (2008) examined predictors of retention for 9,200 first-time-incollege (FTIC) students at a community college in Texas. Positive predictors of retention included completion of developmental coursework, enrollment in online courses, receiving financial assistance, participation in student support services, and number of credit hours enrolled in the first semester. Student ethnicity and parents' level of education were not identified as predictors of retention. Although Fike and Fike's study revealed no relationship between community college student retention and parents' level of education, studies of traditional college students have identified parents' level of education as a strong predictor of student persistence (Berger, 2001; Kuh, 2001).

Some research studies indicated community colleges were not as proficient as four-year colleges and universities in preparing students for baccalaureate degrees (Clark, 1960; Orfield & Paul, 1992; Dougherty, 1992). As a result of reviewing multiple studies on the impact of community college attendance on baccalaureate completion, Pascarella and Terenzini (2005) concluded students who initially attended community colleges were 15% to 20% less likely to earn baccalaureate degrees than students who started at fouryear colleges. This perceived lack of proficiency could be partly attributed to characteristics of students who attend community colleges and the reasons students choose to attend community colleges (Townsend, 2007). Community colleges enroll higher numbers of non-traditional, minority, and part-time students than four-year colleges and universities (Bailey, Calcagno, Jenkins, Kienzl, & Leinbach, 2005). The proportion of minority students enrolled at a community college is associated with lower graduation rates (Bailey, et al.). Additionally, students who attend part time are less likely to be retained and graduate than students who attend full time (Metzner & Bean, 1987; Fike & Fike, 2008).

While some may argue community colleges fail in comparison to universities' capacities to prepare students for bachelor's degrees, Wellman (2002) reported problems with transfer data prior to the 1990s prevented colleges from accurately tracking enrollment patterns of students who left their institutions. Since then, Wellman reported improvements in national and state data have been helpful in providing enrollment patterns and attributes of transfer students. Nationally, 70% of students who transfer from a two-year college to a four-year college earn baccalaureate degrees (Wellman). In comparison, about 57% of full-time bachelor degree-seeking students who first enrolled

in four-year institutions in 2001 graduated in six years or less (National Center for Education Statistics, 2011).

Although some studies indicate transfer students typically take longer to graduate, other studies have shown transfer students and native university students have comparable baccalaureate completion rates of 65% to 70% (Johnson, 1987; McCormick & Carroll, 1997). In contrast, Garcia Falconetti (2009) found a significant difference in graduation rates between community college transfer students (63%) and native university students (77%) at three public universities in Florida. Although the transfer students dropped out of college at a higher rate, transfer students who graduated had comparable grade point averages and earned fewer cumulative credit hours than native university students (Garcia Falconetti).

According to the Florida Department of Education (FLDOE), approximately 70% of Associate in Arts (AA) degree graduates who transferred to public Universities in Florida graduated from baccalaureate degree programs within four years, compared to 80% of juniors who began studying at the universities as freshmen (1998). The FLDOE partly attributed transfer students' increased time to degree to their academic loads. In 2003, 64% of transfer students attended full-time, compared to 94% of native students (FLDOE).

#### **Community College Baccalaureate Accountability**

In 2009, the state of Florida issued its first official report on the performance outcomes of baccalaureate programs in the state colleges. Of the full-time students who initially enrolled in Florida's state college baccalaureate programs as juniors in 2004, approximately 75% graduated within four years (Baccalaureate Accountability, 2009).

Although the report did not differentiate between native and transfer students, their overall persistence rate (75%) was comparable to the persistence rates of native SUS students (80%) and those who transferred to SUS institutions (70%).

While graduation rates describe the percentage of students who graduate, some researchers have analyzed factors impacting the specific number of semesters it takes for students to graduate. In her dissertation examining the effectiveness of articulation agreements between community colleges and universities in Missouri, Perkins (2010) compared the credit hours and number of semesters to graduate of native university students, students who transferred with AA degrees, and students who transferred with all general education requirements completed. While she found full-time native university students accumulated significantly less credits and graduated significantly faster than students who transferred with all general education requirements completed, she found no significant differences between the time to degree of native students and AA transfers (Perkins).

In addition to graduation rates and time to degree, employment and graduate school enrollment status of graduates are often used as indicators of successful programs. According to the Florida Education & Training Placement Information Program (FETPIP), 89.2% of students who graduated with bachelor degrees from Florida state colleges in 2005-2006 were employed, and 9.8% were continuing their education (2008). Some graduates were both employed and continuing their education. In comparison, 68% of all bachelor degree recipients from Florida's state university system (SUS) in 2005-2006 were employed, and 19% were continuing their education. Compared to the baccalaureate graduates from the SUS, state college baccalaureate graduates were more likely to be employed. Conversely, graduates of the SUS were more likely to continue their education.

### **Increased Demand for Baccalaureate Nurses**

The three most common educational options to becoming a registered nurse are a nursing diploma, an associate degree in nursing (ADN), and a pre-licensure BSN. According to the Institute of Medicine (IOM), the most popular option is the ADN, which is found in community colleges (2010). While the ADN combined with an RN license are currently acceptable for entry into the workforce, the occupational landscape is transitioning. In response to a changing health care system and patient needs, the Institute of Medicine (IOM) (2010) stated nurses must increase their levels of training by earning bachelor's degrees before or soon after entering the workforce. To accommodate ADN graduates, some universities and community colleges offer RN-to-BSN programs (DeBrew, 2010). RN-to-BSN programs may also be referred to as a "BSN-completion programs" because they allow RNs who completed Associate Degrees in Nursing to return to college and earn BSN degrees by completing additional general education courses and junior/senior-level non-clinical nursing courses.

The IOM proposed a goal of having 80% of the RN workforce with BSN degrees by 2020. According to the Health Resources and Services Administration (HRSA) (2010), only about 50% of all RNs had BSN or higher degrees in 2010. Furthermore, only 21% of ADN graduates were enrolled in BSN programs in 2006 (HRSA, 2006). With such a large pool of RNs who need BSN degrees and are not yet enrolled, there appears to be a large potential for growth in RN-to-BSN programs.

#### **Nursing Student Success**

In order to practice as registered nurses, graduates from ADN and pre-licensure BSN programs must successfully pass the National Council Licensure Examination for RNs (NCLEX-RN). Because the pre-licensure RN training programs are designed to prepare students to meet the standards of the industry and pass the NCLEX-RN examination, some researchers have examined potential factors impacting student success rates on the NCLEX-RN exam. Some studies indicated standardized test scores of prenursing students were reliable predictors of later success on the NCLEX-RN examination (Sayles, Shelton, & Powell, 2003; Alexander & Brophy, 1997). The most consistent predictor of NCLEX-RN exam success among students in traditional BSN programs was pre-nursing GPA (Yang, Glick, & McClelland, 1987; McClelland, Yang, Glick 1992). More specifically, some research indicated student GPAs in science courses predicted how students would perform in nursing programs and on the NCLEX-RN exam (Byrd, Garza, & Nieswiadomy, 1999; Campbell & Dickson, 1996; Griffiths, Bevil, O'Connor, & Wieland, 1995).

Although GPA appears to be a predictor of student success on the NCLEX-RN examination, Jackson (2010) found no relationship between GPA and timely graduation of ADN students. In her study of 437 ADN students enrolled in three Midwestern community colleges, Jackson found student prerequisite GPA, cumulative GPA, and race had no significant impact on students graduating in four semesters. Furthermore, she reported no relationship between age and race with timely graduation. Although Jackson's findings did not support the assertion that prerequisite or cumulative GPA predicts timely graduation, these factors may have an impact on three-year or four-year graduation rates. Because her study was limited to examining graduation within four semesters, it likely excluded many part-time students who may have graduated within an extended period of time. Jackson recommended further research to determine predictors of timely graduation of ADN students.

To promote student retention and graduation, some schools have incorporated structured retention programs to promote the success of at-risk students. School officials in the St. Xavier University in Chicago, IL implemented a retention program for at-risk BSN students, entitled Partnership in Learning for Utmost Success (PLUS) (Lockie & Burke, 1999). The PLUS program consisted of six one-credit hour seminar courses, which were to be taken concurrently with course in the nursing curriculum. Of the 210 at-risk students who enrolled in a cohort of the BSN program, those who participated in the PLUS program (n=121) were nearly twice as likely to graduate in four years as students who did not participate in the program (Lockie & Burke). While the results of the study indicated the PLUS program promoted student retention and graduation, students voluntarily participated. At-risk students who voluntarily participate in such programs may be more likely to succeed than those who do not, even without partaking in retention programs (Hovland, 1994).

While students in ADN programs and pre-licensure BSN degree programs take the NCLEX-RN exam after completing all courses, students in RN-to-BSN programs must pass the NCLEX-RN examination prior to enrolling in upper-division BSN coursework. Because students in RN-to-BSN programs have already passed the NCLEX-RN examination, success in such programs may be measured in terms of retention and graduation rates. In an effort to increase retention rates of students in an RN-to-BSN program at the University of Tennessee, staff members designed and implemented the Gateway program, which channeled students in a cohort through a highly structured fourteen-month curriculum (Davidson, Metzger, & Lindgren, 2011). The courses in the Gateway program were delivered in a hybrid format – a combination of online components and face-to-face class meetings. Of the 53 students admitted in the first two cohorts of the program, 52 (98%) graduated within 14 months. A program evaluation indicated program support, technology support, and peer support contributed to the high success rates (Davidson, et al.). Most students in the program were required to complete some general education requirements to complete the BSN degree, and the timing of when those courses were completed was not indicated.

#### **General Education Requirements**

Like other bachelor degrees, the BSN includes a combination of general education and specialized courses for the major area of study. Schneider (2010) described undergraduate education as a combination of breadth and depth of knowledge, where general education courses provide breadth, and courses in a specific field of study provide depth of education. General education requirements have taken on many forms since the inception of higher education at Harvard University in the mid-1600s (Wehlburg, 2010). In the current model, students typically complete general education requirements in the first two years of study, then focus on specialized courses in the last two years. Assessment of general education in colleges and universities has become more popular in recent years because regional accrediting bodies require institutions to define and measure general education outcomes (Wehlburg, 2010; Warner & Koeppel, 2009). Although some type of general education requirement is found in nearly all baccalaureate programs, it has become devalued by some students who view such courses as barriers to enrolling in coursework more meaningful to their interests and goals (Wehlburg, 2010). To promote value and relevance of general education coursework to students' major courses of study, some institutions encourage integration of the two components across curricula (Association of American Colleges and Universities, 2009; Schneider, 2010; Wehlburg, 2010). Wehlburg suggested integration of general education courses with specialized coursework may lead to higher student retention rates.

While some researchers and organizations have promoted integration of general education to improve general education learning outcomes, DeBrew (2010) found no difference in general education performance outcomes between two groups of students who took general education courses in distinctly different enrollment sequences. According to DeBrew, "A liberal education is thought to provide the professional nurse with the skills needed to practice nursing, including critical thinking, effective communication, collaboration with others, appreciation of diversity, and integration of knowledge from science and humanities in order to solve problems" (p. 43). DeBrew performed a qualitative study to assess the perceived value of liberal education courses by nursing students in RN-to-BSN and pre-licensure BSN programs at a large university nursing program in the southeastern United States. Students in the RN-to-BSN program completed the liberal education courses before enrolling in nursing courses, whereas students in the prelicensure BSN program took liberal education courses after taking basic nursing courses. Based on themes derived from student responses to survey

questions, DeBrew concluded graduates from both programs achieved the desired outcomes of liberal arts education.

Popovich (2005) studied the impact of general education completion on baccalaureate success rates of transfer students. In her study of students who transferred to Arizona State University, Popovich reported higher graduation rates and grade point averages among students who completed all general education requirements before transferring. Students who had not completed all their general education courses requirements before transferring graduated at much lower graduation rates than students who transferred with associate degrees or certificates of general education course completion. The findings of Popovich were similar to those of other research findings, which indicated students who completed associate degrees from community colleges prior to transferring to universities had higher baccalaureate graduation rates than students who transferred without associate degrees (Cejda, Rewey, & Kaylor, 1998; Cohen & Brawer, 2003; Coley, 2000).

### **Conceptual Framework**

As evidenced by the literature review, many factors contribute to student retention and graduation rates. Jeffreys (2004) developed the Nursing Undergraduate Retention and Success (NURS) model – a multidimensional approach to analyzing nursingdiscipline-specific factors impacting retention of traditional and non-traditional students. According to Jeffreys (2007), retention is impacted by "the interaction of student profile characteristics, student affective factors, academic factors, environmental factors, professional integration factors, academic outcomes, psychological outcomes, and outside surrounding factors" (p. 161). Metzner and Bean (1987) defined academic factors as a student's involvement with the academic process, including study skills, study hours, use of college support services, course availability, and academic advising. Jeffreys suggested specific investigations of each academic factor may divulge several dynamics which could impact individuals differently. This study extends Jeffreys NURS model to include general education course enrollment patterns as an academic factor which may impact two academic outcomes (graduation rate and time to graduate).

### Summary

The review of the literature indicated concurrent trends of: (a) more community colleges offering baccalaureate degrees, (b) an increased focus on graduation rates and accountability, and (c) the increasing demand for nurses with baccalaureate degrees. While the existing literature includes studies of graduation rates of native and transfer students pursuing traditional baccalaureate degrees, there appears to be a void of research to address the factors impacting graduation rates of community college baccalaureate students. The relative infancy of the RN-to-BSN degree and the community college baccalaureate concept warrants further investigation of such factors. General education requirements have remained a fairly constant and integral component of associate degree curricula to prepare students for further academic study. Though studies have demonstrated community college transfer students are more likely to earn baccalaureate degrees from universities if they first complete all general education requirements (Popovich, 2005), this type of research with community college baccalaureate programs has not yet been published. While DeBrew (2010) indicated the pattern of general education enrollment did not impact on general education outcomes, there have been no studies published to examine if such enrollment patterns impact graduation rates or time

to degree of RN-to-BSN students. This study investigated the impact of general education course enrollment patterns the graduation rates and time to degree of community college baccalaureate students in an RN-to-BSN program.

#### **CHAPTER III**

#### **METHODOLOGY**

Until recently, an Associate Degree in Nursing (ADN) was comparable to a Bachelor of Science in Nursing (BSN) degree in nursing for entry in to the workforce as a registered nurse. In 2010, the Institute of Medicine (IOM) recommended 80% of all registered nurses have bachelor degrees in nursing. If the health care industry complies with this recommendation, bachelor degree programs in nursing throughout the nation will likely be inundated with applications from registered nurses who have not yet earned BSN degrees.

As federal and state governments continue to hold colleges and universities more accountable for producing graduates, community college leaders must employ effective strategies to promote student progression and graduation rates. The AS to BS degree transfer option is a relatively new phenomenon, and there has been little empirical research regarding the impact of general education enrollment patterns on graduation rates and time for degree completion of RN to BSN students.

This chapter presents the study's research design and approach, including the justification for the methodology used to examine time to degree and graduation rates for BSN students and the variable of when they completed their general education requirements. The purpose of this study is to determine if there are significant differences in the graduation rates and time to degree completion between students who complete all general education requirements before entering an RN-to-BSN program and students who complete any general education requirements after entering an RN-to-BSN program. The study will be guided by the following research questions:

- 1. When do RN-to-BSN students complete general education requirements?
- 2. Does completion of general education course requirements before entering an RN-to-BSN program have a significant impact on graduation rates?
- 3. Among RN-to-BSN graduates, does the pattern of general education course completion have a significant impact on time to degree?

### **Research Design**

To address the research questions, an ex post facto quantitative research design was employed. Ex post facto research is a non-experimental effort to investigate the possible cause and effect relationship between the independent variables and the dependent variables (Creswell, 2003). Cohen, Manion, and Morrison (2000) explained ex post facto research as searching back in time for the possible factors seemingly associated with certain occurrences. This study examined data from a college's student information database to determine if general education enrollment patterns impacted student graduation rates and time to degree completion.

The dependent variables of the study were student graduation rates and time to degree. The first dependent variable was the three-year graduation rate. The three-year graduation rate was measured in accordance with the state of Florida's accountability model, which assesses graduation rates at three years after initial enrollment (FLDOE, 2008). The three-year graduation rate was defined as the percentage of students who graduated within three years after first enrollment as juniors in the BSN program. The graduation rate was calculated by dividing the number of graduates from a cohort by the number of students who began in the respective cohort.

The second dependent variable, time to degree, was defined as the number of terms between a student's first enrollment as a junior in the BSN program and graduation. Terms in which students were not enrolled were included in the time to degree calculations.

The independent variable was the general education coursework enrollment pattern, which included the following levels:

1. Completed all general education coursework before entering the RN-to-BSN program.

2. Completed any general education coursework after entering the RN-to-BSN program.

For the purposes of this study, all lower-division courses included in BSN student schedules were classified as general education courses. Lower-division coursework included any course with a course number from 1000 to 2999. Upper-division coursework was defined as any course with a course number of 3000 to 4999. Because the independent variable could not be controlled in this study, an ex post facto approach was appropriate (Montero & León, 2007). Ex post facto data were extracted from the student information database of an RN-to-BSN degree-granting state college in a major metropolitan area.

Descriptive statistics were used to report the graduation rates of BSN-degree-seeking students who entered the BSN program between the Fall semester of 2002 and the Spring semester of 2004. Student data were divided into the following categories:

 Students who completed all general education courses before entering the RN-to-BSN program.  Students who completed any general education requirements after entering the RN-to-BSN program.

The number and percentage of students who graduated within three years after admission to the BSN program was calculated and reported. A Pearson Chi-square test was performed to determine if there were significant differences in the graduation rates between the two groups. For each student who graduated within three years, the number of terms from initial enrollment to graduation was calculated. A t-test was performed to determine if there were significant differences in time to degree between the two categories of students.

#### **Population and Sample**

The population for this study included students enrolled in an RN-to-BSN program within a public state college in a major metropolitan area of Florida. The accountability model used by the Florida Department of Education (FLDOE) assesses graduation rates at three years after initial enrollment (FLDOE, 2008). The college students examined in this study were among the first cohorts to enroll when the program was first implemented at one of Florida's community colleges in August, 2002. The sample of the study included all degree-seeking students who first enrolled in the BSN program between the Fall semester of 2002 and the Spring semester of 2004 (n=240). Students enrolled in BSN coursework and classified as transient or non-degree seeking were not included in the study.

## **Data Collection Procedures**

Data were gathered from the student information system at the college where this study was conducted. The student data included several characteristics of all students who first enrolled in coursework as BSN students between the Fall semester of 2002 and the Spring semester of 2004. Although gender and ethnicity were not examined as factors impacting graduation in this study, these data were included to help describe the sample population. For categorical reporting purposes, each characteristic was coded with a numerical representation as follows:

- 1. Graduation rate
  - a. Students who graduated within 3 years were coded as 1.
- 2. Sequence of general education course completion
  - a. Students who completed all general education course requirements before entering the RN-to-BSN program were coded as 1.
  - b. Students who completed any general education requirements after entering the RN-to-BSN program were coded as 2.

### 3. Time to degree

- a. The number of terms between initial enrollment in the RN-to-BSN program and graduation was counted and coded numerically for each student who graduated within three years.
- 4. Gender
  - a. Males were coded as 1.
  - b. Females were coded as 2.
- 5. Ethnicity
  - a. Whites were coded as 1.
  - b. African Americans were coded as 2.
  - c. Hispanics were coded as 3.

- d. Asians were coded as 4.
- e. American Indians and Alaskan Natives were coded as 5.
- f. Native Hawaiians or Other Pacific Islanders were coded as 6.

### **Data Analysis**

To address the first research question, descriptive statistics were used to report when RN-to-BSN students completed general education requirements. Data from all cohorts were categorized together and examined as one group. The number and percentage of students who took general education requirements before, concurrently with, and after upper-division courses were reported.

Research question two was addressed with the data from research question one to determine if there was a statistically significant difference in the number of RN-to-BSN graduates who completed general education courses:

- 1. before entering the program
- 2. after entering the program

The number of students who graduated within three years was calculated and reported. To illustrate and analyze these data, a contingency table was developed for students who graduated within three years. The contingency table displays the frequency distribution of the two variables - general education enrollment pattern and graduation status, as displayed in Table 1. A  $2 \times 2$  Chi-square was used to compare the frequency of graduation of students who completed all general education requirements before entering the program with the frequency of graduation of students who completed any general education requirements after entering the program. The Chi-square value indicates

whether the observed frequency is significantly different than what would be expected by chance (Sprinthall, 2007).

Table 1

Students who graduated within three years by enrollment pattern.

General Education	Graduated	Did Not Graduate	Total
Enrollment Pattern			
Before Upper-			
Division Courses			
Concurrently and/or			
after Upper-			
Division Courses			
Total			

To address the third research question, descriptive data gathered in research question one were used to compare the time to degree of RN-to-BSN students who completed general education courses:

- 1. before entering the RN-to-BSN program
- 2. after entering the RN-to-BSN program

Time to degree was calculated by counting the number of semesters from initial enrollment in RN-to-BSN program to graduation. Only students who graduated within three years were included in the time to degree calculations. The mean number of terms to graduation was calculated for each of the two groups of students with different general education enrollment patterns. To determine if there was a statistically significant difference in time to graduate among the two groups, a t-test was performed. Because the means of two independent samples were compared, a t-test was appropriate to determine if there were statistically significant differences (Sprinthall, 2007). Sprinthall discussed the appropriate use of t-tests and the six major assumptions made when using a t-test: Randomly-selected samples, normality of traits being measured, similar standard deviations, independent samples, consistent trait measured in both samples, and interval data. For this study, the traditional alpha value of .05 was used.

### **Delimitations**

This study focused specifically on students in a Community College Baccalaureate (CCB) program at a state college in Florida. With the exception of the authority to grant baccalaureate degrees, the state college model in Florida is comparable to the community college model in other states. Students are not classified in a baccalaureate program in Florida's college system until they have completed at least 60 credit hours. Student graduation rates and time-to-degree calculations will begin from the time students enter the program as juniors, not as freshmen. While the majority of CCB degrees offered by Florida community colleges were BAS degrees, this study focused on students in a college's BS degree in nursing program. Although the BS designation typically designates a traditional bachelor's degree in a university, the BS in nursing program in the Florida state college system was designed for registered nurses (RNs) who already completed associate degrees in nursing (ADN).

### Limitations

This study focused on a specific population of RN-to-BSN students who enrolled in an RN-to-BSN program within the first two years after the program was implemented at a state college in Florida. The program at this college was designed for students to take the upper-division courses one at a time, with courses lasting between five and six weeks each. Students participating in the program were free to choose between online and face-to-face course formats. However, during the first year the program was offered, upper-division nursing course options were limited to the face-to-face format. Therefore, students who began in the first two cohorts had fewer opportunities to choose the online course format than students admitted in later cohorts. Furthermore, the format (online or face-to-face) of the courses completed was not a controlled variable in this study.

To gain admission to the RN-to-BSN program, students were required to have completed at least 15 credit hours towards a 36-credit-hour general education component. To graduate with the BSN degree, students were required to complete all remaining general education courses to fulfill the 36-credit-hour general education requirement in addition to 40 credit hours of upper-division courses in the BSN curriculum. If foreign language requirements were not met by prior credits in high school or college, up to 8 credits of foreign language courses were required to be completed as well. In addition to the 40 upper-division credit-hour requirement, students entering the program without first completing all general education requirements could potentially be required to complete up to 29 lower-division credits, including general education and foreign language courses. Students who completed all general education requirements and foreign language prior to entering the program were required to complete only 40 upper-division credits to graduate with the BSN degree. Compared to students who entered the program with unmet general education and/or foreign language requirements, students who entered the program with all general education requirements previously completed were

inherently more likely to graduate at a faster pace because they had less total credit hours remaining to graduate.

During the timeframe the sample of students were enrolled, faculty advisors promoted student completion of upper-division courses, and some students may not have been aware of remaining general education requirements until after upper-division courses were completed. In later cohorts, faculty advisors began encouraging students to complete remaining general education course requirements before enrolling in upperdivision courses. Because of the difference in faculty advising provided between the earlier and later cohorts, the findings from the study of earlier cohorts may be different than studies of later cohorts.

Results from this study may provide useful information about the impact of general education courses enrollment patterns of RN-to-BSN students. As evidenced by Jeffreys' (2004) NURS retention model, nursing students have a unique combination of characteristics which may influence student success, graduation, and time to graduate. While the framework and experimental design may be used to replicate the study in other disciplines, the results of this study may not be generalized to students in programs other than RN-to-BSN programs.

#### **CHAPTER IV**

#### RESULTS

The purpose of this ex post facto study was to determine if there were significant differences in the graduation rates and time to degree completion between students who completed all general education requirements before entering an RN-to-BSN program and students who completed any general education requirements after entering an RN-to-BSN program. This chapter summarizes the findings of the statistical analyses performed to address the previously established research questions:

- 1. When do RN-to-BSN students complete general education requirements?
- Does completion of general education course requirements before entering an RN-to-BSN program have a significant impact on graduation rates?
- 3. Among RN-to-BSN graduates, does the pattern of general education course completion have a significant impact on time to degree?

## Introduction

This chapter includes an analysis of data extracted from the student information system of a community college in a major metropolitan area in Florida. The data examined in this study included enrollment records of 240 students who first enrolled as juniors in an RN-to-BSN community college baccalaureate degree program at one institution between the Fall semester of 2002 and the Spring semester of 2004. Students in this study were categorized as either completing all general education requirements before entering the program or completing general education requirements after entering the program. Statistical analyses were conducted to assess differences between groups. Descriptive statistics were used to describe the sample population. Table 2 illustrates the distribution of students by ethnicity as it was defined in the college's student information system. 74.2% (178) of the students in the sample were White, 18.3% (44) were Black, 2.9% (7) were Asian, and 2.9% (7) were Hispanic. Four students (1.7%) had records with no ethnicity indicated, and they were listed as "Unknown".

## Table 2

Ethnicity of	f students	in sample.
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Ethnicity	Frequency	Percent
Asian	7	2.9
Black	44	18.3
Hispanic	7	2.9
White	178	74.2
Unknown	4	1.7
Total	240	100

As Table 3 indicates, 210 (87.5%) of the students in the sample were females, and 30 (12.5%) of the students in the sample were males.

Gender of Students in Sample.

Gender	Frequency	Percent	 	
Female	210	87.5		
Male	30	12.5		
Total	240	100		

## **Graduation Rate**

The three-year graduation rate was calculated by dividing the number of students who graduated within three years (n=119) by the total number of students in the sample (n=240). The three-year graduation rate for the overall sample was 49.6%. Table 4 illustrates the distribution of students by enrollment pattern who graduated with a BSN degree within three years of entering the program as juniors. Of the 119 students who graduated within three years, 31 (26.1%) completed all general education requirements before entering the BSN program as juniors, and 88 (73.9%) completed general education requirements after entering the BSN program as juniors.

## Distribution of Three-year Graduates by Enrollment Pattern.

General Education Completed	Number of Graduates	Percent
Before entering BSN program	31	26.1%
After entering BSN program	88	73.9%
Total	119	100%

### **Graduation Rates by General Education Completion Patterns**

Of the 240 students in the sample, 47 students completed all general education requirements before entering the program, and 193 students completed remaining general education courses after entering the program. Table 5 presents a contingency table which illustrates the three-year graduation status of students in each group. Of the 47 students who completed all general education requirements before entering the BSN program, 31 graduated within three years, and 16 did not graduate within three years. Of the students who completed general education requirements after entering the BSN program, 88 graduated within three years, and 105 did not graduate within three years.

# Graduation Status after Three Years by General Education Completion.

General Education	Graduated	Did Not Graduate	Total
Completed			
Before Entering BSN	31	16	47
After Entering BSN	88	105	193
Total	119	121	240

The three-year graduation rate for each group was calculated by dividing the number of students in each group who graduated within three years by the total number of students in each group. As indicated in Table 6, the three-year graduation rate for the students who completed all general education requirements before entering the BSN program was 66%, and the three-year graduation rate for the students who completed general education requirements after entering the program was 45.6%.

# Three-Year Graduation Rate of students by General Education Completion Pattern.

General Education Completed	Three-Year Graduation Rate
Before Entering BSN	66%
After Entering BSN	45%

To determine if there was a significant difference in the graduation rates between each group, a Pearson Chi-square test for independence was conducted. The test revealed a significant difference in the three-year graduation rates between the two groups,  $X^2$  (1, N = 119) = 6.268, p<.05. Table 7 summarizes the results of the Pearson Chi-square test. Students who completed general education requirements before entering the BSN program were more likely to graduate within three years than students who completed general education courses after entering the BSN program.

Chi-Square Results Summary.

Statistical Test	Value	df	Significance	
Pearson Chi-square	6.268	1	.012*	
*The difference was significant at $p < .05$				

# Number of Semesters to Graduate

Of the 119 students who graduated within three years, the mean number of semesters to graduate was calculated for each group of students. The mean number of semesters to graduate for students who completed all general education courses before entering the BSN program to graduate was 5.58. The mean number of semesters to graduate for students who completed general education courses after entering the BSN program was 6.08. Table 8 includes a summary of the mean number of terms to graduate for each group.

## Descriptive Statistics for Terms to Graduate.

		Range		
Completed General Education	М	SD	Lower	Upper
***************************************				
Before entering BSN	5.58	1.18	5	9
After entering BSN	6.08	1.33	5	9

A t-test was conducted to determine if there was a significant difference between the mean number of semesters to graduate among the two groups of students who graduated within three years. T-test results indicated no significant difference in the mean number of semesters to graduate between the two groups, t (117) = -1.86, p > .05. Table 9 includes a summary of the t-test results.

Table 9

T-test Results Summary

T value	df	Significance
-1.86	117	.066*

\*The difference was not significant at p > .05

### Summary

The relationship between general education course enrollment patterns and graduation rates was examined on two dimensions – graduation rate and time to degree. Students who completed all general education requirements before entering the RN-to-BSN program were more likely to graduate in three years than students who completed general education requirements after entering the program. To examine the three-year graduates further, a t-test was used to determine if one group graduated in fewer semesters than the other. No significant differences in time to degree completion were found between the two groups of students who graduated within three years.

The following chapter provides further discussion of the results, including implications for policy decisions related to RN-to-BSN programs at community colleges. The discussion includes references to the current body of professional literature on general education requirements and factors impacting graduation from RN-to-BSN programs. The researcher's observations, overall impressions of the results, and recommendations for further research will be provided.

#### **CHAPTER V**

#### CONCLUSIONS

This chapter includes a summary of the study, followed by a discussion of the results, including conclusions, implications for leaders, recommendations for practitioners, and implications for further research.

#### **Overview of the Study**

The impetus for this study was a combination of the nation-wide drive to efficiently graduate more college students, the growing presence of community college baccalaureate programs, and the labor-market demand for higher numbers of Registered Nurses (RNs) with Bachelor of Science in Nursing (BSN) degrees. The registered nurse occupation is expected to have the largest national growth of any occupation, with a projected 22.2% increase, or 581,000 new jobs between 2008 and 2018 (BLS, 2009). According to the Health Resources and Services Administration (HRSA) (2010), about 50 percent of all RNs had a BSN or higher degree in 2010. The Institute of Medicine (IOM) proposed a goal of having 80 percent of the RN workforce with BSN degrees by 2020. RN-to-BSN programs provide avenues for RNs who graduated from Associate Degrees in Nursing (ADN) programs to complete their BSN degrees. This study included an analysis of enrollment data for 240 students who enrolled in an RN-to-BSN program at a community college in Florida between Fall of 2002 and Spring of 2004. The graduation requirements of the RN-to-BSN program included some general education courses and some upper-division nursing courses. Students in the program could choose to complete the general education requirement before or after entering the program.

The state of Florida requires all baccalaureate students in the state's public universities and colleges to complete 36 credit hours of general education requirements to graduate. Students who graduate from one of Florida's community colleges with an Associate in Arts degree have satisfied the general education requirement, and may then transfer to a university to complete the upper-division requirements for a bachelor's degree. As community college baccalaureate degrees were implemented to provide transfer options for students who earned Associate in Science or Associate in Applied Science degrees, the remaining general education requirements were integrated into the upper-division curriculum. Students who earned applied science degrees in fields such as nursing could take general education courses such as Humanities or English Composition concurrently with junior- and senior-level nursing research courses. Many researchers have demonstrated that students have higher graduation rates when transferring from a community college to a university if they first complete all general education requirements (Cejda, Rewey, & Kaylor, 1998; Cohen & Brawer, 2003; Coley, 2000; Popovich, 2005). However, there have been no research studies that this researcher was able to discover which examine the impact of completing general education requirements prior to entering a community college baccalaureate degree program.

The purpose of this study was to determine if there were significant differences in the graduation rates and time to degree completion between students who completed all general education requirements before enrolling in an RN-to-BSN program and students who completed general education requirements after enrolling in an RN-to-BSN program. If students who completed all general education requirements before enrolling in the program had higher graduation rates or graduated at a faster pace, administrators of RN-to-BSN programs and departments of education may benefit from adopting admission or progression policies accordingly. This study was designed to address the following research questions:

- 1. When do RN-to-BSN students complete general education requirements?
- 2. Does completion of general education course requirements before entering an RN-to-BSN program have a significant impact on graduation rates?
- 3. Among RN-to-BSN graduates, does the pattern of general education course completion have a significant impact on time to degree?

To answer these research questions, a quantitative ex post facto research design was applied. Data were extracted from the student information database of an RN-to-BSN degree-granting state college in a major metropolitan area in Florida. The data included course enrollment history, graduation date, gender, and ethnicity of all students who first enrolled in coursework as students in the RN-to-BSN program between the Fall semester of 2002 and the Spring semester of 2004. Student data were divided into the following two groups:

- Students who completed all general education requirements before entering the RN-to-BSN program.
- Students who completed general education coursework after entering in the RNto-BSN program.

The dependent variables of the study were student graduation rates and time to degree. The first dependent variable was the three-year graduation rate. The three-year graduation rate was measured in accordance with the state of Florida's accountability model, which assesses graduation rates at three years after initial enrollment (FLDOE,

2008). The three-year graduation rate was defined as the percentage of students who graduated within three years after first enrollment as juniors in the BSN program. The graduation rate was calculated by dividing the number of graduates from a cohort by the number of students who began in the respective cohort. The second dependent variable, time to degree, was defined as the number of terms between a student's first enrollment as a junior in the BSN program and graduation. Terms in which students were not enrolled were included in the time to degree calculations.

The independent variable examined was the general education coursework enrollment patterns, which included the following levels:

1. Completed general education coursework before entering the RN-to-BSN program.

2. Completed general education coursework after entering in the RN-to-BSN program.

Descriptive statistics were used to report the graduation rates of BSN-degree-seeking students who entered the RN-to-BSN program between the Fall semester of 2002 and the Spring semester of 2004. The number and percentage of students who graduated within three years after admission to the BSN program were calculated. A Chi-square test was performed to determine if there were significant differences in the graduation rates between the two groups. For each student who graduated within three years, the researcher calculated the number of terms from initial enrollment to graduation. A t-test was performed to determine if there were significant differences in time to graduate between the two categories of students.

### **Discussion of the Findings**

The race and ethnicity of the sample were collected and summarized to help define the population examined in this study. The majority of students in the sample were white and female. According to the Bureau of Labor Statistics (BLS), approximately 91% of the employed RNs are female, 10.4% are black, 7.3% are Asian, and 5.1% are Hispanic (2011). Similarly, most students enrolled in BSN programs throughout the US are white (National League for Nursing, 2009) and female (National League for Nursing, 2009a). In 2008-2009, 88% of students enrolled in BSN programs throughout the US were female, 14% were black, 6.5% were Hispanic, 7.4% were Asian or Pacific Islander, and .8% were American Indian or Alaskan native (National League for Nursing). Because the majority of BSN students and RNs are white women, the large distribution of white women in the sample was expected.

Research question 1: When do RN-to-BSN students complete general education requirements? Of the 240 students in the sample of this study, the majority of students (193) completed some general education requirements after entering the BSN program. When given the choice, most students (80.4%) elected to begin the program before completing all general education requirements. In contrast, only 47 students (19.6%) completed all general education requirements before entering the program. Some students may not have known about the general education requirements before they applied for admission because they were not required to be completed prior to admission to the program. Other students may have previously completed all general education requirements through their pursuit of another major. Regardless of the reason for completing or not completing general education requirements before entering the program, the purpose of the next research question was to identify if either enrollment pattern resulted in higher graduation rates.

Research question 2: Does completion of general education course requirements before entering an RN-to-BSN program have a significant impact on graduation rates? The three-year graduation rate of the193 students who completed some general education requirements after entering the BSN program was 45.6%, compared to a 66% graduation rate of the 47 students who completed all general education requirements before entering the program. A Pearson Chi-square test for independence indicated the difference between the graduation rates of the two groups was statistically significant, *X2* (1, N = 119) = 6.268, p<.05. Students who completed all general education requirements before entering the BSN program were more likely to graduate in three years than students who did not complete all general education requirements before entering the program.

Research Question 3: Among RN-to-BSN graduates, does the pattern of general education course completion have a significant impact on time to degree? Of the 240 students in the study, 119 students graduated within three years. Of those who graduated within three years, the mean number of semesters to graduate for students who completed all general education courses before entering the BSN program to graduate was 5.58. The RN-to-BSN program in this study was designed for students to complete all upper-division courses in five semesters if admitted in the Fall semester and six semesters if admitted in the Spring semester. Because of the difference in the time to graduate based on time of entry, the average of 5.58 semesters to graduate is what one

might expect for students who completed all general education requirements before entering the program.

The mean number of semesters to graduate for students who completed general education courses after entering the BSN program was 6.08. T-test results indicated no significant difference in the mean number of semesters to graduate between the two groups, t (117) = -1.86, p > .05. Therefore, of the students who graduated in three years, general education course enrollment patterns did not appear to have an impact on time to degree. Graduates who completed some general education coursework after entering the program took only half a semester longer than students who completed all general education courses before entering the program. This finding was unanticipated, especially when couched with the finding that students were more likely to graduate within three years if they completed all general education requirements before entering the program. Even though students were more likely to graduate within three years if they completed all general education requirements before entering the program, some students who completed general education requirements after entering the program were able to graduate at nearly the same pace. Further investigations to determine the actual number and type of general education courses taken by this group could reveal additional insights and recommendations.

### **Findings Related to Professional Literature**

As discussed in the literature review, many factors contribute to student retention and graduation rates. This study was designed using the theoretical framework of Jeffreys (2004) Nursing Undergraduate Retention and Success (NURS) model – a multidimensional approach to analyzing nursing-discipline-specific factors impacting retention of traditional and non-traditional students. According to Jeffreys (2007), retention is impacted by "the interaction of student profile characteristics, student affective factors, academic factors, environmental factors, professional integration factors, academic outcomes, psychological outcomes, and outside surrounding factors" (p. 161). Academic factors include a student's involvement with the academic process, including study skills, study hours, use of college support services, course availability, and academic advising (Metzner and Bean, 1987). Jeffreys suggested specific investigations of each academic factor may divulge several dynamics which could impact individuals differently. This study extended Jeffreys NURS model to include general education course enrollment patterns as an academic factor which may impact two academic outcomes -graduation rate and time-to-degree-completion. The results of this study suggest general education course enrollment patterns may be a significant component to consider as an academic factor contributing to student retention and graduation in the RN-to-BSN programs.

The significant difference in graduation rates between the two categories of students supported prior research indicating community college students who completed associate degrees prior to transferring to universities had higher baccalaureate graduation rates than students who transferred without associate degrees (Cejda, Rewey, & Kaylor, 1998; Cohen & Brawer, 2003; Coley, 2000; Popovich, 2005). This study supports the body of professional literature indicating the completion of general education course requirements prior to transferring to a baccalaureate program results in higher graduation rates. In addition, this study's findings extend the knowledge-base to include a community college baccalaureate RN-to-BSN program.

Wehlburg (2010) suggested the integration of general education courses with specialized courses may lead to higher student retention rates. This study did not support Wehlburg's argument. While this study did not directly measure retention rates, the lower graduation rate suggests a lower retention rate of students who attempted to integrate remaining general education requirements along with the junior- and seniorlevel nursing curriculum.

Unfortunately, there are no state-level or national benchmarks for graduation rates of RN-to-BSN programs. Therefore, it is difficult to assess how students in this program performed in comparison to similar programs throughout the state or in the nation. The Commission on Collegiate Nursing Education (CCNE) and the National League for Nursing Accreditation Commission (NLNAC) both require schools of nursing to calculate graduation rates as a component of the program's focus on continuous improvement (Papes & Lopez, 2007). While CCNE defined graduation rate as the "number of students completing a program divided by the number of students entering a program" (CCNE, p. 17), CCNE allows program administrators to determine the entry point and time frames to use in graduation rate calculations. The entry point for students in this study was defined by the first term of enrollment in any course after being admitted to the BSN program. In a study by Papes and Lopez (2007), administrators at Barry University defined the entry point for students in their RN-to-BSN program as the term in which an admitted student took the first nursing course. Administrators at other schools may choose to define the entry point as the second semester of courses in the nursing program. Because there are no national standards for measuring nursing student graduation rates, and there are no central databases to access RN-to-BSN graduation

rates, it is difficult to compare graduation rates of RN-to-BSN students from one institution to another.

### **Implications for Leaders**

Given the nationwide effort to graduate more students and the health-care industry's trend of requiring registered nurses (RNs) to have bachelor's degrees, leaders in higher education should consider the results of this study when examining policies and procedures related to admission requirements and/or curriculum design for RN-to-BSN programs. The methodology of this study could be used at other institutions to help determine if general education enrollment patterns impact graduation rates with their populations of students. Because of productivity concerns in a financially-stressed public funding system, it may not seem like a practical business decision to deny students admission because of a few remaining general education course requirements. When great emphasis and efforts are placed on increasing the number of students who enroll in programs, admission requirements may not be as stringent as programs with limited enrollment capacities. Financial constraints and incentives should be weighed with factors which could impact student success. Short-term financial gains associated with higher enrollment numbers could be negated by lower graduation rates of less-prepared students. Delaying admission and/or enrollment in the junior-level courses by one or two semesters in order for students to complete remaining general education requirements could result in increased student graduation rates at your institution. A higher graduation rate in RN-to-BSN programs translates to a more efficient supply of BSN graduates for the RN workforce.

### **Recommendations for Practitioners**

Students who completed all general education requirements before entering the RN-to-BSN program were more likely to graduate in three years than students who did not complete all general education requirements before entering the program. If students entering the program were aware of lower chances of graduating in three years without first completing remaining general education requirements, they might have chosen to complete them before entering the program. Whether or not program administrators decide to implement policies to require all general education requirements to be completed prior to being admitted to the program, at a minimum, the results of this study should be presented as an advisory to their students. Advise students to complete as many requirements as possible before transferring or applying for admission to a baccalaureate degree program.

Prior to implementing a policy requiring students to complete all general education requirements before granting them admission to an RN-to-BSN program or any baccalaureate program, practitioners should ensure the degree-program classification system at their institutions can accommodate students who are missing such requirements. Some applicants may have already earned a two-year degree, and it may not be appropriate to classify them as degree-seeking for an additional two-year degree. It is important for practitioners to collaborate with the college/university administration at their institutions to establish provisional admission classifications for students to be admitted as juniors to the programs with the limitation of being permitted to enroll only in general education courses. Students classified in such provisional admission categories should be considered degree-seeking and eligible for financial assistance. Once the provisionally-admitted students have completed all remaining general education courses, then they can be reclassified as fully admitted into the program and be eligible to enroll in upper-division courses.

#### **Considerations for further research**

Metzner and Bean (1987) found the top three predictors of attrition among nontraditional students were grade point average (GPA), intent to leave, and number of credit hours enrolled. Students in this study were enrolled in a program where the curriculum was designed for them to progress in cohorts. The upper-division courses were offered about every five weeks, and students were restricted to no more than one upper-division course at a time. Because of the controlled design of the curriculum, there is not likely to be much variance in the number of credit hours in which students enroll each semester. Variance in number of credits enrolled could be attributed to general education course enrollments, which this study addressed. However, student GPAs and intent to leave were not addressed in this study, and these factors could potentially impact student graduation rates of students in RN-to-BSN programs. Earlier studies suggested student GPAs in science courses predicted how students would perform in nursing programs and on the National Council Licensure Examination (NCLEX-RN) (Byrd, Garza, & Nieswiadomy, 1999; Campbell & Dickson, 1996; Griffiths, Bevil, O'Connor, & Wieland, 1995). While students in RN-to-BSN programs have already successfully completed the NCLEX exam, it would be revealing to determine if student GPAs in science courses also predicted success in BSN-level coursework among this population. If student GPAs in specific science courses were predictors of success or attrition in RN-to-BSN programs,

students with lower GPAs could be provided with remediation opportunities to achieve desirable levels prior to admission to the program.

Although the gender and ethnicity of the students in this study were collected for reporting purposes, comparing graduation rates or time to degree by race or ethnicity was not the purpose of the study. A follow-up study to determine if there were any differences between the graduation rates of different races or gender could provide valuable information for practitioners. If certain ethnic groups have significantly lower graduation rates, program administrators may be inclined to further examine potential reasons and solutions for such discrepancies.

Some students in this study attended other community colleges prior to transferring to the RN-to-BSN program at this institution. This study did not examine differences between transfer students and native students. When students transfer from a community college to a university, there is often a decrease in academic performance, as evidenced by a lower GPA at the university. This phenomenon is known as "transfer shock" and has been studied extensively by researchers (Cejda, 1997; Diaz, 1992; Glass, 2002, Laanan, 2007). While transfer shock has been well-documented among students who transfer from community colleges to universities, such research has not been conducted to determine if there is a similar experience among students transferring from one community college to another community college's baccalaureate program. The increasing number of community college baccalaureate degree programs warrants investigations to determine if the transfer-shock phenomenon occurs in this population.

Because this study focused on students at one institution, caution should be used before generalizing the results to other schools without further investigations including

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other institutions. General education enrollment patterns of students in RN-to-BSN programs throughout Florida should be investigated to determine if results will be similar among the 10 RN-to-BSN programs offered in the state colleges throughout the region. When investigating other schools throughout the state, attention should be given to the curriculum design. Students in the program of this study participated in courses either online or face-to-face, and all upper-division courses were taken one at a time in a dynamically-dated course format. Most classes were approximately five weeks in duration and taken one at a time, compared to the traditional model of enrolling in multiple sixteen-week courses simultaneously. The format and timeframe of the courses could be analyzed as potential variables impacting student success rates.

# Conclusion

In order to adapt to a changing health-care system and patient needs, RNs must increase their levels of training by earning bachelor's degrees before or soon after entering the workforce (IOM, 2010). The Institute of Medicine (IOM) suggested 80 percent of the RN workforce should have BSN degrees by 2020. If registered nurses (RNs) will increasingly be required to have baccalaureate degrees to work in the healthcare industry, the viability of the ADN in community colleges and nursing and hospital training programs will become questioned. While traditional BSN programs coexist with RN-to-BSN programs in the higher education community, practitioners on both sides should maintain awareness of factors to help facilitate student success in obtaining BSN degrees efficiently. This study revealed a higher graduation rate for students who completed all general education requirements before entering the RN-to-BSN program BSN program. Advisors at community colleges offering the ADN should encourage prenursing students early in their academic careers to complete all general education requirements for their AA degrees while preparing for entry into ADN programs. Students who graduate with both ADN and an Associate in Arts (AA) degrees will be better prepared for admission to RN-to-BSN programs, and they will be more likely to graduate with BSN degrees in a timely manner.

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# **EDUCATION**

**PhD in Community College Leadership**, Old Dominion University, Norfolk, VA. Expected graduation: May 5, 2012. Dissertation Chair: Dr. Mitchell R. Williams

Master of Health Science in Rehabilitation Counseling, University of Florida, Gainesville, FL. December 1996.

**Bachelor of Science in Psychology**, University of Florida, Gainesville, FL. Graduated with honors, August 1995.

# **COLLEGE TEACHING EXPERIENCE**

Fall 2000 – Fall 2007Career and Life Planning, St. Petersburg College, Instructor<br/>and Designer of First Web-Based Section.

#### SPECIALIZED TRAINING AND INSTRUCTION

National Academic Advising Association (NACADA) Administrator's Institute	2011
SPC President's Cabinet Internship	2009
SPC Leadership Seminars, Drs. Hockaday and Hunter	2005
Educators in Industry, Pinellas County, FL	2002
Center for Applications of Psychological Type, MBTI Qualifying Program	2001

#### **PROFESSIONAL AFFILIATIONS**

Student Success Committee, St. Petersburg College	2012-Present
Student Affairs Council, St. Petersburg College	2007-2011
National Academic Advising Association (NACADA)	2006-Present
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#### REFERENCES

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