

2019

Faculty and Student Perspectives of Nursing Student Completers in a Community College

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Rachael Farrell

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Walden University

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Abstract

Faculty and Student Perspectives of Nursing Student Completers in a Community

College

by

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MSN, Walden University, 2008

BSN, University of Phoenix, 2006

ADN, College of Southern Maryland, 2002

Project Study Submitted in Partial Fulfillment

of the Requirements for the Degree of

Doctor of Education

Walden University

April 2019

Abstract

Research about retention of nursing students has focused on either specific student characteristics or on nursing students at the university level. A problem experienced by a community college nursing program in Maryland is low completion rates, which can affect the institution and the nursing profession. This qualitative case study explored faculty-related factors leading to success of students in the nursing program at this school, so the low completion rate can be addressed. The conceptual foundations for this study were Tinto's theory of student retention and Jeffreys' nursing undergraduate retention and success model. The research questions addressed how faculty-related factors affected students' success in the nursing program. The study was conducted with 9 second year nursing students and 7 nursing faculty providing information through face to face interviews at a community college in central Maryland. Data analysis was conducted using inductive processes to code, identify, and analyze the themes. The findings of this case study suggested that students can benefit from improving their critical thinking abilities. The findings of this case study also suggested that faculty affect students' critical thinking abilities when faculty are approachable, provide a nurturing environment, and are helpful to students. A professional development workshop for nursing faculty and staff was developed based on the findings from these study results. This workshop will provide guidance to faculty and staff on strategies to assist student with improving critical thinking abilities. Implications for positive social change include addressing the nursing shortage by increasing the number of qualified nursing students from this program, understanding the perspectives of nursing students, and helping to meet the needs of nursing students.

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Dedication

This work is dedicated to my family. My parents, James and Margo Hollenbeck provided for me as a child and without them I would not have pursued my childhood dreams of being both a nurse and now a doctor. My husband, Kevin, 25 years and still going strong. He has supported me through this journey, unconditionally. My daughter, Chloe, has filled my life with an abundance of love. And lastly, my sister, Angela; our talks on the phone mean the world to me, even though we're far apart, we're near at heart.

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Section 1: The Problem

The local problem that prompted the study was low completion rates in a nursing program at a community college (CC) in Maryland. A pseudonym, Maryland Community College (MCC), was assigned for the site of this project study to protect its identity. One goal of CCs is to provide education at an affordable cost to those who choose to pursue education after high school (Schudde & Godrick-Rab, 2015). One of the many options available at the CC setting includes nursing, which can be of two distinct levels: either a certificate program or a degree, depending on the program selected by the student. Schudde and Godrick-Rab (2015) found that attaining a college degree improves students' financial and nonfinancial outcomes when compared to those who had not completed college. Prymachuk, Easton, and Littlewood (2009) found that younger students and those considered minorities in nursing were less likely to finish their degree. Veal, Bull, and Miller (2012) found that minority graduate nursing students have higher rates of attrition when they are unable to balance stressors, thus preventing these students from completing their studies. These studies are of concern to colleges with high numbers of minority students because they show minority students do not earn nursing degrees as often as nonminority students. In June 2015, the nursing program at MCC had a completion rate of 53.7% with an 83.14% first time National Council Licensure Examination for registered nurses (NCLEX-RN) pass rate, according to the program outcomes page on the study site's website. Additionally, on the same webpage, there is a completion rate of 33% for the Fall 2014 Practical Nurse Certificate (PNC) program

option, which is the same time frame with the 53.7% completion rate for registered nursing students.

The main campus of MCC is centrally located in Maryland. In Fall 2015, at MCC, there were 104 different countries represented by the student body, according to the credit student demographics' page on the website of the study site. MCC boasts of the diverse nature of its student population on its website. Figure 1 shows the breakdown of students by ethnicity at the study site in Fall 2016. Figure 2 shows nationwide student demographics for CCs from Fall 2014 according to the American Association of Community Colleges (2016). Comparing nationwide demographics and demographics at the study site, the population at the study site is more diverse, based on this comparison.

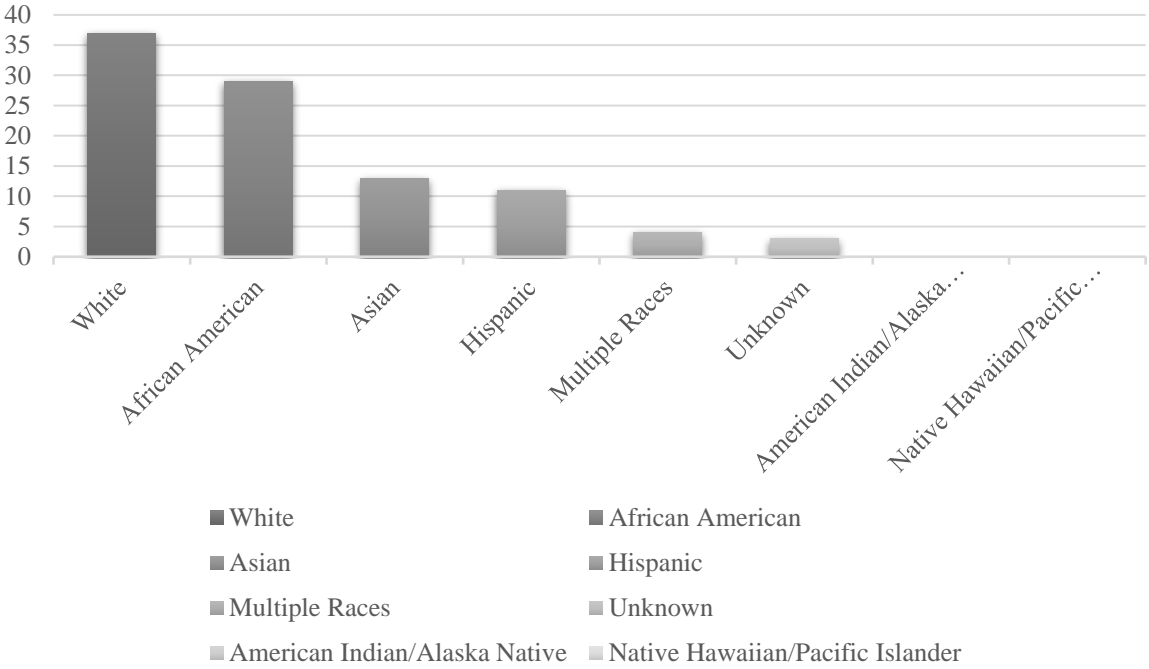


Figure 1. Credit Student Ethnicity, Fall 2016.

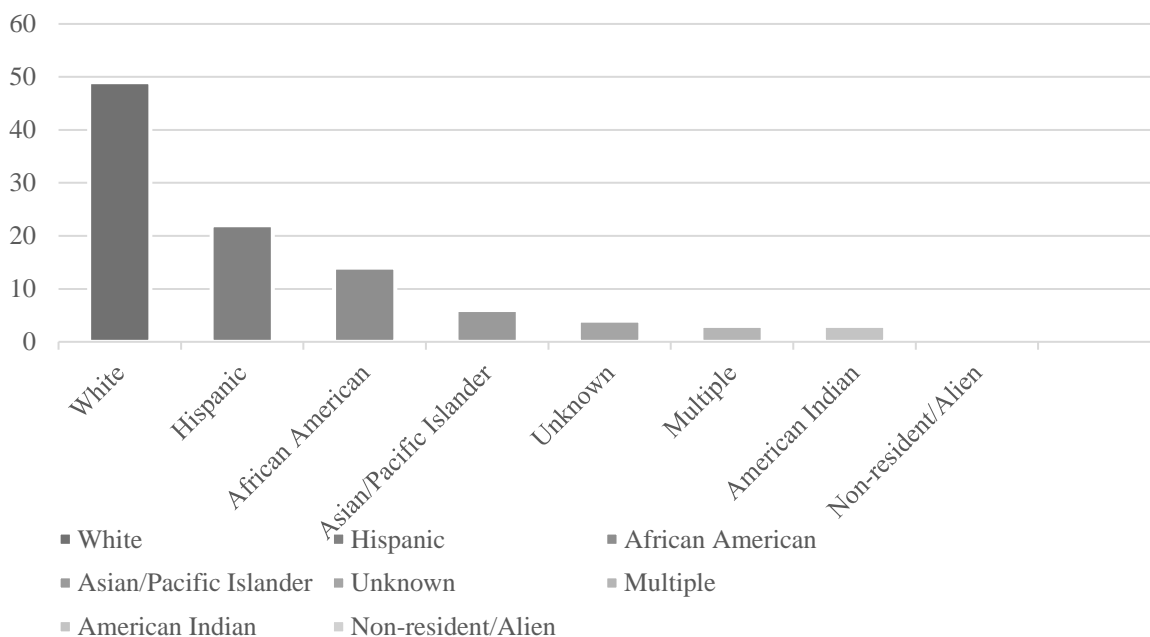


Figure 2. Student Ethnicity, Community Colleges Nationwide, Fall 2014. American Association of Community Colleges, 2016.

The comparison of the number of minority students at MCC to the number of minority students at CCs nationwide is important because Seago, Keane, Chen, Septz, and Grumbach (2012) found that students in California CC nursing programs who were of African American ethnicity were less likely to complete college when compared to other ethnic groups. In the United Kingdom, Prymachuk et al. found “being male or coming from a black/minority ethnic group increase the risk of discontinuation from a nursing programme” (2009, p. 158). Additional research in Texas found that students most likely to be off track or out of nursing programs were more likely to be older, male, or of ethnic minority (Donnell, 2015). As the school’s director of nursing (DON) noted in correspondence in April 2017, the student demographics of MCC nursing program show only 32.9% of the Fall 2016 students in the nursing program were White. The findings

from the previously mentioned studies are concerning because of the make-up of the student population and the problem the nursing program is having with low student completion.

Table 1 shows the demographics for the students in the nursing program at MCC for the Fall 2015 and Fall 2016 semesters as reported by the program nursing director from a correspondence in April 2017. The population in the nursing program is comparable to that of MCC and shows a diverse population. In January 2017, the school’s DON stated the nursing program at MCC had a completion rate of about 55%. When a nursing program has low completion rates, the program has cause for concern because the program budget can be affected, and there is a lack of adequate resource utilization (Zheng, Everett, Glew, & Salamonson, 2014). The nursing program at MCC has a diverse population which is comparable to the population with the rest of the college. However, the nursing program has a low completion rate and it needs to be addressed.

Table 1
Nursing Student Ethnicity, Fall 2015 and Fall 2016

Ethnicity	Fall 2015 Percentage	Fall 2016 Percentage
White	35.9%	32.9%
African American	35.2%	36.2%
Asian	12%	12.9%
Hispanic	10.5%	10.3%
Multiple Races	3%	3.7%
Unknown	2.7%	3.2%
American Indian/Alaska Native	unknown	unknown
Native Hawaiian/Pacific Islander	<1%	<1%

The Local Problem

The division dean of the nursing program has explained during division meetings that all programs at MCC are expected to achieve a 70% completion rate. However, the nursing program at MCC has low completion rates and does not meet this expectation. The program outcomes page on the study site's website reports a completion rate that hovers around 50%. The completion timeframe of 3 years is 150% of the program length is by the Maryland Higher Education Commission (MHEC) and the program's accrediting agency, Accreditation Commission for Education in Nursing (ACEN). Although MCC has a nursing program with all four semesters of the nursing courses running during the major academic semesters, according to the students seeking readmission statement listed on the study site's website, students who are unsuccessful in a nursing course must reapply to the program and are only allowed back in the program based on seat availability and the grade earned in the failed course. Therefore, if there are no seats available in a subsequent semester or the student earned a very low grade in the course, the student can miss the time frame necessary for college completion per MHEC and ACEN.

Another concerning issue for students who fail a course is when the student is in the evening or PN cohorts. These cohorts are offered one time per year, which means the student must wait until the following spring or fall, depending on when the failure occurred. The program admissions page on the site's webpage informs potential students that students are not able to change to the registered nurse (RN) cohort, nor can they change to the day cohort due to program policies. Therefore, when these students fail a

course, it is difficult to meet the required timeframe for completion because the student must wait more than one semester to return to the nursing program.

During the first two semesters of the nursing program, there are many students that fail the nursing courses. During retention and program meetings, the DON has informed program faculty the retention rate of the program is about 58%, slightly higher than the completion rate. As the school's DON noted in a correspondence in January 2017, Figure 3 shows the cohort of students that entered the ADN nursing program in Fall 2014 was composed of 128 students and only 86 of the students continued to the second semester courses the following spring. This means the first semester course had a success rate of 67.2% with an attrition rate of 32.8% for this cohort of students.

Continuing to follow this cohort of students, the school's DON noted in the same correspondence that for the second semester, there were 20 students from previous cohorts readmitted to the program which brought the number of students for the second semester courses to 106 for Spring 2015. Of the 106 students that started the second semester courses, only 62 students continued in the nursing program. This means the second semester had a success rate of 58.5% with an attrition rate of 41.5% in Spring 2015. The overall retention rate for the cohort of students that started the nursing program in Fall 2014 was 57.8% which means the attrition rate was 42.2% for the first year of the nursing program. The program's DON also provided success rates for the third and fourth semesters which were 88% (74/87 progressed to fourth semester), and 88.9% (71/79 students completed the final course) for same cohort of students.

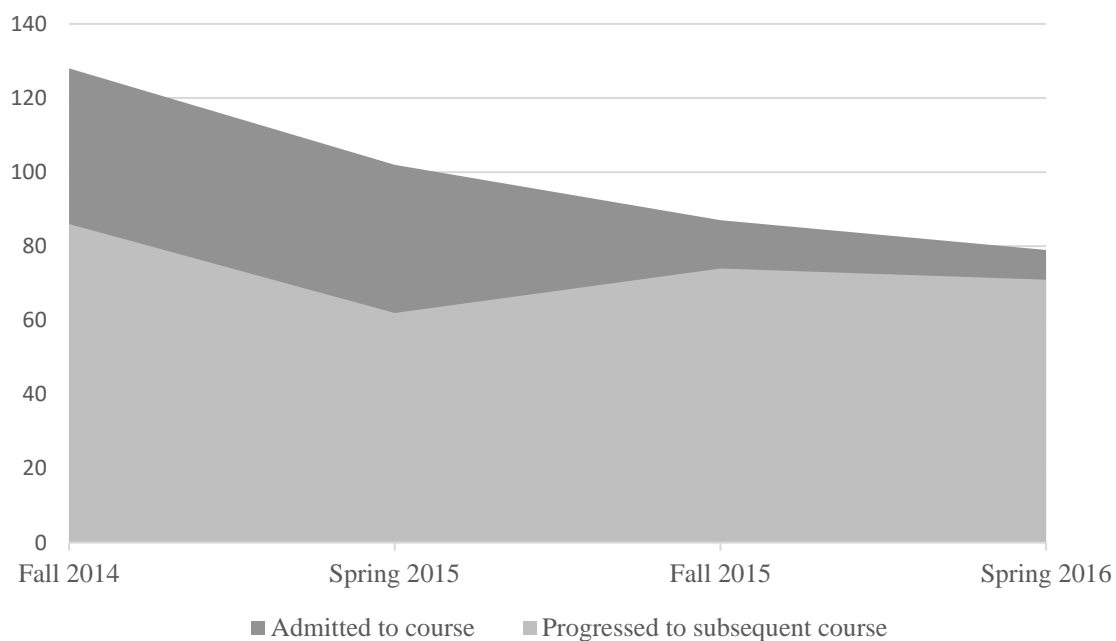


Figure 3. Fall 2014, Student Cohort Success by Semester.

My study focused on the perceptions of successful students in the program. To participate in the study, students had to be beyond the first year of the nursing program. The rationale for waiting until students completed the first year of the nursing program was due to the definition being used, successful students. To be successful, a student must persevere towards completion of their chosen program of study (Bergman, Gross, Berry, & Shuck, 2014). The faculty in this program have seen that students in the first year of this program have difficulty completing the courses and as the program director noted in correspondence in November 2016, only 58% of the students who start the program will complete the first two semesters of the program, which means over 40% of the students that start the program do not progress to the second year of the program. Therefore, successful nursing student, for this study was defined as those students who complete the first year of the program and have at least a 2.5 grade point average (GPA).

Students need at least a grade of a C, 2.0, to pass courses in this program. Therefore it was decided to use a GPA of 2.5 or higher in the nursing courses to ensure students were doing well in these courses and not just meeting the minimum requirements to pass the nursing courses.

In considering an even larger context of this problem, the nursing workforce has a need to continue to diversify to meet the needs of those that nurses care for (Bednarz, Schim, & Doorenbos, 2010; Villarruel, Washington, Lecher, & Carver, 2015). By increasing the number of diverse students who successfully complete this program the program can help to meet this need. According to the Census Bureau (2015), the White population was approximately 75% of the American population and increased slower than the overall population in the 2010 census. McMEnamin (2015) explained how the nursing workforce is slowly diversifying and can expect continued gains in diversification as the aging nursing workforce reaches retirement age. Part of these changes are attributed to the aging RN workforce, but other changes are attributed to the recruitment of men and ethnic minorities to nursing. The need for registered nurses is growing much faster than average due to a variety of reasons including “an increased emphasis on preventive care; growing rates of chronic conditions, such as diabetes and obesity; and demand for healthcare services from the baby-boomer population, as they live longer and more active lives” (United States Department of Labor, 2015a, job outlook paragraph). Nurse educators can help meet this need for new nurses. The educators at MCC can help meet the need for a diverse nursing workforce by having a positive influence on the completion rate of the nursing program (Veal et al., 2012).

Although a goal of CCs is to provide an affordable education to those who might not otherwise pursue a higher education (Schudde & Godrick-Rab, 2015), the problem that prompted this study is the low completion rates being experienced in the nursing program at MCC.

Rationale

The rationale for selecting this problem was that the nursing program at MCC has a low completion rate and has struggled with it for several semesters. Program administration was aware of the low completion rates, and faculty have worked to improve the rate without consistent success. Although many studies have been conducted on what affects college students' success, the body of research available regarding nursing students focuses primarily on either baccalaureate nursing students or on specific student groups, studying various ethnicities or men in nursing (Ostrogorsky & Raber, 2014). These previous studies have looked at nursing student populations in isolation, rather than integrated nursing student populations. This study looked at a population of CC nursing students and what faculty-related factors they believed affected their success, without regard to gender or ethnicity. This was important for MCC because the student population of the nursing program is diverse, and to influence the low completion rate it was essential to look at the integrated student population, rather than parts of a whole.

The students in the nursing program at MCC struggle with success. The school's DON noted in correspondence in January 2016 that the completion rate was about 55% and had been about 55% since at least the December 2013 graduating cohort. Table 2 shows the number of students enrolled in this program and how many have completed the

nursing program between 2013-2016. Table 2 also shows the completion rate has varied between 49.1% and 60.6% since fiscal year (FY) 2013. The number of students that have completed this associate degree nursing program has varied from 132-160 for these 4 years, while those completing the PN certificate option has been less than 10 students, although each year at least 16 students have been enrolled in the PN completion course. For this school, the FY includes the summer, fall, and spring semesters because these are the semesters during which the nursing program has courses that students can complete their program of study. In retention and program meetings the school's DON noted the retention rate for this program is a few percentage points higher than the completion rate and is 56-58% but is not at the desired level of 70% for the program.

Table 2

Nursing Student Completion, 2013-2016

Degree	FY 2013	FY 2014	FY 2015	FY 2016
ADN Enrolled	224	264	242	263
ADN Completed/ Percent	132/58.9%	160/60.6%	130/49.1%	149/56.7%
PN Certificate Enrolled	29	28	24	16
PN Certificate Completed/ Percent	8/27.5%	9/32.1%	8/33.3%	5/31.3%

Evidence of the Problem at the Local Level

During division meetings at the end of the academic year college goals are discussed. At these meetings, the division dean has explained that some programs, including nursing, are failing to meet administration's expectations that college programs

achieve a 70% completion rate. The nursing program has a low completion rate, and in meetings for both the nursing program and retention team this problem has been discussed. Additionally, interventions utilized to address this problem has been discussed in meetings for the nursing program. Until recently, the program completion rate has not been published, although the first-time pass rates for the NCLEX have been available on the Maryland Board of Nursing website for many years. However, in March of 2016, ACEN changed its policies regarding advertising and recruiting of students to include that program completion rate is to be publicly available as part of the student achievement data (ACEN, 2013). Data retrieved from the National Center for Education Statistics (NCES) show that nursing programs in the state of Maryland had completion rates between 9-27% for the student cohort that started in Fall 2012 (NCES, 2017). However, these rates only consider full-time students and do not consider part-time student completion. The rate of students transferring from these same schools varied from 5-37% without apparent correlation between schools that had low completion rates and high transfer rates or vice versa (NCES, 2017). When completing the search on this website, I used the limiters of programs that were 2-years in length, awarded either an associate degree in registered nursing or registered nurse, located in the state of Maryland, and were a public school. This brought the number of schools from the thousands to 15 on this website, which allowed for comparison in terms of reviewing completion and transfer information. Additional data retrieved from the NCES in 2017 showed completion rate at 2-year postsecondary institutions was 31.6% for the 2012 cohort. Once again, the completion rates were only based on students attending college

full-time. These numbers demonstrated that nursing programs in Maryland had a problem with program completion.

The purpose of this qualitative study was to determine factors leading to success of students in the nursing program at MCC to address the problem of low completion. Exploration of the nursing student experiences at MCC occurred through student and faculty interviews. Students who had completed the first year of the nursing program with at least a 2.5 GPA on a 4.0 scale in their nursing courses were eligible to participate. The focus of student interviews was the student's educational experiences and how faculty-related experiences affected the student's success in the nursing program. Faculty interviews focused on faculty student interactions and faculty observations of successful students in nursing courses. Student attrition in nursing programs has been attributed to variables such as financial concerns, academic abilities, and personal hardships (Prymachuk et al., 2009; Wray, Aspland, & Barrett, 2014). Since there are many variables that influence student attrition, it is likely there are many variables that influence student success. Therefore, student interview questions included various aspects of the students' educational experiences. When asking about the educational experiences, it was important to ask what influences the faculty had on the educational experiences to learn what faculty can do differently to improve student success. The comment section from course and program evaluations were also reviewed and evaluated to discover relevant issues to completion of courses or the program.

Definition of Terms

For this study, it was essential to define some of the terms frequently used. The definitions are provided here alphabetically.

Accrediting Commission for Education in Nursing (ACEN): This group provides voluntary accreditation to nursing education programs (ACEN, 2016).

Completion time: 150% of time from start of first required program course to the end of final program course, including prerequisite courses (ACEN, 2013; MHEC, n.d.).

Maryland Higher Education Commission (MHEC): The board responsible to establish policies throughout the state of Maryland related to public and private colleges and universities (Maryland Higher Education Commission, n.d.).

National Council Licensure Exam (NCLEX): The licensure exam consistent with current practice for nurses (NCSBN, 2017).

National Council of State Boards of Nursing (NCSBN): This board works with state boards of nursing to provide nursing regulation to protect the public's health and safety (NCSBN, 2017).

Practical nurse/licensed practical nurse (PN/LPN): An individual who can perform specific acts of nursing as determined by the state regulatory agency (Maryland Nurse Practice Act, n.d.c). In the state of Maryland there are multiple acts prohibited by the nurse practice act for LPNs to complete such as comprehensive nursing assessments, supervision of RNs or other LPNs, client triage, case manager, or analysis of client data to determine client outcomes and nursing diagnoses (Maryland Nurse Practice Act, n.d.b).

Registered nurse (RN): An individual who can perform specific acts of nursing as determined by the state regulatory agency to “(i) Maintain health; (ii) Prevent illness; or (iii) Care for or rehabilitate the ill, injured, or infirm.” (Maryland Nurse Practice Act, n.d.a).

Successful nursing student: A nursing student who has completed at least the first year of clinical courses in the nursing program and has a 2.5 or higher GPA in the nursing courses. This definition is based on the requirements of the nursing program at MCC which says all students need at least a C grade to pass the nursing courses as listed in the study site’s course catalogue. As part of the definition of *successful*, students need to be in the second year of the nursing program because they have persevered and continued their studies (Bergman et al., 2014). If a student has failed a course, repeated it successfully, and meets the GPA requirements of 2.5, they are successful for this study. Students that repeat a course show persistence and perseverance in their studies. Additionally, the requirement for a student to be successful is higher than what is necessary to pass the nursing courses of this program to ensure students are doing well in the nursing courses rather than just meeting the minimum requirements to pass the nursing courses.

Significance of the Study

Student success and completion have been topics of interest in academic circles for decades. This study explored student experiences to address the problem of low completion occurring at a CC in Maryland. This problem is significant because the registered nurse profession has growth expectations of about 16% by the year 2024

(United States Department of Labor, 2015b). Nursing programs with high rates of attrition are unable to provide adequate numbers of qualified applicants to sit for the NCLEX because they do not have high enough numbers of students completing their programs. In Maryland, 60% of registered nurses graduate from associate degree programs, and the associate degree graduates from Maryland consistently perform above average on the NCLEX (Maryland Association of Associate Degree Nursing Directors, 2013). However, nursing programs in Maryland currently struggle with low program completion rates. Therefore, they are unable to adequately meet the need of this occupation because there are not enough graduates produced who are eligible for licensure (NCES, 2017). A failure to meet the need for new nursing graduates by nursing programs will exacerbate the expected nursing shortage as nurses that are near retirement age start to retire.

By exploring the influence of faculty-related factors on successful nursing students, program faculty can learn how to improve the assistance and support provided to nursing students, thus helping these students be successful in the nursing program. Tinto (2012b) said multiple pieces make up student success including the classroom environment, faculty having elevated expectations of students, and schools providing support to the student. Additionally, students report increased feedback from faculty, or clear expectations from faculty, increase their engagement with course content (Ferrell & DeCrane, 2016; Tinto, 2012b). The site program faculty have been unsure how to address the problem of low completion rates as evidenced by the unchanging completion rates of about 50% as reported on the program outcomes page of the institution's webpage.

Many nursing programs throughout the state of Maryland experience the problem of low program completion (NCES, 2017). By focusing on successful students within a program, educators can learn what faculty-related factors the students believe had a positive effect on their nursing education. Through the collection and analysis of the information gathered, faculty can make changes to decrease the attrition rates. For example, changes that faculty can make that are specific to the program include the choice of teaching methodologies, faculty office hour options, program policies, and providing study sessions both before and after exams. If more students complete associate degree nursing programs in Maryland, there will be more eligible candidates to sit for the NCLEX-RN. Once these candidates pass the NCLEX, there will be a positive influence on the number of newly licensed RNs, a profession that has growth expectations of about 16% over the next 7 years (United States Department of Labor, 2015b). Student demographics at MCC reflect a diverse population. Increasing the number of diverse nursing graduates can positively align with the increasing diversity of the general patient population (Veal et al., 2012). Only 35% of the school's nursing students are White, according to the program's DON. Increasing the success of ethnically diverse nursing students is essential to increase the availability of culturally proficient nursing care to a more ethnically diverse American population. Positive social change implications following the completion of this project study may include a better understanding of the perspectives of CC nursing students, having a positive effect on the lives of these nursing students, and addressing the nursing shortage by increasing the

number of qualified nursing graduates from this program and possibly other programs in Maryland.

Research Questions

Nursing curricula are rigorous and nursing students have many demands on their time. Nursing programs that experience low completion rates can have a negative effect on their institution (Wray et al., 2014). To help solve the problem of low completion rates in this CC nursing program, a qualitative project study investigated successful nursing student perceptions of what affected their ability to complete their nursing courses. The study results provided information to assist program faculty in aiding future students become successful in nursing courses and the nursing program, thus addressing the low completion rate.

The purpose of this qualitative study was to determine faculty-related factors leading to success of students in the nursing program at MCC to address the problem of low completion. The guiding question for this study was: What are the faculty-related factors that influence successful nursing students at Maryland Community College.

There were three focused questions that helped guide the study. The focused questions to guide the study implementation were:

- What faculty-related learning experiences do students believe have a positive effect on their success while in the nursing courses?
- What are faculty-related obstacles that nursing students overcome to successfully complete the nursing courses?
- How do faculty student interactions affect student success in the nursing courses?

The guiding question stemmed from a concern about how students who have completed at least the first year of the nursing program perceive faculty-related factors affecting their success. The focused questions provided structure to the broad scope of influencing factors to student success. Answering these questions was important to learning what helped students pass nursing courses so the low completion rate could be addressed. Faculty-related factors included faculty office hours, teaching methods, availability of course study guides, use of faculty led study sessions, and any other factor or experience the student felt influenced his or her educational pursuit. Faculty effects on student success and faculty knowledge of student success strategies are important aspects of course and program success because when faculty are unaware of what students do or how students perceive the faculty, the students can believe faculty are uncaring (Tinto, 2012a). In learning these pieces of information, I determined which faculty-related factors influence student success in this program. Using this information can help decrease the low completion rate the program has experienced.

Review of the Literature

The literature review focused on multiple topics that are important to associate degree nursing education. To begin, I discussed the theoretical models which provided structure for this study. Next, I reviewed CC students including their persistence, and success to provide background information of the general population seen in associate degree nursing programs. Finally, to fully understand nursing student success, I wrote about student retention and success in nursing programs. The literature review is structured in four sections: (a) the theoretical models, (b) CC students—including

characteristics, persistence and success, (c) retention in nursing programs, and (d) student success in nursing programs. To complete the literature review I used multiple research databases and focused on articles published within the past 5 years. ERIC, Education Source, Sage Journals, ProQuest, CINAHL, Academic Search Complete, and the Networked Digital Library of Theses and Dissertations (NDLTD) are the databases I used to complete the literature review. Articles were reviewed if published in the past 5 years. Inclusion of classic articles occurred if they produced value to the work. Words used to complete the search included *nursing program, completion, attrition, graduation, retention, associate degree, community colleges, persistence, student motivation, and success*. Some searches included the Boolean “AND” such as *nursing AND completion, nursing AND associate degree, retention AND success, and nursing AND retention*. Saturation was achieved as demonstrated by the inability to identify additional articles in the content area at the time of the search. Articles were reviewed within the disciplines of education and nursing education as well as outside of the disciplines.

Conceptual Framework

Conceptual frameworks provide structure to guide research and are composed of theories and/or concepts that provide guidance regarding how a problem and possible solutions are connected (Creswell, 2012). For this project study, I used both a theoretical model and a conceptual framework. The theoretical model was Tinto’s model of student retention (Tinto, 2006) and the conceptual framework was the nursing undergraduate retention and success (NURS) model by Jeffreys, (2004). In Tinto’s theory of student retention, Tinto developed a theoretical model that described how college students must

have elevated expectations of themselves to succeed, but at the same time, they must also have the support of their college to succeed (Tinto, 2012a). In Jeffrey's NURS model, there is an examination of several factors influencing student success within nursing programs with a suggestion made that the interplay between these factors that affect decisions regarding retention of nursing students (Jeffreys, 2004).

Tinto's theory of student retention. The first theoretical model that provided structure for this project study is Tinto's theory of student retention. This theory originated from a theory Tinto developed in 1973 in conjunction with Cullen called a theoretical model of dropout (Tinto & Cullen, 1973). The theorists stated, "that dropout is a multidimensional process which results from the interaction between the individual and the institution and which is influenced by the characteristics of both elements" (Tinto & Cullen, 1973, p. 41). In the years since the writing of this initial theory, Tinto has expanded and revised the theory multiple times to account for the CC student, as well as the adult student that does not pursue higher education until some years after finishing high school (Metz, 2004).

Student engagement is important to Tinto's (2006) theory of student retention. Class participation, supporting peers both in and out of the classroom, and campus involvement are various manners in which students demonstrate engagement in the academic environment which leads to improved student retention (Campbell & Mislavy, 2012; Tinto, 2006). Each of these methods of engagement are applicable to the traditional student that attends and resides at a university. However, the nontraditional student that attends a CC may not have the ability to provide support to their peers outside of the

classroom, or these students may not be able to participate in campus activities outside of the classroom, which led Tinto to revise his theory, so it was applicable to students attending CCs as well as students who commute to universities (Metz, 2004). To promote student engagement, the student has a duty to be engaged with the community, but there is also an obligation of the institution to the student to provide an environment conducive to learning. Through the expansion and revision of the original model, Tinto has developed a model to include the adult CC student.

Institutions of learning have an obligation to their students to provide an environment in which the student can learn and progress towards graduation. This environment includes having faculty that encourage faculty student interactions. In Tinto's model of student retention this obligation is stressed (Tinto, 2012a). Tinto learned that it is more than just student actions that lead to student success in college; it is also how faculty interact with students in the classroom that help keep students engaged and influence student persistence (Tinto, 1998; Tinto, 2006). According to Tinto (2012a), students must feel as though they can approach faculty, and students need to feel supported in their learning environment. By providing faculty that care about students, institutions fulfill an obligation to their students to foster the students' progress towards graduation. In this section I discussed Tinto's theory of student retention which was the first theoretical model used to guide this study. Tinto's theory of student retention looks at why college students continue in school and persist in their pursuit of higher education. In the next section, I discuss a conceptual model which is more specific to nursing students.

Jeffreys' NURS model. The second conceptual model that provided a framework for this project study is Jeffrey's NURS model. There are several factors that affect nursing students' ability to remain in their nursing program and some of these factors include academics, demographics, environment, and outside factors (Jeffreys, 2004). Although the NURS model was developed based on other theorists, the idea behind it is to integrate students into the nursing profession using faculty advising and peer mentoring (Jeffreys, 2004). With the NURS model, Jeffreys' (2004) presented a method to examine factors that affect the retention and success of nursing students. With this model, Jeffreys helped explain that attrition happens for many reasons and can occur either by student choice or not (Fontaine, 2014). Within the NURS model, Jeffreys helps nurse educators examine student attrition so the educators can then attempt possible solutions for the school's student population.

When first created, the NURS model Jeffreys focused on undergraduate students (the original U in the acronym) and the factors which affected students' success in nursing school (Jeffreys, 2004). However, revisions have been made, and NURS now stands for "nursing universal retention and success model" (Jeffreys, 2015, p. 425). The model was updated to reflect the need for nursing students at all levels to be successful (Jeffreys, 2015). As the nursing workforce continues to age, the workforce in all nursing arenas needs the success of current nursing students to have nurses in the future (Benner, Sutphen, Leonard, & Day, 2010). This includes not only the undergraduates such as those pursuing entry into the nursing profession, but also those already in the nursing profession seeking to further their education and become nurse educators or nurse

practitioners (Jeffreys, 2015). Nursing students seeking higher degrees are important to the nursing profession because the profession will need nurse educators and other advanced practice nurses as older nurses start to retire (Benner et al., 2010). Although the model now focuses on nursing students at all levels, it is still appropriate for use with associate degree nursing students and nurse educators that work with these students.

This research study focused on successful students and learned what the student participants believed influenced their success. The NURS model by Jeffreys uses a holistic method of student retention and achievement in which nurse educators work proactively with students instead of focusing on students thought to be at risk of failure (Jeffreys, 2014). Retention, keeping students within the program progressing from one course to the next, is a key component of the NURS model (Jeffreys, 2015). As I explored what the nursing students believed influenced their success in the nursing program, the NURS model was an appropriate framework to use as guidance. In this section I discussed the theoretical models for this project study. CC students and some of the characteristics seen in the CC students of today are discussed in the next section.

Community College Students

CCs provide an opportunity to those who might not otherwise pursue a higher education. Many times, those who attend CC do so because they have obligations outside of school such as family or work obligations (Bers & Schuetz, 2014; Bragg & Durham, 2012). These students make up the bulk of CC student population, although they are not what comes to mind when one thinks of a college student. Although these students do not meet a perceived college stereotype, they too have the right to pursue higher education to

ultimately improve their lives. Although research found that the nontraditional student is more at risk of not achieving college completion (Kasworm, 2014), research has also found that if the nontraditional student can be engaged with the college environment, the student is more likely to complete college than the student not engaged with the college environment (Kasworm, 2014; Tinto, 1993).

There have been many variables investigated regarding CC student success. Some of the variables such as number of hours worked, age, and financial aid indirectly affected student completion by influencing other factors (Nakajima, Dembo, & Mossler, 2012). However, the student's cumulative GPA while in college was the one variable that did not change based on other variables (Nakajima et al., 2012). Therefore, it is essential for a student to maintain as high a GPA as possible to increase the chances of college success. Over the years, research has repeatedly shown that student engagement affects GPA and college completion (Kasworm, 2014; Tinto, 1993). Therefore, although many variables affect student completion, the only variables that consistently influence CC completion are student engagement and having a high GPA.

Community college persistence. Persistence is continuing the same course, despite experiencing challenges or opposition. When pursuing a college degree, persistence is a positive trait since completion of the degree requirements is necessary to obtain the degree. When starting the journey of higher education, it is important that students meet with an educational advisor. This advisor can help students make goals, develop plans toward achieving the goals (Donaldson, McKinney, Lee, & Pino, 2016; Ryan, 2013) and can meet with students when the students are performing poorly.

Proactive advising is a form of advising in which there are mandatory times that students meet with advisors and utilization occurs in situations when students may not know to seek help (Donaldson et al., 2016). According to Donaldson et al., (2016) students reported feeling more involved in the planning processes, and that they had a say in their scheduling when intrusive advising occurred. Proactive advising is a method that CCs can use to improve student persistence by encouraging interactions between students and college staff.

Another aspect of proactive advising includes faculty student interactions. When students are performing poorly in a course, although the student should reach out to the faculty, the faculty needs to reach out to the student (Wirt & Jaeger, 2014). In this interaction, the faculty needs to determine what is in the best interest of the student. Faculty student interactions are an important predictor of student persistence and ultimately degree completion for students in the CC environment (Ryan, 2013; Tinto, 2015). There are many things CCs can do to improve student persistence and thus improve student completion.

CC students that experience initial success persist with college courses (Davidson & Blankenship, 2016; Martin, Galentino, & Townsend, 2014). According to Davidson and Blankenship (2016) students that successfully complete at least 15 credits initially and complete at least 30 credits the first year of college can finish school sooner. When working with a specific goal in mind, CC students are more apt to persist when he or she sees positive movement towards the goal.

A final predictor of student persistence and ultimately student success when the student has a clear goal (Donaldson et al., 2016; Martin et al., 2014). Whether the goal is program completion or to transfer to a 4-year school, when a student has a specific goal to work towards, the student is more likely to persist and see the goal to fruition (Martin et al., 2014; Tinto, 1993). When CC students have clear, specific goals in mind at the start of their journey, they are more likely to persist in the journey. By persisting in the journey, students are more likely to meet their goals. The success of CC students is discussed in the next section.

Community college success. CC students have a diverse background and bring those experiences with them to the classroom. It takes CC students up to 6 years to complete an associate degree and only 39% of students that enroll in CCs complete their educational goals within this period (Juszkiewicz, 2017). These numbers include students that transfer to another CC or those that transfer to 4-year universities. These experiences influence the students' future expectations (Friedman & Mandel, 2009; Nakajima et al., 2012). Friedman and Mandel (2009) learned that students with goals experienced positive performance. When students were successful previously, they would continue to work for high grades, which led to course completion for these students. Motivation for earning high grades may have included strong familial or school support (Martin et al., 2014). When CC students are motivated to earn good grades in college early in their college career, the students take the positive experiences with as they continue their academic journey.

CC students need support from friends and family to earn good grades and complete their degrees. Strom and Savage (2014) learned that students who received initial support from family or friends were more likely to complete a degree when compared to students who did not receive support from either family or friends. Support occurs in the form of financial support from significant others, or it occurs in the form of emotional support when students feel defeated by course requirements. Either way, when college students feel adequately supported, they are better able to persevere despite the challenges they experience and persist in their courses. This perseverance leads to continued motivation in the students.

Motivation is a key component to student success. Motivation can be internal; the students strive to succeed. It can also be an external factor; high standards from teachers which then led to high performance by the students, leading to positive outcomes for the students (Friedman & Mandel, 2009; Tinto, 2015). Student motivation is also responsible for a student's desire for high grades when in school. Engstrom and Tinto (2008) found about 30% more high-income students than low-income students would earn their 4-year degree. There was a myriad of reasons for those who failed, some of which included a lack of preparedness and inadequate support from the institution for the students with lower incomes (Engstrom & Tinto, 2008). However, for students who did succeed, the students reported "commitment and motivation to pursue their studies increased because of the validation they received through the mastery of key skills" (Engstrom & Tinto, 2008, p. 49). Therefore, when administrators examine programs for student retention and success, ways that help students build on previously mastered basic skills, as the students

continue their education (Engstrom & Tinto, 2008) should be emphasized. These programs could be integrated through not only general education requirements, but through programs of study as well to improve CC student success. The next section discusses how nursing programs are affected by student attrition.

Nursing Programs

Throughout the United States there are nursing programs of various levels. These nursing programs offer educational opportunities to students that include activities designed with success and retention at their center; however, nursing programs do not always achieve student success and retention. When CC students enroll in a nursing program, they do so even though they may require additional assistance in not only basic skills such as reading and math, but also skills essential to nursing such as critical thinking (Custer, 2016). A need for educational assistance, as well as lack of social support, financial obligations, or academic difficulty can lead to nursing student attrition (Crombie, Brindley, Harris, Marks-Maran, & Thompson, 2013; Shelton, 2012; Williams, 2010). The nursing student at a CC is still a CC student; thus, this student is apt to face many of the same struggles as the CC student. However, when the nursing student has difficulty with basic college level skills such as math or reading, then attempts to start a nursing program, difficulties are likely to ensue, unless the student has worked through the difficulties. In the next section I review various methods that nursing programs have attempted to improve student retention.

Nursing program retention. There are many ways nursing programs have attempted to improve student retention. These methods include alternate teaching

methodologies such as distance learning and simulation, mentoring programs, the use of retention programs, and supplemental instruction programs (Fontaine, 2014; Harding, 2012; Robinia, Maas, Johnson, & Nye, 2012; Schrum, 2015). There are many factors that affects a student's approach to learning such as economic issues, course load, how courses and programs are designed, and which teaching methods are used (Carrick, 2012). Each method discussed has been successful at improving program retention; however, not all the methods have proven successful at improving program completion rates. Each method will be discussed in the upcoming sections in alphabetical order.

Alternate teaching methodologies may include the use of distance learning or it can include the use of flipping the classroom, in which students are given in-depth assignments to be completed prior to class and during class time discussions are held and material clarification is given (Bristol, 2014). Another alternate teaching method is the use of simulation, which can range from no technology used to high amounts of technology used, the available resources determine how much technology is used (Hayden, Smiley, Alexander, Kardong-Edgren, & Jeffries, 2014). Robinia et al. (2012) found no significant difference in program completion rates or NCLEX-PN pass rates for students in a PN certificate program that was taught using hybrid methodology compared to students in the same program prior to using hybrid methods. The results from this study support research done with nursing students from other levels of education which showed that simulation use does not negatively affect student outcomes (Hayden et al., 2014; Robinia et al., 2012). The use of hybrid courses did not take the place of face to face education though, it was used as a supplement in the program to help with clinical

placement and classroom difficulties experienced by one nursing program (Robinia et al., 2012). The use of hybrid courses and simulation as alternate teaching methodologies have not negatively influenced success. This use of hybrid courses and simulation demonstrate how nurse educators are using technology as alternate teaching methods.

Simulation is another alternate teaching method. Simulation allows students to provide care to patients in a safe environment. The students are in a lab setting and the patients are mannequins or standardized patients that have specific responses to give, based on the care received (Rutherford-Hemming, 2012). In July 2014, results from a long-term study regarding the use of simulation on nursing students were released by the NCSBN (Hayden et al., 2014). This study looked at how using simulation in lieu of clinical hours affected nursing students over a prolonged period (Hayden et al., 2014). There were three groups used in the study, a control group in which no more than 10% of the time could be simulation, a variable group with 25% of their clinical time spent in simulation, and a second variable group, with 50% of their clinical time spent in simulation (Hayden et al., 2014). This allowed the researchers to compare students within the same program to each other instead of trying to compare students from different programs to each other. The study was conducted over a period of 2-years, with data collection occurring throughout the 2-year period (Hayden et al., 2014). According to Hayden et al. (2014) there were differences in attrition rates from the study among the three groups, although the overall withdrawal rate was about 13%. Hayden et al. (2014) could not determine the exact cause of the differences in attrition among the groups; the groups had similar make-up when considering age, race, gender, and educational

experiences. However, Hayden et al. (2014) determined the students who were older (>35 years old), as well as those who were nonwhite, or were male were more likely to have dropped out of the study. Since study participation was voluntary, attrition from the study occurred in one of two ways, either the participant no longer wanted to participate, or the participant was no longer eligible to participate (Hayden et al., 2014). Simulation as an alternate teaching method is another way that nursing programs work toward improving student retention. However, simulation inconsistently showed improvement in retention.

The next retention method for discussion is mentoring programs. Peer mentoring occurs when students are matched with more senior students who act as advisors. Bryer (2012) discussed a peer mentoring program in which associate degree nursing students who had previously been unsuccessful in a nursing course were in a tutoring group with peer tutors. The end goal of this program was to allow participants to meet graduation or transfer requirements, which was stated as part of the objectives of the study (Bryer, 2012). Students in the peer groups exchanged knowledge and developed trusting relationships (Bryer, 2012). According to Bryer, the program saw overall success with eight of the 11 returning students passing the course and this led to requests for program expansion. Conversely, faculty mentoring was found effective at improving CC nursing student persistence (Metcalf & Neubrandner, 2016; Peltz & Raymond, 2016). However, it was noted that nurse educators must look at the characteristics of the program's students when developing a mentor program to best meet the needs of the students (Jeffreys, 2014; Metcalf & Neubrandner, 2016; Peltz & Raymond, 2016). It is also important that a needs assessment is completed to determine which students would most benefit from a mentor

relationship (Jeffreys, 2014). Mentor programs help students achieve graduation requirements and work best when students are encouraged to participate.

Retention programs associated with nursing curricula could be any type of instruction designed to improve course completion rates. Specifically completion rates between the first year to the second year of the nursing program. It is vital that nursing faculty develop retention programs to support students with both academic and nonacademic concerns to improve program retention and success (Fontaine, 2014; Jeffreys, 2007). Wray et al. (2014) learned that students reported family and academic support as key to remaining in school when wanting to quit educational endeavors. Students need support at home and at school to remain in school. That support may take the form of formal retention programs, in which students meet with specific faculty multiple times during the semester to review content and study strategies (Schrum, 2015). When utilizing formal retention programs, nursing programs need to ensure the students feel supported.

The final strategy for discussion in nursing student retention is supplemental instruction, which has been used as both a retention method and an alternate teaching method. As a retention strategy, supplemental instruction has been used as an optional offering to students. Harding (2012) described a study in which at risk students were offered an optional one-credit supplemental instructional course during the third medical surgical course. This supplemental instructional course used case studies and other activities to help foster the critical thinking necessary for the students to apply the knowledge gained in the nursing program to date, and specifically relevant information

being studied in the medical surgical course (Harding, 2012). Harding (2012) found that while there did not seem to be a significant difference between program participants and nonparticipants in their course grades, “there were significant differences in these measures between those who were successful in the program and those who were not” (p. 29). Upon analysis, Harding found although the program was successful, it was only successful at helping at risk students complete the specific course it was created for.

As an alternate teaching method, this form of instruction is built into the courses, frequently using case studies and other activities in class to encourage the development of critical thinking by students. When using supplemental instruction methods in the classroom, Popil (2011) found the case study method of teaching effective at improving problem solving and critical thinking abilities for nursing students. Goodstone et al. (2013) described how using either simulation or case studies improved the critical thinking abilities of students in the classroom. The use of supplemental instruction with the use of case studies can be beneficial not only to improving nursing student retention, but also to program completion. In the next section, I discuss nursing program student success.

Nursing program student success. There are many factors that influence the success of nursing students. Factors for consideration are related to specific courses such as faculty expertise and teaching methods as well as the curriculum (Tinto, 2012a). Student characteristics also need consideration (Jeffreys, 2004). When considering student characteristics, student learning style and why the student wants to learn (Carrick, 2012) are considered. Since a range of factors influence individual students differently,

both students and faculty need dynamic solutions to solve the difficulties students experience with learning. The upcoming sections will look at some of these solutions, including the use of case studies, simulation, and study strategies used by students.

Popil (2011) discussed how critical thinking skills are an essential component of nursing and need to be taught. Case studies can be used as a form of active learning to teach critical thinking skills in nursing (Gibbs, Trotta, & Overbeck, 2014; Popil, 2011). Through using a case study method of teaching, students learned nursing interventions, rather than being focused on disease management (Gibbs et al., 2014). Case studies can help students learn by encouraging students to interact with class materials more frequently. When students learn material better, they achieve improved success in courses, which leads to improved success in programs. Simulation is another form of active learning found effective at allowing students the opportunity to interact with experiences and drawing connections from theory to patient situations.

Researchers that compared simulation and case study teaching strategies decided that although simulation is available as a substitute for clinical time, both simulation and case study use are valuable when teaching critical thinking skills to nursing students (Gibbs et al., 2014; Goodstone et al., 2013). Use of simulation alone can help a student develop competencies necessary for real world nursing without exposing the student to risks of the real world (Goodstone et al., 2013; Rutherford-Hemming, 2012). Simulation provides the student an opportunity to make mistakes while caring for patients in a safe environment, and there is no danger of patient harm occurring (Rutherford-Hemming, 2012). This means the students can see how their care affects the patient differently, all

dependent on how the student responds. This in turn fosters the development of critical thinking for the student, which can improve their success.

Hayden et al. (2014) found no significant differences between students who had various amounts of simulation, up to 50% of simulation in lieu of clinical time. Hallin, Bäckström., Häggström, & Kristiansen (2016) discovered that students in their final semester were unable to satisfactorily demonstrate clinical thinking abilities when placed in teams for high fidelity simulations using a scenario in which a patient deteriorates. Although the results supported other research findings the researchers were surprised because the simulation findings did not correlate to the performance of the students in theory classes (Hallin et al., 2016). The contrary findings of these two studies demonstrate the importance of nursing programs using simulation judiciously and not relying on simulation as the sole method of clinical application for students.

Few studies have been done regarding associate degree nursing student study habits. However, Dapremont (2014) learned that successful nursing students used repetition without realizing the repetition helped create a routine which led to the success of the student. Even students whose “routine was crazy” (Dapremont, 2014, p. 159) realized the importance of having a routine. Although these students struggled, they persevered, using whatever means they could to help them succeed and achieve their goals. According to Dapremont, they developed study groups with peers outside their comfort zone to learn different perspectives. As they did so, they created a sense of community, and learned course materials better (Dapremont, 2014). The use of peer groups and the sense of community these students developed mirror the sense of

belonging discussed by Tinto in his theory of student retention when he discussed the importance of students getting involved in the college community (Tinto, 1998) to remain in college once enrolled. It did not seem to matter which study strategy was used by students; it was the consistency of using study strategies that improved the students' success in their nursing courses.

Implications

From the literature review, a gap was identified regarding the influence of nursing student perspectives on student attrition and retention. Maryland CCs are struggling with high attrition rates and low retention (National Center for Education Statistics, 2017). The gap identified in the literature review may directly influence an ability to solve the low completion rates being experienced not only at MCC, but other nursing programs in Maryland.

By completing this project study, professional development (PD) was created that focused on faculty-related factors reported by students that had an influence on their success while in the nursing program. Specifically, the PD focused on ways faculty and staff can help nursing students develop and improve critical thinking skills. The positive social change implications following completion of this project include addressing the nursing shortage by increasing the number of qualified graduates who can take the NCLEX-RN, helping program faculty better understand the needs of nursing students, and improving the educational experiences of nursing students.

Summary

Nursing programs must address program attrition rates to improve completion rates. One way to do this is to learn from the students why they remain, despite facing challenges (Wray et al., 2014). There are many factors that influence a student's ability to be successful (Jeffreys, 2004); and the college has a responsibility to the enrolled student to look at these factors and moderate what factors it can (Tinto, 1993). The nursing program at MCC in Maryland has a low completion rate. A qualitative study was conducted to learn what has influenced the successful nursing students. I focused on students in the second year of the nursing program who had at least a 2.5 GPA in the nursing courses because students who persist and achieve more than the minimum passing grade in courses are more likely to achieve their goals (Bergman et al., 2014). The 2.5 GPA was selected because the participants needed to be successful, which meant they should be doing better than the minimum expectations for the program, which is a 2.0 in the nursing courses. The following section describes the research design, the setting and participants for the study, and data collection and analysis.

Section 2: The Methodology

A problem experienced by a nursing program at a local CC in Maryland is low completion rates. The purpose of this qualitative study was to determine factors leading to success of students in the nursing program at MCC to address the problem of low completion. To achieve this, a qualitative study was designed to explore how faculty-related factors influence the success of nursing students at MCC. Both students and faculty were interviewed to learn their perspectives on these influences. The research question was related to what faculty-related factors that students believe affect their success. Qualitative research looks at perspectives, feelings, and beliefs of participants, which is why the qualitative research method supports this research question. Qualitative research allows data to be collected in various manners including the use of interviews (Merriam & Tisdell, 2016; Yin, 2014). This section explains the research design and justification. Additionally, discussion about achieving credibility, validity, and trustworthiness for this project study will occur in this section.

Research Design and Approach

A qualitative approach for this project study was selected because there was an interest in students' perceptions of what affects their success in their nursing courses. Many students in the nursing courses at MCC struggle with the rigorous demands of the course work. I wanted to learn from successful students what they do to be successful. I believed that using a qualitative approach, in which interviews are conducted, data could be collected and analyzed such as: what experiences the students believe helped them succeed and what nursing faculty know about student use of study strategies. Qualitative

research allows the use of interviews to collect subjective data surrounding the research question (Merriam & Tisdell, 2016; Yin, 2014). By collecting and analyzing qualitative data I was able

In reviewing the types of qualitative research designs, a case study design was determined most appropriate because of the focus on in-depth investigation to understand a specific situation or event (see Yin, 2014). Phenomenology is one type of qualitative research. However, it was not appropriate for this study because phenomenology seeks to understand a specific individual's lived experiences (Bogdan & Biklen, 2007) and this study looked at nursing students' perspectives. Ethnography is another qualitative method of research that was not appropriate for this study. In ethnography, the researcher remains with the chosen culture for a prolonged period in order learn about the chosen culture first hand (Bogdan & Biklen, 2007), which means it was not feasible for this study to utilize an ethnographic method. Case studies allow a thick, rich description of participant experiences (Creswell & Miller, 2000; Yin, 2014) to be written, and this supported the design of this project study. When defining a case study, it is important there are boundaries that limit the phenomena to be studied (Creswell, Hanson, Clark Plano, & Morales, 2007; Yin, 2014). The research question for this project study was "What are the faculty-related factors that influence successful nursing students at Maryland Community College." The case for this study was the successful nursing students in the nursing program at MCC. Based on the definition of case study provided by Yin, the boundaries for a case are based on the purpose of the study. For this study, the purpose was to explore faculty-related factors leading to the success of nursing students.

Therefore, in this study, the boundaries were based on eligibility for students to participate in the study, thus defining the case.

In designing this case study, an embedded, single case design was best, but it depended on the participants of the study. Yin (2014) described this design as one in which multiple units are analyzed as part of a single, larger unit. In this study, the single larger unit was the overall number of students who were successful in the nursing program, therefore, the larger unit is the nursing program. The embedded units were based on which semester the students were enrolled in either the third or the fourth semester as the project studied students in the second year of the nursing program. An embedded case study design was originally planned for this study, however, most of the student participants were from the fourth semester of the nursing program, which made this design less feasible than originally hoped for. A multicase study design is considered a more rigorous form of case study design (Yin, 2014); this was not a feasible option since the study was conducted at a single community college. Qualitative case study design can take multiple forms, depending on the unit being studied.

It would have been ideal to conduct research at a school with a similar program to prevent conflicts of interest from arising. However, to have used a different school it would have been necessary to develop a relationship with the school, determine the school has a very similar problem to solve, and learn the ways of the school (Merriam & Tisdell, 2016; Suzuki, Ahluwalia, Arora, & Mattis, 2007; Yin, 2014). Therefore, although it would have been interesting to use a different school that is comparable to MCC, it was not feasible due to difficulties in developing a relationship with a different institution and

ensuring the other institution was experiencing the same type of problem with a comparable population as MCC. Therefore, the research was conducted at the chosen location, despite my being employed by the site. Since there was an established, working relationship, it was essential to maintain boundaries between the role of researcher and the role of employee to remove the possibility of conflict of interest. Part of my role as researcher was to protect the participants; this was paramount.

Participants

To protect participants, it was important to follow ethical practices concerning the use of human subjects. There were several steps taken to protect research participants including: I received institution review board (IRB) approval from both Walden University and MCC prior to any data collection, I protected participants from harm, I made sure participants provided informed consent prior to participating in the project study, and I selected participants equitably from the participant pool.

The potential participants included all nursing students in the second-year courses of the nursing program at this institution. However, inclusion criteria said that students must have a 2.5 of 4.0 GPA in the nursing courses. This was to limit participants to the specific group of nursing students of interest for the project study, those who were successful in the nursing program to that point in their program. Since this was qualitative research, I expected that not many participants were needed (see Creswell, 2012). I anticipated interviewing no more than 15 students, and possibly as few as seven or eight student participants before reaching data saturation. There was a total of nine student participants interviewed. To gain access to the students of interest, I first spoke

with the DON, who provided me the faculty names of the faculty members who taught in the second year of the program. Faculty received student invitations to participate in both hard and soft copy. The hard copies of the student invitation to participate were distributed by second year faculty in class and the soft copy was placed as an announcement on the course learning management system. The invitation to participate included basic information about participation criteria and included my contact information for those who were interested. Interviews were conducted until content saturation occurred.

I attended a PD offering during which I learned about the IRB processes at MCC. I attended this offering in preparation for the doctoral research study. I also spoke with the IRB chair to ensure I followed the correct processes at MCC. The IRB chair informed me that participant recruitment occurs in the manner I just described. To obtain an adequate number of student participants, I reached out to course faculty multiple times. The information was first distributed by the faculty about a week before spring break. Then, about a week after spring break, the information was reposted by course faculty, on the course learning management system, because I had inadequate student participation. I provided additional hard copies for in class distribution for interested students. This was about 3 weeks after the first time course faculty provided information to prospective student participants. The third time I reached out to faculty was again about 3 weeks later. At that point, I had interviewed three students, but was starting to see repetition in some responses. However, as students finished their coursework for the semester, I had several students contact me over about 4 days.

Another data source was nursing faculty interviews. To initiate contact with nurse faculty I worked with the DON. She placed the faculty invitation to participate in all full-time faculty mailboxes. The faculty invitation to participate included a brief introduction to the study and my contact information for those who were interested in participating. Faculty started contacting me within a couple of hours. I then sent the informed consent to interested faculty members via email. By completing the process in this manner, I provided for the confidentiality of the participants because only myself and participants that participated knew who participated. Since all full-time faculty received the invitation, the individuals could decide whether they wanted to participate or not. This provided for the voluntary nature of the study. It was anticipated that four to six faculty interviews would be needed to achieve saturation as qualitative research looks for rich, thick descriptions rather than quantity of participants (see Creswell, 2012). There were seven faculty interviews needed to achieve saturation of data. The rationale for interviewing only nursing faculty was that although some nursing students take general education courses while they are taking nursing courses, most nursing students only take the nursing courses when in the nursing program at MCC. It was also important to focus on observations and knowledge of nursing students during the faculty interviews. Faculty in the general education courses do not always know whether the students they teach are nursing students. Interview questions with the nursing faculty focused on teaching methods and faculty student interactions, as well as faculty observations of student behaviors to learn what students enrolled in this nursing program do that have a positive influence on course success.

Prior to data collection, permission was received from the Walden IRB and the study site IRB to conduct this project study. It was important approval was received to ensure requirements for both institutions were met regarding participant protection from harm, that confidentiality of the participants was protected, and requirements for informed consent was met (see Creswell, 2012). To protect participant confidentiality, participant names were changed to a pseudonym, no participant identifying information will be published, and project study data was stored on USB based encrypted storage to prevent unauthorized disclosure. Paper copies of files will be maintained in a locked file that only I will have a key for. All data will be maintained for at least 5 years.

Data Collection

Data collection for case studies can include interviews or document review (see Creswell, 2012; Merriam & Tisdell, 2016; Yin, 2014). The primary method of data collection for this project study was semistructured individual interviews with students that lasted between 30 and 60 minutes. Prior to the interviews, the participants were emailed sample questions to help them prepare for the interview. Two of the questions included in the email asked students to think back to specific situations that made the student feel successful in school and share the situation. These two questions were expected to take the students longer to formulate a response because they had to reflect on all the experiences they had and select one special experience to share for each question. The participants were asked to email the responses to these two questions when they submitted their consent. Based on participant response to the reflective questions, additional questions were asked during the interview that explored the experiences the

participants shared with me. The questions for the two reflective questions were included at the end of the interview protocol, and the responses were analyzed with the other interview responses collected.

During interviews, student participants were asked their perceptions about faculty-related factors used such as attendance at study sessions, use of program resources and use of faculty office hours. Students were also asked about what their ideal and their nightmare faculty person would be. Faculty participants were asked about their teaching methods and their observations of student behaviors. Although focus group interviews could be used to collect data for qualitative studies (Yin, 2014), due to the diverse population of students in the nursing program at the study site, individual interviews allowed for better interpretation of research data than could have been collected during focus groups. Students were asked to describe any other faculty-related factors during their nursing education they felt had a positive effect on their educational journey. See Appendix B and Appendix C for the faculty and the student interview protocols.

Demographic information including status in school, GPA, and work status was collected during interviews with the student. The demographic information such as work status and full-time versus part-time status in school was important because this type of information has been found relevant to students' ability to achieve academic success (Peltz & Raymond, 2016; Reason, 2009). The GPA was needed to help ensure potential participants met the requirements of the project study. This demographic data was collected at the start of the interview and acted as screening questions to ensure the

participants met the requirements of the project. Specifically, participants needed to be in the second year of the nursing program and have at least a 2.5 GPA for their nursing courses to participate in this project study. Although students had the eligibility requirements prior to the interview, it was important to verify participants met the requirements of the study, so data collection was accurate and reflected the experiences of successful nursing students, which were the phenomena studied.

When the data collection process started, course faculty announced to all students in the appropriate courses the information regarding this study, so participant engagement occurred. I spoke with the DON to determine which course faculty were the correct ones to speak with in each course. It was determined the course leaders were the best faculty to speak with. These faculty members were “research champions” (see Robinson, 2014, p. 36) because they were able to help with participant recruitment. These were the faculty that placed the student invitation to participate on the learning management system. They were also the faculty that instructed students to contact me if the students had any questions. I met with each of the course leaders individually to verify the number of students in each of the second-year nursing courses and answered questions from them prior to providing the student invitation to participate. In providing this information to the appropriate faculty, I reached the target population.

Informed consent was provided electronically. Once consent was received, participants were given a pseudonym. After that time, participants were only referred to by pseudonym to help maintain their confidentiality. The master list links names and pseudonyms, to connect the informed consent to the responses given during the

interview, in the event the participant changed his or her mind and chose to not participate in the study after giving the interview. To ensure the same interview questions were asked of the participants the interviews were semistructured in that an interview protocol was developed with the basic interview questions included. A semistructured format allowed further investigation when appropriate but provided guidance as I conducted the interviews to ensure I asked the same basic questions of each participant (see Merriam & Tisdell, 2016). All students were given my contact information to receive additional information regarding the project which helped them decide whether they wanted to participate.

Once possible student participants made contact for study participation, they were given additional information regarding the study. Participants were given the opportunity to ask questions prior to providing informed consent. The informed consent was completed electronically because the student participants were asked to provide responses to reflective questions prior to the interview occurring. Therefore, it was necessary to obtain consent prior to conducting the interviews. This informed consent was sent via email and explained the rationale for the study, any potential risks or benefits to both the participant and me and explained the project study itself in greater detail than the invitation to participate (see Suzuki et al., 2007; Yin, 2014). Audio recording of interview sessions occurred, so focus remained on the participant during the interview (see Creswell, 2012). Participants agreed in informed consent to the recording of the session. Participants had the opportunity to ask questions regarding the consent form and the research prior to electronically providing consent. Most students did not have any

questions about the research, although a couple students sought me out in my office and asked questions face to face prior to contacting me via email to express interest in participating in the research.

There was no intent to use my current students because the participant pool included students who were from the second year of the nursing program and I teach in the first year of the program. Although students who had been my students previously were used for this project study, there were no conflicts of interest because I was not involved in teaching of the second year of the program, nor do I teach in the practical nurse completion course, which occurs after the first two semesters of the nursing program. By using student participants that I am not currently teaching, and by keeping the identities of the students confidential, there was relatively little cause for concern of possible conflict of interest because I had no influence over the students' grades (see Suzuki et al., 2007), nor were the faculty in their courses aware of which students participated in the project study. To ensure faculty in other courses were not aware of student identities that participated in the study, once faculty gave information about the study to all the students and provided students with my contact information, the faculty were no longer involved. In maintaining confidentiality of study participants, and not using my current students as study participants, protection of participants was provided since there was no sense of obligation between myself and the participants.

Data analysis occurred in an on-going manner with each interview transcribed from the digital file after the interview was completed. Although data analysis occurred as the interviews were transcribed, in-depth analysis and interpretation of data were not

completed until most of the data was collected since I am a novice researcher (see Bogdan & Biklen, 2007). Member checking was done to help with credibility (Merriam & Tisdell, 2016; Schwandt, Lincoln, & Guba, 2007). As such, once the interviews were transcribed, they were returned to the participants to verify the transcripts were correct. Participants were asked to review the transcripts and if there were errors to contact me via email within 48-72 hours, so any errors could be fixed. After transcription of the interview was done, organization and coding of the data was started using NVIVO software. NVIVO is a software program available for qualitative research that provides methods to organize and manage the data obtained (Creswell, 2012). This program also supports qualitative research by allowing visual mapping of categories (Creswell, 2012). By using NVIVO software, coding, organization, and management of the qualitative data occurred in a systematic manner.

Although the primary data source for this project study was student interviews, it was necessary to collect data from other sources to ensure the findings from the primary source were consistent (Yin, 2014). For this project study, another source of data included nursing faculty interviews. The faculty interviews were conducted with faculty who teach throughout the nursing curriculum and focused on behaviors observed by the faculty in students that were passing the nursing courses. These interviews lasted no longer than 45 minutes. Prior to conducting faculty interviews, informed consent from faculty was obtained. The informed consent process was the same for faculty as it was for student participants; interested faculty were sent an email with the informed consent to review. The faculty then asked any questions, and I answered them either in person or via

email. Once faculty felt comfortable with the consent, they replied to the informed consent email with “I consent” or “I am willing to participate.” Participation by faculty remained confidential and this was achieved using pseudonyms. To ensure appropriate faculty were approached, the DON was contacted regarding which faculty were most appropriate to interview for this research. The DON provided all full-time nursing faculty with information regarding this research and my contact information. This allowed those faculty who were interested in participating to contact me, so we could schedule an interview after the faculty provided informed consent. Working through the DON was an important step because there have been new nurse faculty hired and the purpose of this research was to learn about the nursing students in this nursing program. Therefore, it was important to use nursing faculty that have been teaching in this program for at least two years.

During the faculty interviews, questions focused on teaching methodologies used, the behaviors of successful students that faculty have observed, and the program resources faculty know of that successful nursing students used. Some behaviors faculty observed included attending class, seeking assistance to clarify content, and reviewing exams with faculty when the student was not satisfied with his or her grade. The use of faculty interviews was done as “people with different perspectives” (see Merriam & Tisdell, 2016, p. 114) to help with triangulation of data. Faculty interviews provided a different perspective on the behaviors of successful students. However, the behaviors reported during the faculty interviews were like the behaviors reported by the successful students.

A final method of data collection was reviewing program documents, specifically the comment sections from both program and course evaluations. Both the course and program evaluations have questions that seek student input on faculty and resources. As such, these evaluations provided anonymous data from students in the nursing program who have completed the courses, regardless of GPA or course success. These evaluations solicit student feedback regarding use and effectiveness of resources and effectiveness of teachers. To maintain the qualitative nature of the research, I reviewed these comments from the evaluations. According to Merriam and Tisdell (2016) using multiple sources of data collection aids in triangulation of qualitative data. The data analysis for these documents occurred in a similar manner as the data analysis for the interviews. To maintain confidentiality of the program faculty prior to receiving the comments from the evaluations, secretarial personnel from MCC collated the requested data to ensure no identifiable information was present. The evaluations were reviewed by the secretarial personnel and the comments were collected and sent to me. Once this data was collected, I coded the data to form descriptions and get a general idea of the data (see Creswell, 2012). After the coding was done, I did a thematic analysis to determine what patterns were present in the data (see Creswell, 2012). The coding and thematic analysis of the document review was the same process followed for the other data collected in this study.

The case study approach was appropriate to this qualitative project study because of a desire to learn more about faculty-related factors that influence successful nursing students at MCC. A semi-structured interview process was used in individual interviews as the primary data collection method to allow a rich, thick description to develop of

these nursing students' experiences. To ensure triangulation of data occurred, faculty interviews were conducted, and reflective questions were used with the students to obtain data from additional sources and help to ensure data collected from the primary source was valid and reliable. Data was analyzed in an on-going basis, and in-depth analysis occurred after all data was collected. On-going data analysis helped determine when data saturation, or the repeating of the same data occurred. The written responses from the student participants' reflections had analysis prior to the interviews to allow for follow-up questioning. Based on the individual responses, follow-up questions were asked of the participants. Once data saturation occurred, in-depth analysis and interpretation were done on all data, including the written responses.

Role of the Researcher

Although I was the researcher in the study, my experience as faculty at the school was beneficial. I have taught at MCC for ten years and have experienced several changes in nursing leadership during that time. I also participated in an accreditation and have been working toward an upcoming reaccreditation while completing my doctoral studies. Over the years, I developed rapport with the faculty, and as I did not conduct faculty evaluations, there was no supervisory role that might have intimidated the participants. Additionally, over the years, I participated in PD at the school, which is of interest to the study. I carefully considered my role as a researcher and my role as member of the population under study to cope with any bias that could possibly occur. To ensure quality, I identified major themes from the data, included personal reflections in the data, used research literature to support my findings, and acknowledged the limitations of the study.

Data Analysis

In qualitative research, data analysis is an inductive approach during which researchers work to gain insight into a phenomenon (see Creswell, 2012). One-on-one interviews with second-year nursing students were the primary method of data collection with secondary data collection from nurse faculty interviews and the review of course and program evaluation comments. This study used inductive processes to assimilate and code segments from these interviews and records which resulted in the emergence of themes relevant to student success. The identified problem of low nursing program completion at this CC and the research questions provided guidance for conducting this study.

Initial data analysis occurred in an on-going manner during data collection, and in-depth data analysis occurred after completion of data collection. According to Creswell (2012), to determine when data collection was finalized, it was necessary to reach a point of data saturation, in which no new results developed from the data. In conducting interviews with multiple participant pools, it was necessary to analyze multiple sets of data. Although the faculty interviews helped with triangulation of the primary data source (see Merriam & Tisdell, 2016), I conducted the faculty interviews first to help determine if there were any program or course resources that needed exploration during the student interviews. Each faculty interview lasted between 20-45 minutes. The interviews were recorded, with limited notes taken during the interview on a copy of the interview questions. Any notes taken during the interview focused on lines of inquiry to follow up with during the interview. Once finished interviewing the

participants, I made additional notes regarding time, location, and mannerisms of the participant. Modifications of these notes occurred as needed during the transcription process, based on my recollections of the interview.

As recommended by Merriam and Tisdell (2016) I transcribed the interviews to Microsoft Word documents to gain insight into the interviews. I listened to each recording at least three times; the first-time allowed transcription, the second time provided an opportunity to edit the document and the third time occurred after participants provided feedback about the transcript's accuracy. When needed, portions of the recordings were listened to additional times to ensure understanding of the participants' meaning. Each review provided the opportunity to ensure accuracy of the transcription. Although several participants provided feedback to the effect the document was excellent, a few participants provided editorial comments during the time allotted for member checking. These editorial changes occurred before initial coding of the data. Storage of all transcripts and audio files is on a USB encrypted storage device, with hard copies of the interview questions being in a locked file.

A colleague performed an *external audit* or “review the project and communicates or writes an evaluation of the study” as described by Creswell (2012, p. 260) to ensure validation. The Walden University instructor completed the external audit and provided areas to examine for strengths and weaknesses. Coding occurred in an on-going process, with initial coding occurring as interviews were taking place and in-depth coding occurring after the completion of interviews. Once in-depth coding started, a grouping of similar codes occurred to remove redundant codes and place codes into themes or

categories (see Creswell, 2012). Appendix D shows coding categories, recurrent words, themes, and how each of these is related to the research questions. During data analysis, review of all data helped determine whether recurrent words were present. The same is true of data themes; the data was present in multiple records, not just one record. For example, even though Sherry reported faculty rudeness as a barrier in the clinical setting, faculty rudeness was present in course evaluations as well, which demonstrated a recurrent issue.

During the initial coding process, comparisons were made between the participant provided responses and the research questions to ensure the responses provided answers to the research questions. There were five original codes developed, and each of these codes had sub-codes associated with them to which responses could be coded to. The initial codes were; “effects of faculty on student success,” “learning experiences,” “obstacles,” and “success.” These codes were directly related to the research questions and included sub-codes such as “negative and positive” under faculty effects, “clinical, simulation, skills, and theory” under learning experiences. While working through the responses, content analysis occurred by looking for similarities in the responses (see Merriam & Tisdell, 2016). After all interviews were completed, a review of both the individual responses and the responses of the participant groups, either faculty or student, occurred. Continued reading of the documents led to the emergence of new themes, and the naming of the new themes then occurred.

Results

The goal of this study was to explore the perceptions of successful nursing students about their experiences at MCC and how faculty-related factors influenced their success in the nursing program. The guiding question for this study was: What are the faculty-related factors that influence successful nursing students at Maryland Community College. Although the guiding question provided the backbone for this study, the study also addressed three focused questions:

- What are faculty-related learning experiences that students believe have a positive effect on their success while in the nursing courses?
- What are faculty-related obstacles that nursing students overcame to complete the nursing courses successfully?
- How do faculty student interactions affect student success in the nursing courses?

Table three shows the strongest connections between the research questions, the codes, sub-codes, and the themes.

Table 3

Research Questions and Coding

Research Question	Codes	Sub Codes	Data Themes
What are the faculty-related factors that influence successful nursing students at Maryland Community College?	Effects of faculty on student success	Positive Negative	Connections
What faculty-related learning experiences do students believe had a positive effect on their success while in the nursing courses?	Learning experiences/critical thinking	Theory Clinical Skills Simulation	New Experiences Learning Strategies
What are faculty-related obstacles that nursing students overcome to successfully complete the nursing courses?	Obstacles	Faculty-related Personal School related	Faculty Barriers Help-seeking behavior
How do faculty student interactions affect student success in the nursing courses?	Success	Student behaviors	Help-seeking behavior Self-ID Student resilience

The following sections report the results of the study as they correspond with the research questions.

Themes

The codes developed into seven themes: connections, new experiences, learning strategies, faculty barriers, help-seeking behaviors, self-identification, and student resilience. One code, *learning experiences* was renamed part-way through the in-depth analysis to *critical thinking* because more data started to support critical thinking as an

issue experienced that is directly related to their learning experiences. As I analyzed the information from the student interviews it was not that I needed an additional code because the descriptions provided by the students were very clear. Instead, it was a case that the initial code did not clearly explain what the students were speaking about. Although the students were using very clear words, the experiences they described alluded to critical thinking instead of the learning environment or the specific experience they shared.

Each theme has relevance to at least one of the research questions. Many of these themes relate in a way that a response belonged to multiple themes. For example, the student participant, Sherry, said: “the professor can be available, but if the student does not do that, like if I did not go see Mrs. J.... I was having trouble answering questions, then I would not have gotten better.” This response shows how a positive faculty student interaction can have a positive influence on student success from the view of the student. It demonstrates a successful student behavior, which led to the student being successful in a specific course. Sherry was successful in the program because she developed an insight into her personal learning needs that she partially tied back to this moment.

Connections

This was an in-depth theme because there are several elements to it. This theme included positive faculty student relationships, negative faculty student relationships, the personality of faculty members, and the availability of faculty members. Each element had influence on student success, however, the focus of this theme was how the faculty student relationship fostered a positive learning experience for the student and helped

facilitate success for the student. The theme was related to the research question “What are the faculty-related factors that influence successful nursing students at Maryland Community College.” Jake summed up this theme with his response regarding a professor meeting with him over winter break;

Upon hearing some of my anxieties about the upcoming job search she offered her time to come and see her in her office just to chat. I know how busy all the professors are with their own classes, so it was a nice gesture to know that someone from the previous year was still invested in my success and was able to answer my questions and allay some of my fears heading towards graduation. Something as simple as a professor reaching out outside of the traditional office hours was reassuring in a way that made me feel successful in my own regard.

Dolly also spoke about how connecting with faculty fostered a positive learning environment with this remark, “Professor Jane really encouraged me and believed in me. She recommended me for a job on the unit to the nurse manager.” Dolly also explained how other faculty helped her by encouraging her when she felt defeated. Beverly talked about participating in a mentorship program and how she found being part of this program was beneficial for her as it helped to hold her accountable to someone other than herself.

New Experiences

This theme included the overall lack of preparedness some students felt when they started the nursing program, as well as all the new experiences the students looked back on as they thought about how far they had come. Codes in this theme included the theory,

clinical, lab, and simulation learning environments as well as sub-codes in the theory code that looked at various teaching and learning strategies. This theme was related to the research question “What faculty-related learning experiences do students believe had a positive effect on their success while in the nursing courses.”

Several of the students, including Dolly, talked about how the nursing lectures were different from lectures in other disciplines in that lecture was “definitely application and just connecting everything you’ve ever learned into this one mindset of the nursing process.” This theme also included the idea of learning how to take tests for at least one of the participants. Kim explained how even though she was a double major for her previous degree, she failed her first nursing course, which she attributed in part to how nursing exams are made. She explained, “my previous college experience and all of my courses except for one math course were writing based exams... the nursing program is set up regarding multiple choice exams was very different from what I was expecting.” Another comment about new experiences was made during the interview with Lori when she spoke about the clinical assignments, “at first I didn’t know why the heck we needed to do care plans because they’re kind of built there in the charts for us, right there in the nursing orders.” However, as the interview with Lori continued, she said she started to understand how the care plans, as well as other assignments, helped her when she said, “my nursing practice doesn’t just end with clinical skills and textbooks, but it’s everything that’s given to me. I have to absorb it like a sponge.” Sherry spoke about the overall lack of preparedness felt when she started the program, based on the courses

taken for her previous degree, even though she took the necessary pre-requisite courses when she said,

At first, it was rough; there were times I would read the PowerPoint and still did not understand it because I did not have a science background, my school was a secondary commercial. Those with a science background, they were the ones who did biology and physics, and chemistry. But my courses were shorthand, economics, and of course English, history, and stuff like that.

Sherry struggled through the program, repeating several courses, but ultimately completed the program after six semesters of interrupted enrollment in the nursing program.

Learning Strategies

The theme of learning strategies was related to several codes including help-seeking behaviors, new experiences, and faculty barriers. These themes are related to the research question “What faculty-related learning experiences do students believe have a positive effect on their success while in the nursing courses.” When discussing learning experiences, participants were all over the place. The students talked about the various environments in which learning takes place for nursing students. They talked about the classroom, where there were lectures and case studies/clinical scenarios to work through. They also talked about the nursing skills lab where they could practice hands-on skills prior to working with real patients. They also talked about the clinical setting and simulation laboratory.

When talking about the classroom environment some focused only on lecture, while others talked about faculty personalities and characteristics. Some, like Dolly, talked about active learning strategies used, “I was very intimidated by the transition from PowerPoints to case studies and study guides. I found that this style of teaching worked very well for me and helped me build critical thinking skills.”

Beverly focused on how the faculty in the first year provided study groups and how she felt a tremendous amount of support from peers in class as well. She explained how she had different study groups for theory and for clinical, and she was even part of another study group for skills. However, she still relied on contacting faculty when she did not understand something because the faculty were experts and they were the ones who knew the information. Beverly did not seek help from other students even though she was part of several study groups because she was concerned, they might not know “the right answer.” The lack of faculty-led study groups in the second year of the program was something that students did not seem to mind because students attended the study groups during the first year when they found the faculty facilitated study groups most helpful.

Some of the other students interviewed would bounce ideas off other students in their study groups or would reach out to classmates before reaching out to the faculty. When questioned why they chose this method of clarification, they said it works for them or, as Jake and Steve discussed, it was the most effective use of their time because it helped them learn the material and they believed by asking other students, it helped the other students learn too.

When talking about the skills lab Steve explained, “the lab instructors if they would have down time, they would sort of walk through the skill with me, if they had the down time. And I found that to be so helpful, particularly this semester”; while Lori provided this description of the skills lab, “I go to the lab quite frequently just so that I can touch the equipment that I need to touch, especially for the skills. I also love that the different lab instructors have different ways of doing skills.” Students also talked about the simulation lab, which is another environment where students can practice skills and learn. As Jake explained, “walking into simulation, although supremely stressful the first year, has now become an enjoyable experience where I feel I learn the most. I know that I’m on the same page as my classmates.” This explanation by Jake goes far in explaining how clinical judgment is developed over time rather than suddenly. It has been the repeated exposure to simulation that has increased Jake’s confidence and helped make simulation enjoyable for Jake.

When talking about the clinical environment, most students had only positive things to say. Sherry said this about her final clinical rotation, “She stripped us of all those things that we were used to carrying! But by doing that I developed the confidence that I needed. I feel like I can go out and help somebody.” The increased confidence Sherry developed is vastly different from earlier experiences she had in the nursing program. She relayed the following about an earlier clinical experience when she had a death in her family and her clinical faculty told her “I should have left that feeling at the door when I entered the hospital.” She went on to share how she regretted not only going to clinical that day, but she regretted letting her clinical faculty know of the death in her

family because “she followed me around to see if I was going to make a mistake.” These contradictory experiences Sherry had over the span of her nursing school experience demonstrate a need for faculty to nurture nursing students. These contradictory experiences also demonstrate a need for faculty awareness regarding how their behaviors and interactions with students can influence student perceptions.

However, each of the student participants and most of the faculty stressed the importance of students answering NCLEX style questions as they study for exams. Nursing exams use this type of question, and this question type is standard for exam preparation for nursing students (Billings, 2016). The questions focus on a student’s ability to provide safe patient care and critically think. Steve relayed how “a nurse from work put an app on my phone that’s an NCLEX review type of app to help me” as he worked through the nursing program and prepared to take the NCLEX. He said this app has a lot of NCLEX style questions and he believed it has been helpful to him as he studied. Samantha explained, “personally I like going online to do NCLEX questions.... There’s also NCLEX books.” Rose, one of the faculty members, explained how the NCLEX style question is “one of the roadblocks” that students face in nursing school because these questions “force students to critically think in order to answer the question correctly, it’s not rote memorization.” This need for critical thinking by students was evident in the student interviews when Steve talked about problem solving, “But, if you reach out to the faculty, they could probably do a little problem solving with you.” Lori also talked about a need for critical thinking when she shared “I’m thinking about it, I really have to make a habit of asking these questions you know when it seems like the

right time to do it...of asking questions like this to find out what makes a difference to people.” Lori’s story was in relation to talking with a pediatric patient’s mother about the various relationships the mother has experienced with healthcare providers while the patient had been hospitalized. The patient had a chronic medical condition requiring repeated hospitalizations since birth.

Faculty Barriers

This theme was related to the code of obstacles, and referred to the research question, “What are the faculty-related obstacles that nursing students overcome to complete the nursing courses.” I needed the students to open up and trust me to develop this theme. During initial data analysis, I realized students had not answered the question regarding faculty barriers to student success. However, a review of the evaluation comments showed negative comments about specific courses, specific faculty (no names listed), and how horrible the program was. Comments on the evaluations included: “but exams were very tricky and didn’t help us demonstrate true knowledge, we did our work and still got poor unit exam scores, professors didn’t seem to want students to succeed in the program”; “power points could more organized and easier to follow, having a lapel microphone would enhance the ability to hear content better”; “the textbook seemed to be missing important points, when using other sources the student finds other important information to mention in the required textbook, look into other sources to use as a textbook for the course; going over time as many times as we did is unacceptable, time management of professors needs to be improved”; and “better communication between all clinical instructors and school staff, all clinical instructors want something different,

no cohesion in clinical to school staff.” These comments came directly from the various course and program evaluation forms during the time period of the research thus demonstrating obstacles present that faculty could control, even though no responses during the initial interviews supported these comments.

Therefore, I modified the interview protocol. Development of questions for the student participants regarding ideal and nightmare faculty ensued in the hopes of getting data to support the evaluation comments. The student participants provided data during interviews that supported the evaluation comments, although they used different words from the evaluation comments. The participants already interviewed had follow-up questions sent to them via email to provide the opportunity to give their input to the new questions. Those participants had to respond via email and their responses placed with the remaining responses.

Faculty barriers to learning included complacency on the part of the faculty. Barriers also included the inability to teach. Jean explained it this way as she explained her nightmare faculty member.

Many nurses who went on to teach are great nurses but are not able to teach effectively. I had a professor who only read from the PowerPoint, but was a nurse for over 25 years, so I had to read and teach myself the material. It makes it harder and more frustrating to learn the material.

Jake talked about disorganization on the part of the faculty member, while both Steve and Sherry talked about intimidation. Sherry shared her experiences of intimidation occurring in the clinical setting of different courses when faculty “raised their voices.

You are kind of nervous, and they were threatening they were going to fail you.” Both Lori and Beverly explained their nightmare faculty would ramble on or would talk too fast. Each student was thoughtful in providing their responses to this, and many said they had not experienced a nightmare faculty member while in the nursing program.

Kim struggled to answer this question and had to focus on “nonideal behavior” of a faculty member, versus a nightmare faculty person, or even a faculty member she would not desire to have taught her. When answering this question, Kim was very hesitant and thoughtful. There were several times that she had to rephrase how she was characterizing the response based on behaviors rather than attributes or characteristics because “there’s a difference in maturity in terms of how one sees others. Because like as a student you have a responsibility in the relationship to your professor...it’s how one relates to authority.” Ultimately, Kim described the nonideal behavior as behavior by the professor or the student that demonstrates a lack of trust such as, “Why did you just do that.” But she was quite specific regarding the confrontational aspect stating, “it’s not seeking to understand what the person is doing. It’s following an action that was a mistake...but expressing a dislike of the person on a more personal nature.”

Help-Seeking Behaviors

Although obstacles abound, the student participants were successful in the nursing program, and the focus of this research was to determine what helped them be successful. This theme was related to the codes of both faculty effects on student success and student success. It focused on things students do to be successful. Although this theme was related to two codes, the research question it most closely answers was, “What are

faculty-related obstacles that nursing students overcome to complete the nursing courses successfully.” Most commonly, successful students would seek help from their faculty. The students asked questions both in the classroom and during faculty office hours. These successful students also talked about how they sought help from their clinical faculty to clarify the theory content at times. Lori had this to say about it, “Definitely my clinical instructors. I utilize them for their knowledge; they're really, really good at seeing things practically... Even though the book tells you one way of doing things they'll tell you the hospital way of doing things.” Some of the other students interviewed stated they bounce ideas off the students in their study groups or reach out to others in their class prior to reaching out to the faculty. Jake gave this response, “First I'll normally ask a classmate, then if they don't understand it, I'll either ask a professor—the one who taught the lecture. But if that person isn't available, then I'll usually send them a message.” When questioned as to why they choose this method of seeking clarification, they said it works for them or, as Jake and Steve talked about, it was the most effective use of their time because it helped them learn better and by asking other students, they believed it helped the other students learn the information better. Steve explained his difficulties understanding some of the faculty as the reason for not wanting to ask faculty questions, “Okay, I just, I've had trouble understanding some of the professors.” He explained that asking other students was the best use of his time because he just wanted his class time to be as useful and productive as possible and he believed the other students in class felt the same way.

Successful students also learned how to effectively take notes and read large amounts of material in limited time. Jean talked about her need to withdraw from the

nursing program the first time she enrolled and explained how the vast amounts of reading contributed to her need to withdraw, “our first lecture had like 12 chapters we had to read! It was about all these different nurses.” Since restarting the nursing program and successfully completing the first three semesters of the program, Jean learned that a key to her success is relying on her spouse to take care of the household during the semester and relying on “color coding things” when completing her notes. She explained how she uses a different color for different steps of the nursing process and different colors for different types of nursing interventions. This was the note-taking process that worked for her. Steve, on the other hand, could not do any color coding. He focused on maintaining a consistent study schedule and reading all assigned readings, despite working 24 hours per week on the overnight shift.

Self-Identification

The theme of self-identification was related to the code of student success and the sub-code of faculty effects on student success. These codes and this theme were related to the final research question, which asks “How do faculty student interactions affect student success in the nursing courses.” During the student interviews, it was apparent that one thing these students had in common was realizing when they did not understand something, they sought help. Responses included; “I’ll go to my instructor ask if I’m missing something,” “I definitely go see faculty after each test that I do, especially if it’s a grade that I’m not really satisfied with.,” “I didn’t really know these things that first semester so, and I wanted to be a good student, I wanted to do these things, but I just didn’t know how,” and “but it all falls back on the student, and the student needs to want

to use the professor. It falls back on that.” This behavior was also reported by most of the faculty during their interviews; “they have the ability to ask questions,” “the students that ask the most questions are usually the most successful,” “getting the students to be prepared for class also means that they're able to ask questions and that lets me know that they've read the book, or they've done their pre-exercises,” “they also tend to be the ones that come on time and regularly come to class. Also, they tend to be the students that read ahead, and they ask questions,” and “so, most of the time, because usually when a student takes the time to ask questions, they tend to have a better understanding of what is going on, in general.” In the evaluation comments, these responses were reinforced with the following statements; “the best simulation so far it was very conducive to learning and I did not always feel pressure to be correct—I felt it was okay to make mistakes,” “thank you to the professors who are always there to help, guide, and encourage me even when I lost hope,” and “the instructor is very patient which enhanced my learning as a nursing student.” Each of these comments supported the importance of student identifying when they needed help and seeking that help.

Student Resilience

The final theme, student resilience, was also related to the code of student success. This theme focused on how the successful student continues in the nursing program, no matter what. Jake talked about the difficulties in attending school and working full-time, plus doing volunteer work, and summed it up with the following:

Still having time to do what I need to do and get things done, you know sleep at night, go to the gym, little things like that. You know, see friends at school, and still have time to do school work all at the same time.

Jake completed the nursing program in May 2018 with induction to Alpha Delta Nu, the nursing honor society for CC nursing students, successfully completed the NCLEX. His plans include working at a local hospital while continuing his volunteer work. He is looking forward to having a “bit of a break over the summer.”

Dolly completed the nursing program in May 2018. While she attended MCC, she also attended courses to earn her Bachelor of Science in nursing (BSN) degree. MCC has an articulation agreement in place with a local university, and second-year students can opt to attend both MCC and the local university at the same time. Dolly reached out to MCC faculty when she experienced some writing difficulties for one of her university courses, but she stuck with it, and by the time she completed her nursing degree, she also completed four courses towards her BSN. Dolly should complete her BSN in the summer of 2019.

Jean repeatedly spoke about relying on her spouse for family duties, so she was able to focus on school, “I have my husband, he does the bulk of things with the kids right now... And yeah, I still have it in the back of my head, but he takes over a lot of it at home.” Jean withdrew from the nursing program during the first couple weeks of the first semester of the program in 2012. For her to return to the nursing program, she had to reapply, and retake her science courses because they were outdated. The impetus for her return to school was her children. She recalled the struggles she faced returning to school,

but she also recalled the encouragement she received from her children “my kids, they were like, Mom when are you going back to school? ...I wasn't thinking about going back to school. Then, I was thinking about it; the kids were the ones who got me thinking about it.” Jean returned to school, repeated science courses, and had to repeat the entrance exam to re-enter the nursing program. She did these things to become a nurse, and she completed the nursing program in December of 2018 after induction to Alpha Delta Nu.

Steve shared how becoming a nurse was a dream from when he was much younger. His nursing degree will be his second degree, his first degree is a degree in Mass Communications, which he earned about 30 years ago at a local university. During his interview, he recalled volunteering at the nursing home where his grandmother worked as a nurse.

I was interested in nursing right out of high school. But my dad would not pay for it; he did not think I could make a living as a nurse. And I wanted to go to school more than I wanted to fight him on that, so I went to school for mass communications.

Steve experienced difficulties while pursuing this degree and had to stop out for a semester when a family member fell ill. When he recounted the process to return to the program, he had a grin on his face as he stated, “Everyone was super helpful...you know administration really helped and got me right back in the program, I thought I was going to have to wait.” Steve completed the nursing program in May 2018 and successfully completed the NCLEX.

Lori talked about understanding how students find inconsistencies in nursing courses frustrating, but she has learned “when I’m tested as long as I don’t break certain rules like sterility and make sure I do calculations correctly...I haven’t failed.” Lori also discovered she learns best by sitting towards the front of the class “that way I can see and hear at the same time everything that the teacher is doing.” Lori reports being an auditory learner, and she said reading material is very difficult for her “and the way that we study is we talk about everything. That way as long as I hear things from somebody else, I’m basically okay.” Lori completed the nursing program in December 2018 and is preparing for her NCLEX.

During her interview, Samantha talked about how during the first semester of the program, she nearly failed because she and her infant both became ill and developed pneumonia. Her ability to complete the first nursing course despite having pneumonia led her to feel like, “okay I can do this I can do this” even though she had her doubts at the time. She recounted how hard she worked to earn a 75% in the course and explained that to make it through she “found a study buddy.” Samantha completed the nursing program in December 2018.

Kim is another student that experienced a rocky path getting through the nursing program. She failed the first nursing course by less than 0.5% so, “it was not quite high enough for me to pass the course. However, because I was so close to passing, I went ahead and applied for readmission.” She also explained how failing that first course was “a good thing” because she did not know everything she needed to know and “I felt like I could not do the right thing.” When she retook the course, she completed it and started

her second-semester courses. During her second semester, she experienced some personal issues, which led to her withdrawing from the courses. In order to return to the program, she had to write an appeal. The appeal was necessary because she was asking for the second readmission to the program. The appeal was granted, and Kim proceeded to complete her subsequent courses successfully. At the time of the interview, Kim was at the end of her third-semester courses and planned to complete the nursing program in December 2018. However, at the time of this writing, she was awaiting readmission to the nursing program.

Beverly finished all courses on her first attempt. Although she “did not do as good as maybe I should have,” she passed all courses on the first attempt, which makes her successful. Beverly works with several study groups, and wonders “how I would have done if I had gone (to a tutor) sooner.” Beverly explained that her confidence has grown since starting the nursing program, and said she felt as though now when she reads something, she “can understand it, but I’m not a reader by nature.” Although she has not earned an A in any of her courses, “I’m going to continue striving for that A because I want that, I want that A. It's not the A, it's the amount of work that I put into it I want it to reflect what I do.” Beverly completed the nursing program in May 2018 and successfully completed the NCLEX.

Sherry had an educational road like Kim in that she failed the first-semester course and had to repeat it. She did so and passed the course. Sherry then moved on to the second-semester courses, which she failed. Like Kim, she had to appeal in order to return to the nursing program. However, unlike Kim, Sherry had to first go through college

processes to get failing grades changed to withdrawals. Once done with that, she could appeal to the nursing program for the opportunity to repeat not one, but two courses. The appeal was granted, and she could repeat her second-semester courses. Multiple times during her interview, Sherry made statements of how “privileged she felt being able to repeat three courses” and how “blessed” she felt to be able to come back in the program again. Sherry genuinely seemed to recognize how being able to repeat three separate courses from beginning to end, after failing the three courses. Sherry took the opportunity presented and made the best of it by using all the resources she could. She visited faculty members regularly; she used the nursing tutors, she used NCLEX study books. She did everything she felt was within her power to ensure she would be successful through the rest of the program. Sherry completed the program in May 2018 and continues studying for her NCLEX.

Summary

In summary, the purpose of this qualitative case study was to determine faculty-related factors that lead to student success in the nursing program at Maryland Community College. Section two shared the findings of this qualitative case study through student and faculty interviews and document analysis. All participants in the study were agreeable to participating in the study and sharing their perspectives on how faculty affects student success in the nursing program. Many codes emerged during data analysis, and there were seven themes developed during data analysis. These themes demonstrated that faculty-related factors could have either positive and negative effects on student success in the nursing program. The themes included connections, new

experiences, learning experiences, faculty barriers, help-seeking behaviors, self-identification, and student resilience. Consequently, these themes demonstrated that although students have both positive and negative experiences while in pursuit of their nursing education, it is those students who take advantage of as many experiences as possible and utilize all possible resources available to them that become successful in their educational pursuits. I had each of the student participants define success as part of the interview process to determine what success means to them (see Appendix E). I learned that none of the students defined success by their grade alone. Instead, they defined success as feeling satisfied with their grade and with their ability to have done the best job possible.

The project for this research study will be PD workshop for the nursing program faculty and staff. This workshop will focus on strategies that can be implemented to improve critical thinking abilities of nursing students. The rationale for this PD goes back to the conceptual frameworks used for the study.

Tinto's model of student retention stresses the obligation of the institution to the student after the admission of the student (Tinto, 2012a). Students are successful because of interactions between faculty and students in the classroom (Tinto, 1998; Tinto, 2006), not just students' behavior. Therefore, it is essential the faculty work with the student to create an engaging environment for learning and students need to feel as though they can approach faculty.

Jeffreys' NURS model provides support to the PD aspect of helping students become more independent learners. One common characteristic most of the student

participants seemed to share was an ability to seek assistance when needed. Although these students were able to work independently, they still sought faculty assistance when necessary. However, they tried other resources first and relied on faculty as a last resort, rather than immediately going to the faculty. This process of being independent in learning shows an ability to problem solve and critically think that is an essential skill for nurses to have (Popil, 2011). According to faculty interviews this is a characteristic that struggling nursing students are missing, the ability to think critically.

Section 3: The Project

The purpose of this qualitative research was to determine faculty-related factors related to the success of students in the nursing program at a CC in Maryland. My objective in conducting this study was to enhance the understanding of what students perceive as affecting their success when enrolled in the nursing courses. I interviewed nine second-year nursing students and seven program faculty to learn their personal perspectives about factors related to student success. During these interviews, I learned there are many factors affecting the students' success. Student and faculty participants identified multiple faculty-related factors affecting student success at MCC. Most of the factors are not factors that faculty can contribute to. However, students attributed several factors to faculty. These factors, as discussed in previous sections, have led to the development of the following project.

The development of this workshop can address the problem of low program completion at MCC. I designed a 3-day PD workshop to assist nursing faculty and staff at MCC as they work with the nursing students to help the students improve critical thinking skills. This project is based on the findings of my research which showed the nursing students need assistance in developing critical thinking skills. Other nursing program educators can modify this workshop for use with their students to improve their program completion rates. Ultimately, this can lead to an increased number of nurse graduates being eligible to sit for the NCLEX-RN.

Description and Goals

The purpose of the 3-day PD workshop is to provide nursing program faculty and staff the opportunity to develop skills to help students develop and foster critical thinking skills. Goals of this workshop are (a) inform nurse educators how nursing students define success; (b) explain how critical thinking is related to student success; (c) present strategies educators can use in the classroom to assist students in developing critical thinking skills; and (d) present strategies educators can utilize in the clinical environment to assist students in developing clinical judgment. During the workshop, results from this study will be presented to workshop participants. Participants will also be presented with classroom and clinical strategies to foster critical thinking abilities in students. Participants will be afforded the opportunity to practice active learning strategies during the workshop.

During the 3-day workshop, active learning strategies will be presented to participants in a manner that demonstrates how the strategies are relevant to the successful nursing students. Another area for exploration during the workshop is research-based strategies that are effective in fostering critical thinking. At the conclusion of the workshop, nursing faculty and staff will have gained greater knowledge about critical thinking. Faculty and staff will have gained skills for use with students in both classroom and clinical settings.

Rationale

After faculty learn of students' perceptions of what influences their success, faculty can reflect and work together to develop strategies to improve student

experiences. Although many of the experiences relayed by the students were not faculty-related, there were several experiences directly linked to faculty. When faculty work together to develop strategies to improve student success, more students can be successful in the nursing program, which in turn leads to more graduates becoming nurses to offset the pending nursing shortage.

Benner et al., (2010) recommend faculty development, so faculty can develop teaching strategies and for curriculum development. It is necessary for faculty of nursing programs to hone their skills in nursing, but also hone their knowledge, skills, and abilities in andragogy. Benner et al. supported this belief by stating, “In any field, excellent teaching requires critical reflection, continuous learning, the capacity to change and to question change, and ongoing development” (p. 241). This workshop is being provided at the college where the research was done and is based on the research findings and best practices in education.

The analysis of data in Section 2 revealed that successful nursing students perceived multiple experiences influenced their success while enrolled in the nursing courses at MCC. The faculty interviews supported these findings, as did the review of document review. The faculty interviews provided insight to differences between successful students and struggling students, which was the impetus for the PD workshop. This workshop was designed to provide strategies for classroom and clinical that faculty can use to foster the development of students’ critical thinking and clinical judgment.

As a result of the workshop and implementation of changes, a positive influence on the nursing program could occur at this Maryland CC. These changes may lead to

improved student performance not only in program courses, but also improved student performance on the licensure exam. As these changes are to improve critical thinking skills of nursing students, the newly graduated nurse should have improved competence demonstrating an ability to provide safe, quality care to clients in the health care setting.

Review of the Literature

In this literature review, literature is presented related to PD and the study outcomes, specifically critical thinking. The literature review focused on the development and design of a PD workshop, as well as strategies to improve students' critical thinking skills. A well-designed PD workshop focuses on content, includes active learning, supports collaboration between participants, demonstrates evidence-based practices, provides coaching and support, offers feedback and reflection, and is of a sustained duration (Darling-Hammond, Hyler, & Gardner, 2017). The data analysis in Section 2 suggested that what nursing students need most to improve their success is improving critical thinking skills in both the classroom and clinical settings.

The literature review focused on these critical components: professional development, critical thinking, clinical judgment, critical thinking and clinical judgment in nursing, and how to improve critical thinking in nursing. The information provided in the review of the literature offers evidence supporting a PD workshop as this project and provides support to innovative methods to improve critical thinking and clinical judgment of nursing students. The literature review used multiple research databases and focused on articles published within the past 5 years. ERIC, Education Source, Sage Journals, ProQuest, CINAHL, Academic Search Complete, and the NDLTD are the databases used

for the literature review. Review of articles occurred if the article was published within the past 5 years and the article was peer-reviewed. Inclusion of classic articles occurred if they produced value to the work. Words to complete the search included *critical thinking, student success, professional development, teacher development, teacher preparation, student learning, concept maps, simulation, and academic achievement*. Some searches included the Boolean “AND” such as; *critical thinking AND student success, student success AND academic achievement, teacher preparation AND student learning, and professional development AND teacher development*. Saturation occurred as demonstrated by the inability to identify additional articles in the content area at the time of the search. Articles reviewed were found within the disciplines of education and nursing as well as outside of the disciplines.

Definition and Purpose of Professional Development

PD is defined as “structured professional learning that results in changes in teacher practices and improvements in student learning outcomes” (Darling-Hammond et al., 2017, p. v). The purpose of PD is to allow faculty to learn what is and is not working in others’ classrooms and have opportunities to “learn, practice, and reflect upon a repertoire of teaching strategies and skills” (Rutz, Condon, Iverson, Manduca, & Willett, 2012, p. 41). Snyder and Bristol (2015) described PD as essential for educators at different stages of their careers that is readily available and of high quality, so students can learn well. According to Darling-Hammond et al. (2017), there are seven features of successful PD and it is essential for PD to have most of these traits to be effective.

Effective PD is content focused, incorporates active learning, supports collaboration, it provides a practical model for examples, provides coaching, encourages collaboration, and is of adequate length (Darling-Hammond et al., 2016; Darling-Hammond et al., 2017). PD that is content focused means the curriculum of the PD supports teacher learning within their classrooms and looks at what the PD participants are teaching (Darling-Hammond et al., 2017). This means the PD is focused on the specific content for the teachers and is customized for the participants rather than being one size fits all. Incorporation of active learning means it provides opportunities for the participants to practice strategies they are learning so they do not merely add new strategies over old strategies. Instead they can “transform their teaching methodology” (Darling-Hammond et al., 2017, p. 7). PD that supports collaboration provides opportunities for participants to work together to “grapple with issues related to new content and instructional practices” (Darling-Hammond et al., 2016, p. 37). Effective PD focuses content the participants need and provides opportunities for the participants to collaborate with each other by practicing active learning strategies.

According to Darling-Hammond et al. (2017) effective PD provides participants an opportunity to reflect on professional practices, with adequate time that allows practice of new strategies, and reflection, with modification of the new strategies. By providing a practice model, the PD workshop encourages participants to discuss personal difficulties in a nonthreatening environment to improve teaching practices. This leads to the next two traits of coaching and reflection. Participants are provided suggestions for improvement in practice through coaching sessions with other participants. They are also

provided suggestions for improvement through practicing strategies with others. The workshop will provide time for participants to reflect on their teaching practices so the participants can determine which of the new practices have proven effective and which have not. Effective PD provides opportunities for the participants to share experiences and expertise (Darling-Hammond et al., 2017) with others. As each of these techniques are a component of effective PD, it is important for PD to include several of these techniques in a methodical manner for the PD to be effective.

Rutz et al. (2012) found connections when faculty participated in more PD leading to improved teaching thus improving student outcomes. Darling-Hammond, Wilhoit, and Pittenger (2014) discussed the importance of a well-prepared educator to ensure adequacy of education of all students. A component to this discussion is the need for adequate PD to maintain the ability of educators to provide superior education to students (Darling-Hammond et al., 2014). A purpose of PD is to allow faculty to learn what is and is not working in others' classrooms and have opportunities to "learn, practice, and reflect upon a repertoire of teaching strategies and skills" (Rutz et al., 2012, p. 41). The more faculty reflect upon their practices, the more involved they become in how they teach. This leads to greater success for students because the faculty become vested in their students' success (Rutz et al., 2012). Well prepared, reflective educators can lead to improved success for students.

To be most effective though, PD must be valued not only by the faculty, but also by the institution, otherwise the faculty become disheartened. Institutions should focus on the local needs of faculty such as teaching and learning but must also provide more

global opportunities such as how faculty can disseminate information gleaned from PD (Rutz et al., 2012). When faculty feel their PD needs are valued by the institution, faculty become interested in disseminating their knowledge to others.

As an educator transitions from learning to teaching, it is important to remember the educator has just become an educator. “A strong preparation is just the beginning of career-long growth and development. Such growth and development, however, looks different and requires different approaches for teachers at different stages of their career” (Snyder & Bristol, 2015, p. 16). PD needs change as teachers move through their careers, simply because initially faculty do not have experiences to reflect on. Instead, faculty rely heavily on education to help them know how to meet the needs of their students (Snyder & Bristol, 2015). Over time, faculty have experiences to reflect on as they continue “to develop the knowledge and skills of all educators throughout their careers through readily available, high-quality professional learning opportunities” (Snyder & Bristol, 2015, p. 16). These PD opportunities need to focus on content, but also needs to focus on teaching strategies and other aspects of teaching such as communication and problem solving to meet the varied needs of educators at different points in their careers.

Critical thinking does not occur in isolation, instead it occurs in conjunction with excellent communication, writing, problem solving, and an ability to collaborate (Paul, 1993). Teachers need ongoing staff development opportunities over extended periods to reflect on their thinking and the standards used in order to meet the needs of students best. This fosters the growth of the teachers’ ability to work with students and help the students develop critical thinking abilities. If students are to learn well and develop a love

of learning, their teachers must know them well. Additionally, their teachers must know the content and skills that are expected of the students. Teachers must also be able to provide learning experiences that are conducive to learning (Snyder & Bristol, 2015). As teachers provide valuable learning experiences and demonstrate knowledge of content, students can develop their critical thinking abilities.

This section has provided a definition and explanation of PD and explained why PD is essential for faculty. I also discussed characteristics of effective PD. In the next section, I discuss critical thinking.

Definition of Critical Thinking

According to Paul and Elder (2006), “Critical thinking is self-directed, self-disciplined, self-monitored, and self-corrective thinking. It entails effective communication and problem-solving abilities” (p. xxiii). In nursing, critical thinking is connected to clinical reasoning, clinical judgment, and safe patient care (Crouch, 2015; Tanner, 2006). Critical thinking is said to include reflections on beliefs and engage skills of analysis and interpretation (Profetto-McGrath, 2005). Paul (1993) said that teachers must foster students’ critical thinking by ensuring students use reasoning and evidence, not just assertion when providing answers.

Thought is necessary for learning; therefore, content is understood by figuring out the correct way to think something through, in other words, to learn a concept (Paul & Elder, 2007). It is necessary to accurately learn the content related to the concepts and the concepts related to the content. It is not possible to learn one in isolation from the other and it is ineffective to deep learning to take random notes or to cram the night before quiz

or exam. Educators must model effective critical thinking, so students can learn how to become effective critical thinkers (Raymond, Profetto-McGrath, Myrick, & Streat, 2018; Sullivan, 2012). To do this, faculty should allow students to see how faculty problem solve and provide opportunities for the students to question how the solution was developed, as providing rationales is a component to critical thinking (Paul, 1993). This provides students the opportunity to learn how examining their thoughts, questioning and pursuing their beliefs based on the facts they discovered are all components to critical thinking (Paul, 1993). This also allows students opportunities to learn that when their beliefs do not hold up to scrutiny, they must then evaluate the results and try a different approach (Paul, 1993; Profetto-McGrath, 2005). “If a person is able to think critically but is not willing to use thinking skills, he or she is not a critical thinker” (Zhang et al., 2017, p. 195). Educators need to model behaviors they expect students to adopt to help students learn the expected behaviors. This includes critical thinking.

Tanner (2006) called critical thinking the basis for clinical reasoning and clinical judgment, both of which are needed by nurses. Tanner (2006) defined the process as noticing, interpreting, responding, and reflecting. Noticing occurs when the nurse observes a difference in a patient’s given response to stimuli compared to an expected response to said stimuli (Tanner, 2006). Interpretation and response occur based on the nurse’s ability to notice the change in the patient (Tanner, 2006). If the nurse does not immediately notice the change or is unable to interpret the change as being cause for concern, the response will be different than if the nurse noticed the change and interpreted the change correctly (Tanner, 2006). Reflection occurs either in action such as

how patient is responding or on action as in how the nurse responded and can change actions in the future (Tanner, 2006). Critical thinking, clinical reasoning, and clinical judgment are related to each other and are necessary for nurses to provide safe, competent care to patients. If a nurse is unable to accurately notice and interpret a change in a patient's condition, the nurse cannot respond to the change in patient condition.

Definition and Purpose of Clinical Judgment

Nursing clinical judgment (NCJ) is an essential skill for nurses to have. It is not an easily defined term though, there are many definitions and it is a difficult skill to measure in an assessment (Muntean, 2012). The reason for the difficulty in measuring NCJ is due to how it develops. NCJ is a composite of both intellectual and observational skills and includes having the physical skills to follow through on the observations made (Dickison et al., 2016; Muntean, 2012). Clinical judgment develops as one has exposure to more experiences. "However, the beginning nurse must reason things through analytically; he or she must learn how to recognize a situation in which a particular aspect of theoretical knowledge applies" (Tanner, 2006, p. 206). If this is true of beginning nurses, then this is also true of nursing students and nurse graduates, they are still reasoning through situations.

In 2015, Muntean proposed a model that included cue recognition, hypothesis generation, hypothesis judgment, hypothesis action, and outcome evaluation (Dickison et al., 2016). This model focused NCJ not only as an "information processing system" (Dickison et al., 2016, p 3), but also looks at when information is received and the order in which the information is processed. The importance of this model to critical thinking

for nursing programs cannot be overstated as the NCSBN has adopted the model for upcoming changes to the NCLEX. In the model, cognitive factors look at the intellectual components of nursing. The contextual factors look at difficulty, distractions, and interruptions (Grossenbacher & Kappel, 2018). The contextual factors are the parts of nursing that make nursing courses difficult for students. As such, it is essential for nursing programs to teach both the cognitive and contextual aspects of nursing (Grossenbacher & Kappel, 2018). The cognitive component is natural and not new to nursing. However, teaching the contextual part, teaching the students how to look at a clinical situation and recognize the cognitive factors even with the contextual pieces, that is what is new to nursing education (Grossenbacher & Kappel, 2018). This is the direction the NCLEX is headed, which means nursing programs must prepare their students for this new NCLEX (Grossenbacher & Kappel, 2018).

The NCLEX measures critical thinking skills and problem-solving abilities of graduate nurses. If a graduate nurse fails the NCLEX, there is a financial burden to the graduate (Kaddoura, Van Dyke, & Yang, 2017). When a graduate fails the NCLEX, there is a risk to the nursing program and there is a loss to the nursing profession (Kaddoura et al., 2017), as well as loss to the graduate. There is no specific definition of critical thinking in nursing; however, critical thinking is composed of, and is the basis of, multiple skills including clinical judgment, clinical decision making, and problem solving (Dickison et al., 2016; Sullivan, 2012; Tanner, 2006). The complexity of critical thinking in nursing is evident in it being composed of but also the basis of multiple skills crucial to nursing care.

Importance of Critical Thinking to Nursing

Critical thinking is essential as a nurse because it is the basis for clinical judgment (Dickison et al., 2016; Tanner, 2006). Nursing students must be able to use and develop their critical thinking skills to provide safe and competent care. Registered nurses have “roles in health promotion, illness prevention, and the care of patients with acute and chronic illness” (Crouch, 2015, p. 45). If critical thinking skills can be predicted a student with poor skills can be helped early rather than later (Crouch, 2015). This means students at risk of either course or program failure could be provided resources earlier than currently occurs for many programs. If this were done, it could lead to decreased attrition for programs and could lead to increased numbers of graduate nurses eligible to take the NCLEX.

A direct result of being able to think critically is increased nursing competence. Teaching strategies for nursing students need to encourage practice and continued development of critical thinking skills to improve competence of nursing students. Nurses have a duty to maintain the safety of their patients, they do this by being competent in the care they provide which includes being a competent critical thinker (Tanner, 2006; Von Colln-Appling & Guiliano, 2017). Nurse educators believe critical thinking is a part of developing a student’s ability for success in nursing (Burrell, 2014; Papathanasiou, Kleisiaris, Fradelos, Kakou, & Kourkouta, 2014). There are many pieces to critical thinking including the acquisition, application, and analysis of knowledge; decision making; and reflecting on not only the decisions made, but on the thought processes that occurred (Tanner, 2006). Nursing students have background knowledge in various

disciplines to start the critical thinking process, however, analysis of clinical scenarios is essential to the provision of safe and competent nursing care (Popil, 2011; Von Colln-Applying & Guiliano, 2017). It is this provision of varied learning experiences that allows the student to become an independent critical thinker (Paul, 1993; Von Colln-Applying & Guiliano, 2017). As nursing students continue in their nursing courses, the students have more opportunities to apply what is being learned to clinical situations. These clinical applications help in the development of critical thinking skills for nursing students.

Ways to improve critical thinking. Critical thinking and clinical judgment have been researched extensively. This portion of the literature review examines some research-based methods of improving critical thinking and clinical judgment. Each of the methods focuses on promoting an environment that promotes critical thinking, which also promotes clinical judgment. As students develop their critical thinking and clinical judgment skills, they can approach learning in a more profound manner, rather than the shallow learning that occurs with memorization.

Reflection. Reflection is an active process that involves looking at yourself and the environment to gain a better understanding of self. This is crucial to critical thinking; in the classroom activities can include having students review their thoughts and beliefs about various aspects they are likely to encounter in nursing such as religion and cultural values (Burrell, 2014). Reflection allows students to connect thoughts to actions as analysis occurs (Kaur, 2017). Through analysis of thoughts students improve in critical thinking abilities because they reflect to connect thinking and actions.

Critical thinking is more than just thinking skills, critical thinking is “cognitive skills and an affective disposition” (Zhang et al., 2017, p. 195). In looking at the emotional aspects of clinical, reflective journaling can be an effective method to provide students a place to look back on their clinical experiences and examine what went well, but also areas of clinical that did not go well. “If a person is able to think critically but is not willing to use thinking skills, they are not a critical thinker” (Zhang et al., 2017, p. 195). Using reflective journaling can help with the development of the affective disposition because students must think about the nursing interventions being used, the rationales for the interventions, the patient’s response to the interventions, and any changes for future similar situations that could improve outcomes (Kaur, 2017; Zhang et al., 2017). In order to adequately implement reflective journaling, it is essential that both faculty and students are trained in reflective journaling techniques (Zhang et al., 2017). This journaling method promotes clinical judgment as described by Tanner (2006) by providing students an opportunity to notice and interpret a given scenario, then intervene and reflect on the response of the patient.

Socratic questioning. Questioning provides an opportunity for students to evaluate possibilities while searching for answers and provides an opportunity to examine complex issues. Socratic questioning specifically provides an opportunity to exchange ideas and perspectives that allows students to provide rationales for their responses. In Socratic questioning, faculty seek more information from students than students may have prepared for; this is okay as the faculty are prepared with questions designed to prompt thought and discussion rather than quick or easy answers (Burrell, 2014). Socratic

questioning is a systematic and disciplined method of questioning that seeks further information (Paul & Elder, 2007). The use of Socratic questions allows faculty the opportunity to assess students' knowledge base in manner that helps provide clarity of content to students.

Socratic questioning is useful when the question and answer investigate beneath the surface of a specified problem. This type of questioning is also useful when looking for consequences or investigating multiple points of view (Papathanasiou et al., 2014). Faculty may use Socratic questioning when students provide a response that does not make sense rather than correcting what was said (Paul & Elder, 2008). Socratic questioning can also be utilized to assess thought processes of the participants since questions may ask for participants' rationale, which has the student providing evidence of why the response they provided is correct, but it also has the student think about how they developed the response.

Critical reading. The goal in teaching college students how to read critically is to teach them the importance of questioning what is read instead of taking it at face value (Elder & Paul, 2004b). To understand the importance of reading to critical thinking, Paul (1993) said students' critical thinking can be fostered by teachers when students use reasoning and evidence to provide answers. This means the student needs to understand what was read, but the student also must be able to relate what was read today to readings from last month. To understand textbook readings, start with the introductory chapter, then move to individual chapters, making sure to relate the parts to the whole (Paul & Elder, 2004). Students should be able to summarize readings in their own words, then

provide an example of some sort describing what was read (Elder & Paul, 2004b).

Reading critically is crucial to critical thinking and initial steps to helping students with critical reading is to help ensure students comprehend what is read.

Something faculty can do to help students learn how to read critically is to model the practice by reading aloud in class. As you read, explain what is understood of the reading and what needs additional reading in order to understand the passage (Elder & Paul, 2008). Students want faculty to provide examples when possible to emulate faculty (Erlam, Smythe, & Wright-St. Clair, 2018). This method can be done with any course to help students learn how to work through this process. As students become more proficient with critical reading, fewer examples should be needed from faculty because students should understand the process and be capable of completing the process independently.

When teaching students how to read critically it is essential to remind them to connect prior learning such as math, science, or general studies to their current learning based on core ideas and concepts (Paul & Elder, 2003) as this helps them improve their critical thinking. It is also vital to stress having a goal or a purpose in mind when reading. The purpose should be more than finishing a set number of pages or chapters. Instead, the purpose should relate to something about what should be accomplished by reading the specified pages (Elder & Paul, 2004a). Reading is essential to critical thinking because if students are unable to connect what was previously read to what is read now, they are not able to think about why they are reading the information.

Problem-based learning (PBL) and clinical case discussions. Group work can be

used in a multitude of ways to facilitate nursing students' critical thinking skills and enhance the learning motivations of students. To use small groups, faculty are turning to problem-based learning strategies and clinical case scenarios such as unfolding case studies (Costello, 2017; Popil, 2011). The use of case-based learning fostered the development of critical thinking skills of students (Kaddoura, 2011) whereas case studies with students worked in small groups to answer questions about a clinical scenario were found effective at improving student test scores (Gibbs et al., 2014). Both techniques are examples of times when faculty utilized a "flipped classroom" (Costello, 2017, p. 212) method of teaching in which students are expected to read materials, watch videos, and/or watch a pre-recorded lecture prior to coming to class (Costello, 2017). When students prepare for a class that has been flipped, they prepare ahead of class by taking specific notes focused on the class outcomes and these preparations are guided by the faculty (Bristol, 2014). Once students come to class, they participate in various class activities developed by course faculty to foster development of critical thinking and clinical judgment abilities (Bristol, 2014; Costello, 2017). In both PBL and case-based learning, students are provided with real life scenarios while working in groups of five to six. The groups are responding to questions provided by the faculty (Costello, 2017; Gibbs et al., 2014; Kaddoura, 2011). While students are working in small groups, faculty walk around the room answering questions of students and ensuring students are engaged (Costello, 2017; Popil, 2011). At the end of the session, faculty should provide a summary of the day's activities and ensure students have the correct answers (Kaddoura, 2011). PBL and case-based learning sessions in the classroom have been found effective when students

work in small groups in the classroom setting.

Utilization of PBL or case-based learning does not exclude Socratic questioning in teaching methods. Instead, these teaching strategies are used together as faculty seek clarification of student responses to the presented cases. Critical thinking and clinical judgment are both attributes of nursing competence. The attributes increase the longer a nurse is in practice (Chang, Chang, Kuo, Yang, & Chou, 2011; Kaddoura et al., 2017). In nursing, the recognition of a problem, be it a change in patient condition or an issue on the department, occurs because of sound critical thinking abilities. The use of clinical judgment includes determining the problem, evaluating possible solutions, and acting to solve the problem.

Ways to improve clinical judgment. The previously mentioned methods to improve critical thinking are focused primarily in classroom teaching. However, nursing students have two environments where learning occurs, which means they have two environments in which they must demonstrate critical thinking. For the critical thinking that occurs in the clinical setting, the term clinical judgment will be used to help keep matters clear regarding the learning environment. However, it is important to remember that ultimately, the goal is for students to have critical thinking that develops into clinical judgment, so they can demonstrate an ability to provide safe and competent nursing care to patients. Some methods, such as reflection and Socratic questioning can be used in both classroom and clinical settings. Clinical educators are frequently hired for clinical expertise but may not have teaching experience. This means these educators need mentoring in how to teach. The following strategies are not used in isolation, instead they

should be used to supplement other strategies to improve the critical thinking and/or clinical judgment of students.

Concept maps. Clinical or concept maps are used in both classroom and clinical settings to help conceptualize disease processes. When used in the classroom setting, concept maps can be an activity as part of the flipped classroom (Bristol, 2014). The use of these maps helps students visualize connections between various aspects of disease processes and the provision of nursing care, which fosters development of clinical judgment (Biniiecki & Conceição, 2016; Nelson, 2017). As students develop clinical judgment, their ability to provide safe, competent care to patients increases because students can make safe decisions regarding the care needed about various disease processes.

Clinical experiences. Faculty are responsible for ensuring students have a rich and varied clinical experience throughout their time in school because clinical experiences are essential to the development of clinical judgment. Role modeling is important not only by classroom faculty, but also by clinical educators because students must witness how critical thinking and clinical judgment occur in the clinical setting (Sullivan, 2012) to develop it themselves. There is a relationship between faculty and students in clinical settings that is a partnership. If the partnership becomes strained by either the faculty or student, the student's ability to further develop critical thinking skills in that clinical experience is damaged (Raymond et al., 2018). When students are not able to model the behaviors of their clinical faculty, the students can have difficulty transitioning to the role of a new nurse.

Many nursing programs utilize simulated patient care experiences as a component of clinical experiences. Depending on the technology available these simulations may be low or high fidelity. Simulation occurs when conditions are created to resemble authentic situations (Bussard, 2017). The NCSBN studied the effectiveness of substituting up to 50% of clinical experiences with simulation and found no significant differences among the study groups for “comprehensive nursing knowledge, preceptor and clinical instructor ratings of clinical competency, and NCLEX pass rates” (Hayden et al., 2014, p. 28). Simulation is utilized as a method of increasing students’ critical thinking by increasing students’ abilities to manage care of acute care patients such as those care for in the clinical settings (Czekanski, Mingo, & Piper, 2018). Not only does the experience of simulation provide the opportunity to improve clinical judgment, but the post-simulation debrief also encourages the development of clinical judgment (Bussard, 2017). When students participate in simulation and debrief activities, they have opportunities to increase critical thinking and clinical judgment.

A well devised simulation provides students with a realistic, but high-risk clinical experience in a safe environment (Gibbs et al., 2014). The simulation should then go into a debrief period during which students can reflect on actions taken during the simulation and receive immediate feedback from both faculty and other students regarding the simulated experience (Bussard, 2017). These are two aspects of simulation that separates it from the hospital setting experience; students receive feedback immediately after performance and the feedback is received from both faculty and other students. The next

section includes a description of the project, its goals, and the potential resources for and barriers to implementing the project.

Project Description

The goal of nursing programs is to graduate students who are eligible to take the NCLEX. The NCSBN (2018) defines critical thinking as “skill in using logic and reasoning to identify the strengths and weaknesses of alternative health care solutions, conclusions or approaches to clinical or practice problems” (p. 9). Clinical judgment is defined by the NCSBN (2018) as:

skill in recognizing cues about a clinical situation, generating and weighing hypothesis, taking action and evaluating outcomes for the purpose of arriving at a satisfactory clinical outcome. Clinical judgment is the observed outcome of two unobserved underlying mental processes, critical thinking and decision making (p. 9).

This means the goal of nursing programs is to graduate students that can demonstrate an ability to satisfactorily recognize significant clinical scenarios and respond in a manner to provide safe care to clients.

According to the United States Department of Labor (2015b), the projected need for registered nurses will continue to grow substantially through 2026 with the demand outpacing the supply. Therefore, nurse educators need to ensure students completing nursing programs have with the necessary skills to complete the nursing program, then take and pass the NCLEX. Based on the findings of this study, the proposed PD

workshop will address strategies to improve the critical thinking skills of students from the beginning of the nursing program through the entire program.

To achieve the purpose of my study, I chose a PD workshop to guide nurse educators and staff on the development and advancement of students' critical thinking abilities. This workshop will provide an opportunity for them to learn strategies to help students improve their critical thinking abilities. In nurse education, faculty are hired based on their nursing expertise and education. The role of nurse faculty is evolving; however, the education of the faculty has not changed at a rate to keep up with these changes (Fisher, 2016). This PD workshop was developed based on the needs of students and faculty alike.

Potential Resources and Existing Supports

To be successful, this workshop needs faculty interested in learning the available information. This workshop also needs adequate space to accommodate the number of participants. The nursing program at MCC has classrooms of various sizes at its disposal. The size of classroom needed depends on the total number of participants since all full-time faculty would be required to attend, but part-time faculty, nursing skills' laboratory staff, and program administration would be invited to participate in the workshop as well. Some of the activities such as coaching sessions and collaborations require small group work (Darling-Hammond et al., 2017), which means the size of the classroom needs to facilitate group work. Other potential resources and existing supports include classroom technologies, the availability of audio-visual support personnel, and the availability of a division survey monkey account could be utilized to collect evaluations from participants.

Potential Challenges and Solutions to Challenges

To provide effective PD, it is necessary to focus on the needs of the participants (Darling-Hammond et al., 2017; Snyder & Bristol, 2015). However, the environment in which the PD occurs must be conducive to learning, there needs to be adequate time, space, and supplies for practicing the techniques learned, administration should support the PD, and faculty should be interested in the PD that is offered (Darling-Hammond et al., 2017). For MCC, some of these challenges, such as the support of administration and faculty interest are easy to overcome because in recent months there has been a decrease in first-time NCLEX pass rates. This means both administration and faculty are open to new ideas.

A challenge to overcome for this program is timing of the workshop. Currently, the faculty of the program are preparing for a re-accreditation visit that occurs in October 2019. Since the program offers a variety of entry points to students and there are both day and evening courses in all academic semesters, the timing of any meeting is an issue. Ideally, this workshop would be offered over the course of a semester, meeting once a month for three months. This time period was selected to provide faculty the opportunity to practice various teaching strategies in the classroom after learning about the strategies in the workshop.

The issue with meeting in this manner is all faculty are on different schedules once classes start meeting. One way to overcome this is to offer the workshop during the PD time provided at the start and end of each semester, then meet once around the middle of the semester. This provides an opportunity for faculty to implement strategies in the

classroom and reflect on the usefulness of the strategies implemented. This provides faculty an opportunity to become immersed in the strategies while in the classroom, which helps them learn the techniques where the techniques will be implemented (Darling-Hammond, 2006; Darling-Hammond et al., 2017). In timing the first and last meetings during PD times the college already has scheduled, it is possible to overcome scheduling conflicts that occur when program faculty are on different schedules. The timing of the meeting for the middle of the semester would n

Proposal for Implementation and Timetable

The implementation of this workshop would be best over the summer because there are only a few nursing courses held during that time. However, many of the faculty are 10-month employees and do not work over the summer months. Therefore, it is necessary to initiate this workshop during the academic year. However, the exact timing of the workshop would be planned with administration of the nursing program after I have completed my doctoral program. The workshop dates would be scheduled well in advance, so faculty can plan accordingly so they can attend the workshops. Since the goal is to provide the workshop over the course of an academic semester, the initial meeting for participants could occur as the new academic year is starting in August, or as the spring semester is beginning in January. My intent is to engage the faculty with the provided information, so they are better equipped to help their students.

Roles and Responsibilities of Researcher

As the researcher, my responsibility has been to remain unbiased and present the findings of my research to the key stakeholders. The key stakeholders include program

administration, study participants, and program faculty. As researcher, I will also facilitate the workshop sessions. Therefore, it is essential I am fully prepared to present not only the results from the research, but also the workshop materials. I also must ensure the room is reserved for each workshop sessions. In planning the workshop, breaks were built into the workshop to account for the needs of participants. Time was also built into the workshop to account for participants to work on various activities and to ask questions. The participants will be responsible to participate during the workshop sessions. They will also be responsible to incorporate the strategies into their student interactions, so they are able to reflect on the effectiveness of the various strategies.

Project Evaluation

Evaluation of a project is crucial and an essential component of the project to help ensure effectiveness. According to Caffarella and Daffron (2013), evaluation can be either formative or summative, although both types of evaluations should be included in evaluation plans. Formative evaluations occur while the project is still occurring and provide an opportunity to ensure the session outcomes are met (Caffarella & Daffron, 2013). Summative evaluations occur at the end of an event and provide the opportunity to ensure overall outcomes were met (Caffarella & Daffron, 2013). Summative evaluations also provide an opportunity for changes to the project to be made, based on the feedback from participants regarding how the workshop or project went.

The design of this faculty development workshop lends itself to both formative and summative evaluations. Formative evaluations will be completed after each day's session via the division's survey monkey account. All participants will be sent an email

with the survey monkey questionnaire seeking feedback regarding the participants' achieving the day's outcomes. Qualitative feedback will also be sought regarding areas of improvement for the sessions. Since this PD is being offered over multiple sessions throughout the course of a semester, formative evaluation can be utilized to make changes to upcoming sessions based on participant feedback (Caffarella & Daffron, 2013). The sessions will not be scheduled on subsequent days. Instead there will be about one month between each session. This time frame provides the opportunity for modifications if necessary. This timeframe also provides participants an opportunity to practice strategies learned in previous sessions in the appropriate setting. In providing this opportunity for real-life application of knowledge acquired, the workshop follows best practices of PD and adult learning principles (Darling-Hammond et al., 2017). After the final workshop, participants will be sent a final survey monkey evaluation for a summative evaluation of the overall program. This feedback will then be utilized for future offerings of the workshop.

Implications Including Social Change

Local Community

The research participants provided insight into not only what affects nursing student success at this CC, but also how students define success. The perceptions of these successful students helped in the creation of a PD workshop for nursing faculty and staff members at the CC to help improve student completion. Social change can be improved through this project by exploring what students need and providing information that helps meet their needs. Improving faculty knowledge and training can have a positive effect on

student retention which can lead to improved student success. This study was designed for a CC in Maryland; however, it could meet the needs of other schools that want to increase their success rates.

Far Reaching

Although this study was designed to address the problem of low completion rates of a specific nursing program in Maryland, the idea of sharing the results with other schools is a possibility. While the specific results are not transferable, the essential components of the PD workshop could be utilized by other nursing programs looking to improve their completion rates. The growing need for nurses is a concern throughout the country (United States Department of Labor, 2015b). It is through the efforts of nurse educators around the country, the need of more nurses can be met.

Summary

Section 3 provided a description of and rationale for a faculty PD workshop as the final product for this product study. A comprehensive literature review was conducted that illustrated how the PD model and topics are suitable to address the problem of low completion rates the study site has experienced. I utilized a qualitative case study that explored the perceptions of successful nursing students regarding faculty-related factors affecting their success in the nursing program. The results of these interviews led to the development of the workshop described in section 3. A connection was made between the proposed project and social change that could affect stakeholders and faculty in the local community. In section 4, closing reflections about the project and the scholarly practice of the researcher are discussed.

Section 4: Reflections and Conclusions

This research study focused on successful students in a nursing program at a CC in Maryland to help improve the low program completion rates this program has experienced. Discussion includes strengths and limitations of the project, scholarship and leadership I developed by creating this project, the importance of this research, and future research directions.

Project Strengths and Limitations

One strength of this project is that it is interactive in nature. The workshop was not designed for participants to passively sit and listen while the facilitator stands at the front of the room talking for hours. Instead, the workshop was developed so as participants are learning the various methods to help in the development and fostering of critical thinking skills, the participants can practice the methods. This interactive design took into account that faculty and staff have different experiences they are bringing with them, which meant when developing the workshop sessions, it was important to include flexibility with timing. There are opportunities for discussions, and opportunities for sharing, as well as opportunities for asking questions and time for reflection.

Another strength of the project is that it will occur over an extended time. According to Darling-Hammond et al. (2017), PD needs to be long enough for transfer of learning to occur. The workshop will take place over three separate sessions, spanning about 3 months. This provides opportunities for participants to integrate strategies in the classroom and reflect on usefulness, then come back to the next session, share their experiences, and get feedback from other participants.

A final strength of this project comes from the participants in the research. The study site prides itself on its diverse student population. Although the number of student participants was small, it was a diverse group of students that represented the student population of the nursing program. Demographic data including traditional or nontraditional student status, race, and gender were collected from student participants at the time of their interview. I collected demographic data as part of the interview process, based on other responses students were giving such as; “I have a little brother I pick up from school and help him with his homework until my parents get home” or “Yeah, well, I have a degree. I went to college 30 years ago and I don’t remember working this hard just to get low Bs.” Table 4 shows the demographic characteristics of the student participants. Race determination was based on researcher observation of skin color only. Specific questions regarding demographics were not asked during the interview process as these questions were not relevant to the research, nor was demographic information a defining feature of the research. Instead, student participants were interviewed based on their academic merit; the student had to be in the second year of the nursing program and had to have at least a 2.5 GPA. These are the characteristics that defined the successful student for this study.

Table 4

Participant Demographic Information

Participant	T v/s NT	Semester in program	Gender	Race
Dolly	T	4 th	F	AA
Jean	NT	3 rd	F	C
Jake	NT	4 th	M	C
Steve	NT	4 th	M	C
Lori	NT	3 rd	F	H
Samantha	NT	3 rd	F	C
Kim	NT	3 rd	F	A
Beverly	NT	4 th	F	C
Sherry	NT	4 th	F	AA

Note. T means age <25, NT means age > 25; AA is African American, C is Caucasian, H is Hispanic, A is Asian.

Project Limitations

The most significant limitation associated with development of this project was associated with developing a faculty PD workshop that can be utilized by the institution. Administration at the institution have been supportive of development of the workshop; however, faculty need the time available to participate in the workshop. That is where the limitation occurs. The program is implementing a new curriculum, preparing for a reaccreditation visit, and must continue meeting day to day student needs. The faculty in the nursing program experienced the loss of several faculty over the last few years and

have been unable to fill these vacant positions. This too adds to the stresses the faculty in the program are experiencing.

Recommendations for Alternative Approaches

The workshop was designed so the 3 days can be completed independently of each other. Although it is not the ideal scenario, a possible solution is for faculty to attend the days they are able to, even if they are unable to attend the 3 full days of the PD. Another way the workshop can be provided is instead of 3 full days, 6 half-day sessions could be provided. A final option is to provide portions of the content in an alternate format the faculty can access on their own, prior to attending the workshops. This option would make use of video capture technologies the institution has available. During the workshop, participants could then focus on practicing techniques and asking questions. This final option would model how the program is currently teaching students, by using a flipped classroom methodology. All these options can be used to ensure faculty receive the necessary information of the PD workshops.

Scholarship, Project Development, and Leadership and Change

As a result of completing this project, I learned that the best scholarship is built on flexibility. Scholarship, as defined by ACEN (2018) is “activities that facilitate the enhancement of a nursing faculty member’s expertise and support the achievement of the end-of-program student learning outcomes and program outcomes. These include, but are not limited to, application of knowledge, teaching, service, practice, and research (p. 15). The creation of the faculty PD workshop is a great idea conceptually; however, the implementation may prove difficult due to the feasibility of getting all full-time nursing

faculty together for the workshop sessions. To help offset this, I have strived to provide alternatives to the plan for the workshop.

As I developed the plan for this research, I knew I wanted to do something that could ultimately help the program with attrition. However, I honestly had no idea what direction the research would take me. As a nursing faculty member at MCC, I was invested in creating a final deliverable that would help nursing students, and this deliverable does so by improving the knowledge of faculty.

Prior to developing this PD workshop, I had no experience developing educational materials, other than the materials for my nursing students. I was very intimidated initially because creating a multiday offering may sound simple conceptually, however, it was not something I had done previously. As I worked through the process, I found there were many details to address to make the project successful. As the project was developed, there were multiple times I had to complete additional research as part of the literature review to ensure adequate coverage of the topics. Through the development of this project, I have grown in scholarship, as defined by ACEN. In developing the final project of this research study, I have demonstrated an ability to apply knowledge, teaching, practice, and research, activities that enhance a nurse faculty member's expertise, to support program and student learning outcomes (see ACEN, 2018).

The ability to apply knowledge was demonstrated as I created the research study. I saw the problem of low program completion and wanted to develop a solution. To develop a solution required me to develop research abilities. I learned which database collections had the research most relevant to my study, when secondary resources were

appropriate to use, and how to determine peer-reviewed resources from non-peer-reviewed sources. I was a nurse first and an educator second which meant I had to leave my comfort zone many times to find the answers I was looking for. The nursing databases focused on the same strategies used by the program, and those strategies were not working with our students; I needed something different.

The journey of this doctoral study has helped me grow as a scholar, as a practitioner, and as a developer of faculty development. Through this journey, I have learned that leadership is about change and being willing to facilitate changes. The participant program experienced curricular changes over the past several years. Until this time, I never realized the length of time it took to change a program's curriculum. I have embraced these changes and have worked to be a leader of these changes, in large part because of the education from my doctoral journey. I recognized these changes were necessary because the program was not working for many students. The nursing program was not meeting the needs of the students, which meant that the needs of the profession were also not being met. MCC had low program completion rates, which meant the school was not meeting the needs of the profession. The nursing profession is heading into a shortage as more nurses near retirement age (Benner et al., 2010). Nurse education programs must work to offset this shortage by graduating safe and competent graduates that will pass the NCLEX-RN when they sit for the exam. At the same time, MCC was not meeting the expectations of the institution because the completion rates were low. Now that MCC has implemented the curriculum, it is up to me to get everyone on board with implementing it the way it was designed to be. This is part of being a leader, acting

as role model, even when others are resistant to change. In developing the PD workshop, I looked to integrate strategies that can be utilized with the new curriculum, that have been shown effective at improving student outcomes.

Leaders are those who embrace change and are willing to be role models for others. I must lead by example. If there are expectations of the rest of the faculty, I too must meet those expectations. By no means am I perfect. I recently had a discussion with my supervisor regarding leadership and personal growth. As a leader, personal growth happens, and it happens whether you are ready for it or not. Unfortunately, with that growth comes pain as you realize your current limitations. Pain does not mean failure, pain simply means growth and changes are happening.

Reflection on the Importance of the Work

This study is essential in many ways. Nursing programs struggle to ensure safe, competent students complete their programs. Once graduates complete nursing programs, they take the NCLEX, which changes every three years, based on a practice analysis. According to Dickison (2018), the NCSBN is currently reviewing how to better test graduates' clinical judgment including clinical scenarios, media scenarios, and constructed responses. As nursing programs prepare students for this next generation of NCLEX, it is essential that faculty help students develop critical thinking skills early in nursing programs (Dickison, 2018). Critical thinking is essential to the development of clinical reasoning and clinical judgment of nursing students and nurses.

As the project for this study, the faculty PD workshop delivers multiple positive outcomes. First, time and resources invested in MCC faculty will increase their

knowledge and skills in working with their students. Second, the workshop has been designed with the curricular changes in mind, which means faculty participants will have opportunities to practice teaching and learning strategies relevant not only to the workshop, but also strategies relevant to the newly implemented curriculum. The third positive outcome will be improved student outcomes because the workshop has been designed to ultimately improve student completion of the nursing program. A final positive outcome should be improved NCLEX pass rates, which should occur as students develop improved critical thinking skills, leading to improved clinical judgment.

Implications, Applications, and Directions for Future Research

The purpose of this study was to determine faculty-related factors leading to success of students in the nursing program at MCC to address the problem of low program completion. This study was unique in that it limited itself to faculty-related factors affecting success and it focused on successful nursing students at a CC in the second year of their nursing program. The findings from this study led to the development of a faculty PD workshop which will provide some of the study findings and discuss teaching and learning strategies faculty can implement in both classroom and clinical settings to improve student critical thinking skills.

Although the findings from this study are specific to the population of the nursing program at MCC, the faculty PD workshop can be utilized by other programs of study at MCC. Programs with less than ideal completion rates can utilize the teaching and learning strategies to improve critical thinking in students and these programs could see an improvement in completion rates.

Future research could look at other student populations such as first-year nursing students, or students with previous failures in the nursing program. Although this study had one student with a previous failure and two other students with readmission to the program due to personal reasons, these readmission students were not the focus of the study. Their inclusion in the participant pool was coincidental. Each of these students provided valuable insight into what helped them succeed as they continued in their studies, however, only one of them has been successful on the NCLEX to date. Of the other two, one had to stop out of the nursing program in the final nursing course, and the other was not successful on the NCLEX. All other student participants were successful on the NCLEX on the first attempt. In identifying factors that led to success of those students with readmission to the nursing program or those students in the first year of the nursing program, even more students could be positively affected. Another direction for future research could include resources utilized by students in the nursing program. This topic was only touched on by this study due to the vastness of the topic. However, researching the resources utilized by students could provide a better understanding of these resources and provide rationales for continuation or extending of specific resources, based on student use.

Summary

Section 4 allowed an opportunity to reflect on the strengths and limitations of this project study, the development of the project, as well my development as a scholar and leader. The implications and possibilities for future research based on this doctoral work were also discussed in section 4. The guiding research question for this project focused

on what faculty-related factors influence successful nursing students at the study site. Throughout the process of developing a research study, conducting the research, data analysis, multiple literature reviews, and the development of a PD workshop, I have focused on improving program completion by students. I anticipate achieving this as faculty work with the students to improve critical thinking, a key component to clinical judgment. As clinical judgment improves, not only should program completion improve, but NLCEX pass rates should improve as well.

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Appendix A: Professional Development Program

Title: Preparing our Students for Success

Purpose: The purpose of the project is to provide nursing faculty and staff the opportunity to develop skills to help students develop and foster critical thinking skills.

Goals: The goals of this workshop are: (a) inform nurse educators and staff how nursing students define success and explain how critical thinking is related to student success; (b) present strategies educators can utilize in the classroom to assist students in developing critical thinking skills; and (c) present strategies educators can utilize in the clinical environment to assist students in developing clinical judgement.

Desired Outcomes: The desired outcome is for nurse educators to integrate the strategies discussed, and activities demonstrated during the professional development into their classroom and clinical settings to improve program completion.

Target Audience: The target audience is nursing faculty, program administration including the Director of Nursing and the dean of the Health Sciences Division of the college, skills laboratory staff, and clinical faculty.

Timeline: A 3-day professional development workshop.

Training Activities and Presentations: During the 3-day workshop, active learning strategies will be presented in a manner that demonstrates how the strategies are relevant to successful nursing students. At the conclusion of the workshop, nursing faculty and staff will have gained greater knowledge about critical thinking and student success. Faculty and staff will have gained skills for use with students in both classroom and clinical settings.

**Professional Development Workshop Agenda
Day 1**

Time	Activity	Facilitator
9:00-9:15	Welcome	Rachael Farrell, EdD, RN, CNE
9:15-10:15	Background to research	Rachael Farrell, EdD, RN, CNE
10:15-10:30	Break	
10:30-12:00	Research results	Rachael Farrell, EdD, RN, CNE
12:00-1:00	Lunch	
1:00-2:30	Critical thinking	Rachael Farrell, EdD, RN, CNE
2:30-2:45	Break	
3:00-3:30	How are critical thinking and success related?	Rachael Farrell, EdD, RN, CNE
3:30-4:00	Day 1 review, Q&A	Rachael Farrell, EdD, RN, CNE

**Professional Development Workshop Agenda
Day 2**

Time	Activity	Facilitator
9:00-9:15	Recap of day 1	Rachael Farrell, EdD, RN, CNE
9:15-10:15	Importance of active learning in the classroom	Rachael Farrell, EdD, RN, CNE
10:15-10:30	Break	
10:30-12:15	Socratic questioning, group work	Rachael Farrell, EdD, RN, CNE
12:15-1:15	Lunch	
1:15-2:30	Peer teaching and other assessment methods	Rachael Farrell, EdD, RN, CNE
2:30-2:45	Break	
2:45-3:30	Bridging classroom to clinical	Rachael Farrell, EdD, RN, CNE
3:30-4:00	Day 2 review, Q&A	Rachael Farrell, EdD, RN, CNE

**Professional Development Workshop Agenda
Day 3**

Time	Activity	Facilitator
9:00-9:15	Recap of day 2	Rachael Farrell, EdD, RN, CNE
9:15-10:15	Critical thinking and clinical judgment	Rachael Farrell, EdD, RN, CNE
10:15-10:30	Break	
10:30-12:00	Role play & reflection	Rachael Farrell, EdD, RN, CNE
12:00-1:00	Lunch	
1:00-2:30	Simulation	Rachael Farrell, EdD, RN, CNE
2:30-2:45	Break	
2:45-3:30	Concept maps	Rachael Farrell, EdD, RN, CNE
3:30-4:00	Day 3 review, Q&A	Rachael Farrell, EdD, RN, CNE
4:00-4:15	Program Evaluation	

Professional Development Workshop Survey

Please complete this short survey.

Overall Evaluation	Excellent	Good	Fair	Poor
Workshop Quality				
Workshop Content				
Useful to my job				
Relevant to my job				
Workshop Outcomes	Strongly Agree	Agree	Disagree	Strongly Disagree
I learned strategies that will be useful to helping improve critical thinking of students				
I plan to implement the strategies I learned				
Presenter aligned the workshop outcomes with my professional needs				
Materials were useful and pertinent				
Opportunities to network and learn from colleagues were provided				

What assistance do you need to implement the strategies you learned today?

How do you believe the strategies you learned will influence student success?

Additional Comments:

PREPARING OUR STUDENTS FOR SUCCESS

A PROFESSIONAL DEVELOPMENT WORKSHOP FOR FACULTY AND STAFF

PROGRAM GOALS

The goals of this workshop are:

- A. Inform nurse educators and staff how nursing students define success and explain how critical thinking is related to student success;
- B. Present strategies educators can utilize in the classroom to assist students in developing critical thinking skills; and
- C. Present strategies educators can utilize in the clinical environment to assist students in developing clinical judgement.

DAY I LEARNING OUTCOMES

- By the end of today's session the participant will:
 - Discuss what success means to workshop participants while in small groups
 - Formulate teaching and learning strategies for use with nursing students to improve student success
 - Discuss what critical thinking means
 - Analyze how critical thinking skills are associated with success

WHAT WAS THE PROBLEM

- What are the faculty related factors that influence successful nursing students at our school?
- 9 second semester students were interviewed
- 7 FT faculty were interviewed
- Records reviewed
 - Course evaluations
 - Program evaluations

THINK-PAIR-SHARE



HOW DO YOU DEFINE SUCCESS?



WHAT CHARACTERISTICS DO YOU SEE IN OUR STUDENTS THAT ARE SUCCESSFUL?



WHAT BEHAVIORS DO YOU SEE IN SUCCESSFUL STUDENTS THAT YOU DO NOT OBSERVE IN STUDENTS THAT STRUGGLE?



WHAT CAN WE DO ABOUT IT?

STUDENT DEFINITIONS OF SUCCESS

- You're successful if you complete the program and you graduate.
- Success in school to me is not related to grades because I don't even have a 3.0 for my GPA. But it is the confidence that I've developed.
- Success has to encompass everything that you've done.
- Success means shifting my thinking to being present in the material when I'm reading and learning the material.
- I think success is just finishing what you set out to accomplish...But as long as I finish it, I'll still be successful.
- I think it's satisfaction with my grade, and as soon as I started nursing I realized that Bs are fine, I've been okay with that. I also think personal sanity is important too.
- Success is being able to apply what you've learned in class to clinical or to like a case study.
- You're successful if you complete the program and you graduate.
- I've maintained a B average throughout the whole program so far. There's been a lot of learning curves.

FACULTY THOUGHTS ABOUT SUCCESS



Barriers to success

Work and family responsibilities
Unprepared for class
Financial concerns



Behaviors of successful students

Ask questions in & out of class
Participate in class activities
Are confident in their abilities
Come to class prepared-complete readings & watch videos prior to class

WHAT WE CAN DO TO IMPROVE SUCCESS

- Get personal with students
- Exit interview
- Mentoring
- Robust remediation that is mandatory
- Detailed orientation sessions, study sessions, hands-on activities
- Require students to meet one-on-one with faculty



CRITICAL THINKING

- “Critical thinking is self-directed, self-disciplined, self-monitored, and self-corrective thinking....It entails effective communication and problem-solving abilities...” (Paul & Elder, 2006, p. xxiii)
- Not a single skill, rather a set of skills
- Needs development and fostering



THINK-PAIR-SHARE

NOW IT'S YOUR TURN, WHAT DOES
CRITICAL THINKING MEAN TO YOU?

DAY ONE REVIEW

- What was the problem
- Student definitions of success
- Faculty thoughts about success
- What we can do to improve success
- Critical thinking
- How critical thinking & success are related



ANY QUESTIONS?



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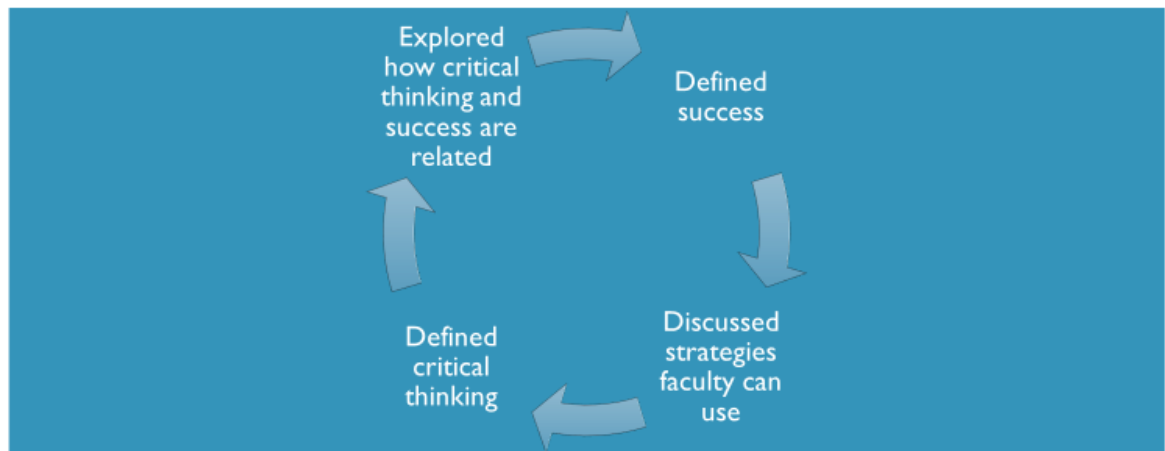
PREPARING OUR STUDENTS FOR SUCCESS

A PROFESSIONAL DEVELOPMENT WORKSHOP FOR FACULTY AND STAFF



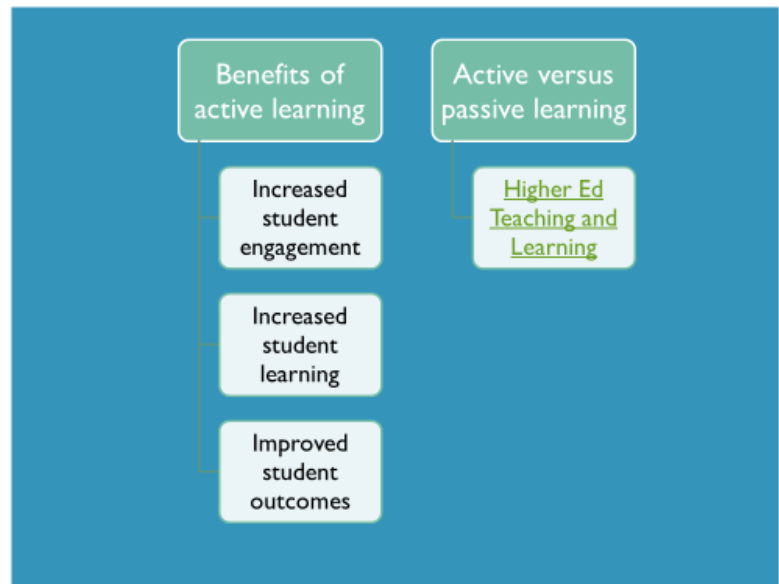
DAY 2 LEARNING OUTCOMES

- By the end of the day the participant will:
 - Review topics from day 1
 - Discuss Socratic questions and how to integrate this strategy in class
 - Collaborate in small groups to develop a role-play for use in class
 - Collaborate with peers to develop an unfolding case study for use in multiple class periods
 - Determine how to integrate student-developed quizzes in class
 - Discover how students are assessed in other courses



DAY 1 RECAP

DAY 2



LEARNING STRATEGIES FOR CRITICAL THINKING IN THE CLASSROOM

- Strategies to bring critical thinking to the classroom
 - Socratic questioning
 - Information seeking
 - Clarification
 - Investigation

IT'S YOUR TURN



- Now we're going to take a few minutes and I want you to share with your group the Socratic questions you might ask students

LEARNING STRATEGIES FOR CRITICAL THINKING IN THE CLASSROOM

Role play

- Improved comfort
- Increased confidence
- Improved critical thinking
- Roles may include
 - Healthcare providers
 - Nurse
 - Physician or Nurse practitioner
 - Other disciplines
 - Patient or family member

IT'S YOUR TURN

- Now we're going to take a few minutes and I want you to share with your group the topics you teach that would benefit from role playing

LEARNING STRATEGIES FOR CRITICAL THINKING IN THE CLASSROOM

- Group work
 - Unfolding case studies
 - Quiz creation



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IT'S YOUR TURN

- Now we're going to take a few minutes and I want you to share with your group topics you teach that could benefit from group work.



ASSESS CRITICAL THINKING



Peer teaching



Other assessment strategies

Written assignments
Simulation
Skills' competency
Alternate format items



CRITICAL THINKING TO CLINICAL JUDGMENT

DAY TWO IN REVIEW

- Importance of active learning
- Socratic questions
- Role play
- Group work
 - Unfolding case studies
 - Quizzes
- Peer teaching
- Other assessment strategies
- Bridging classroom to clinical





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ANY QUESTIONS?

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PREPARING OUR STUDENTS FOR SUCCESS

A PROFESSIONAL DEVELOPMENT WORKSHOP FOR FACULTY AND STAFF

DAY 3 LEARNING OUTCOMES

- By the end of the day the participant will:
 - Review topics from day 2
 - Determine how role play can be integrated into the clinical environment
 - Discuss how reflective writing influences clinical judgment
 - Discover ways to use simulation off site
 - Construct a concept map based on course content that could be utilized in clinical setting

DAY 2 RECAP



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Let's watch a
couple of video
clips to review
active learning
Eric Mazur
lecture hall

BRIDGE CLASSROOM AND CLINICAL



ROLE PLAY



REFLECTION



SIMULATION

CONCEPT/CLINICAL
MAPS

ROLE PLAY

Role play in clinical

- Improved communication between students and hospital staff
- Enjoyable form of learning
- Seen as story-telling by some
- Decreased role strain
- Decreased stress on caregivers when used by nurses with caregivers

IT'S YOUR TURN

NOW IT'S YOUR TURN. BUT FIRST, LET'S WATCH A QUICK EXAMPLE. [HAND OFF EXAMPLE](#)

BRAIN
STORM!
CHALLENGE

REFLECTION

Reflection is a component of critical thinking

- In action
- On action

Written reflection occurs via journal entries

Reflective writing improves over time

Reflection provides

- An opportunity to examine experiences
- An opportunity to examine prior learning with new perspective

SIMULATION

Augments teaching & learning process

Utilizes mannequins, models, or scenarios

Provides safe environment

Integrates multiple learning strategies



NOW IT'S YOUR TURN

- First, let's watch a quick video showing simulation and a skills review



CONCEPT MAP

- Provides visual representation
- Helps develop shared meaning
- Shows connections and relationships
- Fosters development of critical thinking
- Used in clinical or classroom setting

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IT'S YOUR TURN

- Now I want you to take some time and come up with a few concept maps that could be used in clinical with your students.



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DAY THREE IN REVIEW



ROLE PLAY



REFLECTION



SIMULATION



CONCEPT
MAPS



ANY
QUESTIONS?

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Appendix B: Faculty Interview Protocol

Welcome: Thank you for taking time to meet with me and answer some questions for my project study research.

Purpose: The purpose of my project revolves around exploring the academic and personal experiences of successful nursing students in our nursing program. Your role in this is to answer questions based on your observations. I sent the consent form to you via email, do you have any questions about the consent form? Remember, all responses will remain confidential, only you and I will know you are participating in this research, which is voluntary. The responses will only be used for the purposes of this project. The session will be recorded to ensure I am able to accurately analyze your responses and include direct quotes if appropriate. We can stop at any time, and you can withdraw your consent at any time.

Ground rules: There are no right or wrong answers. I want to know your thoughts and beliefs about the questions I have for you. If you're ready, we will get started with some background questions in which I am just going to ask about your qualifications to teach nursing. After that, I have questions regarding student behaviors you may have experienced in the educational setting. I also have a couple of questions about your perspectives regarding influences on student success. We'll finish with how you believe nursing faculty can best help students that are struggling in class.

Background Information

If you're ready let's get started by you telling me a little about yourself and your career as a faculty member and your experiences working with nursing students. For example: how long have you been teaching nursing students, what training have you received to teach nursing students?

1. Describe any personal skills/strengths that you use while working with nursing students.
2. What teaching methods you have used in the classroom? How do these methods effect the success of the students you teach? An example of classroom teaching method would be lecturing in front of the students.

Student Behaviors

3. What behaviors have you observed that affect nursing student success? For example, have you noticed that students that do poorly on an exam, then meet with faculty are more likely to improve scores on future exams?
4. What behaviors by successful students do you observe in the classroom that you do not observe in students that are not successful?
5. How often are you approached by students in need of assistance in understanding nursing content? To the best of your knowledge are these students usually successful or unsuccessful in the course you teach?

Influences & Resources

6. What do you believe is the school's responsibility to the student once that student has been admitted to the nursing program?
7. What resources are you aware of that nursing students utilize that help them succeed in your course?
8. How do you think faculty can best help students that are not academically successful in the nursing courses?

Appendix C: Student Interview Protocol

Welcome: Thank you for taking time to meet with me and answer some questions for my project study research.

Purpose: The purpose of my project revolves around exploring the academic experiences of successful nursing students in our nursing program. Your role in this is to answer questions based on your experiences as a nursing student in this program. I sent the consent form to you via email, do you have any questions about the consent form? Did you bring the responses to those questions with you? _____ (I will have copies of the questions available in case the participants say no, in which case I will give the questions now so participants can think about the questions from now until end of interview). Remember, all responses will remain confidential, only you and I will know you are participating in this research, which is voluntary. The responses will be used for the purposes of this project. The session will be recorded to ensure I am able to accurately analyze your responses and include direct quotes if appropriate. We can stop at any time, and you can withdraw your consent at any time.

Ground rules: There are no right or wrong answers. I want to know your thoughts and beliefs about the questions I have for you. If you're ready, we will get started with some background questions in which I want to know a little more about you and your student career so far. After that, I want to know how you define a couple of words. Then, I have several questions in which I want to know your thoughts about. Some of the questions look at how you have studied, some questions ask about various resources you may have used as a student, and in other questions I ask you to share experiences you have had. At the end, we'll talk about the two questions I sent via email. The interview should last no longer than about an hour.

Background Information

If you're ready let's get started by you telling me a little about yourself and your student career to date. For example, what is your GPA for the nursing courses you have taken, how many credits are you currently enrolled in, are you currently employed (if so, is it part or full-time).

Definitions

1. The next thing I want to know is how do you define success in school? How do you describe resource?
2. What program or course resources have you utilized since starting the nursing program? An example of a course resource includes attending study sessions while an example of a program resources includes meeting with the retention specialist. How do you believe these resources have helped you be successful in your nursing courses?

Student Motivation

3. How has your success in your nursing courses been impacted? What has influenced your success in the nursing courses? In other words, what has influenced your ability to complete the nursing courses you have taken so far?

Student Learning

4. How do you learn your lecture materials? How have you learned your clinical skills?
5. How do you proceed when you do not understand course content? Why do you do that?

Sharing Experiences

6. * Describe the first time you felt successful in nursing school.
7. * Now we are going to talk about the question I asked you to bring a response for. I want you to share a specific situation when a faculty member helped you feel successful. When did this experience occur? What was it related to (skills, theory, simulation, clinical, something non-nursing course related)? How specifically did the faculty member behave and what did the faculty do to help you feel successful? Finally, how have you continued to use this situation moving forward in the nursing courses?
8. What changes would you make to improve nursing student success?

Appendix D: Coding and Themes

Research Question	Coding Categories	Recurring Words	Data Themes
What are the faculty-related factors that influence successful nursing students at Maryland Community College?	Effects of faculty on student success	Open-door policy Approachable personality Going to faculty Use of office hours The professors really encouraged me A person we can go to for anything Availability	Connections
What faculty-related learning experiences do students believe had a positive effect on their success while in the nursing courses?	Learning experiences	Active teaching & learning methods Change their way of thinking and learning Becoming acclimated to how students are evaluated in the program I had to learn skills I didn't know already Case study/scenario Clinical tutoring in lab Watch clinical faculty 'be a nurse' Clinical skills Completing care plans/concept maps Practice skills before evaluations and practice if unsure of something before going to clinical, lab staff will help if needed Simulation NCLEX style questions	New Experiences
What faculty-related learning experiences do students believe had a positive effect on their success while in the nursing courses?	Learning experiences	Study sessions NCLEX style questions Clinical faculty-ask questions based on theory content Skills laboratory Simulation laboratory Theory Clinical Case studies/clinical scenarios Lecture	Learning Strategies

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Research Question	Coding Categories	Recurring Words	Data Themes
What are faculty-related obstacles that nursing students overcome to successfully complete the nursing courses?	Obstacles	Abrupt/rude personality Sarcasm Student reaching out to faculty/asking questions Understanding some faculty—heavy/thick accent, word choices	Faculty Barriers
		Large amounts of reading in short time frame Learning how to take notes Study groups Asking questions Being prepared for class The behavior of students that can self-identify is different from students that do not realize they are struggling; behaviors include attending class, reaching out to faculty, knowing what type of learner they (the student) is, and having family support I write what I need based on what faculty said is important I ask other students to see if it was something I missed.	Help-seeking behavior
How do faculty student interactions affect student success in the nursing courses?	Success	I felt like I couldn't 'do the right thing' because I didn't understand what I needed to know, so it was a good thing I didn't pass I withdrew, at the start of the first semester, but came back a few years later and started over—I planned better I failed courses and had to do them over again We have to be really flexible and roll with things Still having time to do what needs to be done I work overnight and try to keep consistent study hours regardless of the day of the week	Self-ID
			Student resilience

Appendix E: Students' Definitions of Success

Participant	Definition
Dolly	Success is being able to apply what you've learned in class to clinical or to like a case study. Or to your patients and learning. I don't want to say not to make the same mistake again but kind of growing and learning and building your knowledge that's how I would define success.
Jean	I've maintained a B average throughout the whole program so far. There's been a lot of learning curves. Well because some classes it's just I'm able to answer the objectives to get the bulk of the information that I need. But some classes it just didn't work. Just answering the objectives didn't work because they're so broad, there's so much
Jake	I think it's satisfaction with my grade, and as soon as I started nursing, I realized that Bs are fine, I've been okay with that. I also think personal sanity is important too. Still having time to do what I need to do and get things done, you know sleep at night, go to the gym, little things like that you know, see friends at school, and still have time to do school work all at the same time.
Steve	To me it's just really basic. You're successful if you complete the program and you graduate. That is really how I define success.
Lori	I think success is just finishing what you set out to accomplish. It doesn't matter what time frame it takes, like for me it's been like a five to 10-year journey. But as long as I finish it I'll still be successful.
Samantha	Well it depends on a person's personal goals. I know there are some students that want a 4.0. So, for them that's their goal and what's best for them but I'm not one of those people.
Kim	For me what successful means has actually changed over time. But then retaking the course and continuing in the program I learned from my mistakes. When I retook the first course, I recognized that I needed to focus being present in the material as I was learning. I had to shift my focus. Instead of just doing well on the exam, I had to shift my thinking to being present in the material when I'm reading the material,
Beverly	I define success as, it has to encompass everything that you've done. It's not necessarily getting an A on an exam, I think it has to do with your performance in skills, your performance in the hospital; it's wherever you are and not just the exam but what you know overall. I think it's a lot, and it's easy to just know instinctively how to take a test but that doesn't necessarily mean success.

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Participant	Definition
Sherry	Success in school to me is not related to grades because I don't even have a 3.0 for my GPA. But it is the confidence that I've developed.