# An Investigation of the Academic Impact of the Freshman Transition Course at One Urban Central Florida High School 

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# AN INVESTIGATION OF THE ACADEMIC IMPACT OF THE FRESHMAN TRANSITION COURSE AT ONE URBAN CENTRAL FLORIDA HIGH SCHOOL 

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A dissertation submitted in partial fulfillment of the requirements for the degree of Doctor of Education in the School of Teaching, Learning, and Leadership in the College of Education and Human Performance at the University of Central Florida Orlando, Florida

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#### Abstract

Researchers with the Everyone Graduates Center at Johns Hopkins University found 1,400 high schools in the United States had a $12^{\text {th }}$ grade enrollment $60 \%$ less than ninth grade enrollment three years prior (Balfanz, et. al., 2013). Additionally, outcomes of a student's ninth grade year serve as significant early warning signs of dropping out of high school (Neild, et. al., 2008). When demographic and economic variables are held constant, retention during the ninth grade, credit accumulation, and academic achievement have consistently been found to be early warning indicators putting students at an increased risk for dropping out of high school (Neild, et. al., 2008).


Due to the increase in accountability brought on by No Child Left Behind (2001), schools and school districts are taking a closer look at dropout and examining what is causing it and how to prevent it or intervene in the process (Neild, et. al., 2008). Although a variety of models exist within the freshman transition intervention architecture, programs which employ a year-long course focused on an application of skills-based, social, and behavioral learning are consistently more effective with encouraging academic achievement, persistence and staying on-track to graduate (Freeman \& Simonsen, 2015). In a meta-analysis of freshman transition interventions, Freeman and Simonsen (2015) noted that the most successful interventions considered multitiered levels of support: academic, socio-emotional, and behavioral, which are organized, wellplanned, and involved a variety of stakeholders.

There is a lack of research on the efficacy of interventions to enhance persistence of atrisk students in high school, specifically with respect to the challenges the ninth grade year as a transition period presents. The factors associated with students dropping out of high school and
interventions intent on curbing instances of dropping out warrant further examination.
Underlying the development and implementation of the intervention to be evaluated was an unacceptable high school completion rate and performance on state accountability assessments. The purpose of the research was to identify the extent to which a school designed freshman transition intervention, Freshman Experience, aligned with recommendations by Freeman and Simonsen (2015) and to determine the extent to which the intervention impacted persistence to the tenth grade, on-track-to-graduation status, and academic success.

The study investigated the academic impact of Freshman Experience through the following research questions: (a) To what extent does the Freshman Experience course align with elements of successful programs (Freeman and Simonsen, 2015): cognitive, affective, and behavioral that is well-planned, supported, systematic, and involve a variety of stakeholders? (b) To what extent do students labeled at-risk for dropping out of high school who enroll as freshman at the beginning of the 2012-2013 school year at the target school compare with students labeled at-risk for dropping out of high school who enroll as freshman at the beginning of the 2012-2013 school year at the comparison school on persistence to the 10th grade? (c) To what extent do students labeled at-risk for dropping out of high school who enroll as freshman at the beginning of the 2012-2013 school year at the target school compare with students labeled at-risk for dropping out of high school who enroll as freshman at the beginning of the 2010-2011 school year at the target school on persistence to the 10th grade? (d) To what extent do students labeled at-risk for dropping out of high school who enroll as freshman at the beginning of the 2012-2013 school year at the target school compare with students labeled at-risk for dropping out of high school who enroll as freshman at the beginning of the 2012-2013 school year at the comparison school
on on-track to graduation status at the end of the 11th grade year? (e) To what extent do students labeled at-risk for dropping out of high school who enroll as freshman at the beginning of the 2012-2013 school year at the target school compare with students labeled at-risk for dropping out of high school who enroll as freshman at the beginning of the 2010-2011 school year at the target school on persistence to on-track to graduation status at the end of the 11th grade year? (f) To what extent do students labeled at-risk for dropping out of high school who enroll as freshman at the beginning of the 2012-2013 school year at the target school compare with students labeled atrisk for dropping out of high school who enroll as freshman at the beginning of the 2012-2013 school year at the comparison school on state standardized assessments such as FCAT Reading 10th grade and Algebra 1 EOC? (g) To what extent do students labeled at-risk for dropping out of high school who enroll as freshman at the beginning of the 2012-2013 school year at the target school compare with students labeled at-risk for dropping out of high school who enroll as freshman at the beginning of the 2010-2011 school year at the target school on state standardized assessments such as FCAT Reading 10th grade and Algebra 1 EOC?

The participants of the study $(N=1449)$ were comprised of three groups: (a) a target group ( $n=644$ ), (b) a comparison group ( $n=250$ ), and (c) an historical control group ( $n=555$ ). The Target Group enrolled at the target school during the 2012-2013 school year and took the Freshman Experience course. The comparison group enrolled at a demographically and socioeconomically similar urban high school in 2012-2013 and did not enroll in a freshman intervention. The historical control enrolled at the target school in 2010-2011, prior to the implantation of the intervention.

Chi square analysis indicated statistical significance for the impact of participation in the Freshman Experience course on persistence to the tenth grade ( $p<.001$ ) and on-track to graduation status ( $p<.001$ ) when compared to both the Comparison Group and Historical Control Group. Multivariate analysis of variance (MANOVA) indicated statistical significance for the impact of participation in the Freshman Experience course on academic success ( $p<.05$ ); however in both models, statistical significance favored an academic impact on Algebra 1 EOC over FCAT Reading ( $p<.000$ ).

While students are being promoted to the tenth grade and accumulating the number of credits necessary for on-track to graduation status, grade level proficiency or academic growth in reading was not evidenced by performance on state accountability assessments. It is imperative that school administrators understand that a focus on outcomes neglects the process and contextual covariates, such as academic motivation and familial and social support structures, which are often latent in the process of academic disengagement and ultimately, dropout. Investments which ranges from $\$ 100,000$ to $\$ 178,000$ requires a return of more than dichotomous outcomes (persistence to the tenth grade and on-track to graduation status); rather, the focus should be on academic tenacity, resiliency, and bonding which considers the contextual covariates prevalent in the academic disengagement process.

For Lauren - Without whom this endeavor would be meaningless.

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# CHAPTER ONE: INTRODUCTION 

## Background of the Study

With the beginning of each school year, a new cohort of high school freshman students find themselves immersed in the drastic and often radical changes and transformations that indicate a challenging new school experience. The tangible anxiety that permeates throughout a high school freshman class is not unwarranted (Haviland, 2005). Freshmen often credit their anxiety to changing surroundings, a dramatic increase in school population, less personal classroom structure, increased academic expectations, and in some cases, competition (Haviland, 2005).

These changes are especially prevalent throughout the transition period into high school (Kerr, 2003; Allensworth \& Easton, 2007). A litany of pre-ninth grade student level variables such as Algebra I grades, state accountability assessment performance, language proficiency, gender, race, exceptional education status, and socio-economic status form predictors of high school success (Orihuela, 2006). Ruth Neild, Scott Stoner-Eby, and Frank Furstenberg (2008) found that student outcomes of the ninth grade year served as significant early warning signs for dropping out of school. In a study of Philadelphia public school students, it was found that a large proportion of students who leave school without a diploma did not acquire enough credits to be promoted beyond the ninth grade (Neild, et. al., 2008). Freshman experiences in high school determine that student's success at that time and beyond; however it is the ninth grade year during which students fail more frequently than any other grade (Zvoch, 2006).

In contrast to factors that the school cannot control, there are certain aspects of a learning environment that can be controlled. Examples of factors that school leaders can control include:
quality of instruction, resources, use of time, and other factors which indicate moderate to high effect sizes ( $d>4$ ) on student achievement and persistence through high school (Hattie, 2009).

Variables to consider when predicting lack of graduation include test scores and other academic achievement indicators such as poor grades and grade retention (Zvoch, 2006). Academically, students who do not complete high school typically fail more than a quarter of their classes during the ninth grade year (Weiss, 2001). Only $8 \%$ of those students who do graduate high school indicated that same difficulty (Weiss, 2001). Allensworth and Easton (2007) found that students who possessed fewer than five credits, as defined by the Carnegie Unit system (one hour of instruction for five days a week or 120 hours of contact with a teacher), at the completion of the freshmen year will not be on track to graduate. Additionally, low attendance throughout the first 30 days of the ninth grade school year is a stronger indicator that a student will not persist to the tenth grade and subsequently drop out of high school than any eighth grade predictor (Zvoch, 2006; Neild, et al., 2008).

Additionally, students face a variety of new and unique challenges they may not be prepared for at the outset of the ninth grade year (Neild, et. al, 2008; Weiss, 2001; Freeman \& Simonsen, 2015). These challenges include schedule changes, overcrowding, relegating of inexperienced teachers to lower level students, and insufficient classroom resources (Neild, et. al, 2008; Weiss, 2001). These challenges can decrease the connectedness a new ninth grade student feels toward a school and inherently increases the likelihood of that student failing courses and subsequently dropping out (Kerr, 2003).

In response to the noted predictability of the ninth grade year on propensity for dropout, high schools have begun to introduce transition programs aimed at mitigating instances of
dropout. Schools have designed and implemented an array of different programs designed with this initiative in mind. In a research brief of transition and freshman orientation courses, Karen Walker (2007) outlined a number of research based orientation programs ranging from interactions between the high school and middle school to the development of entire courses dedicated to the purpose of orienting freshman to high school: eighth graders shadowing ninth graders in order to build a relationship with the transition school, high school teachers and counselors visit middle school to talk with eighth grade students, summer enrichment programs for incoming ninth graders, and others.

## Statement of the Problem

Students in ninth grade represent the largest percentage of the high school population due to the additive factor of incoming ninth grade students plus failure and subsequent retention of others (Zvoch, 2006). This occurrence creates what is known as the ninth grade bulge and tenth grade dip (Zvoch, 2006). Additionally, a Johns Hopkins University report found that $40 \%$ of ninth grade students who attended school in cities with the highest dropout rates repeated the ninth grade; however only $10-15 \%$ of those students who failed to persist to the tenth grade after their freshman year went on to graduate (Balfanz, Bridgeland, Bruce, \& Fox, 2013). Perhaps unsurprisingly, ninth grade attrition affected those students in urban, high poverty schools disproportionately when compared to low poverty districts: $40 \%$ and $27 \%$ respectively (Weiss, 2001).

The factors associated with students dropping out of high school and interventions intent on curbing instances of dropping out warrant further examination. There is a lack of research on the efficacy of interventions to enhance persistence of at-risk students in high school, specifically
with respect to the challenges the ninth grade year as a transition period presents. Underlying the development and implementation of the intervention to be evaluated was an unacceptable high school completion rate and performance on state accountability assessments.

## Purpose of the Study

A review of literature relevant to the relationship of ninth grade retention and subsequent student completion of high school, especially for students attending schools serving disproportionate populations of high-poverty students, has led this author to research the impact of an existing school designed intervention program, Freshman Experience, in one large urban high school in Central Florida. The purpose of the research was to identify the extent to which the intervention aligned with recommendations by Freeman and Simonsen (2015) and to determine the extent to which the intervention impacted persistence to the tenth grade, on-track-to-graduation status, and academic success.

## Definition of Terms

For purposes of consistency and universal understanding, the following definitions of terminology related to freshman orientation and transition programs as well as low-performing schools and urban school districts are provided. These definitions were ubiquitous to the literature on high school dropout and freshman orientation and transition programs.

## At-Risk

The United States Department of Education and No Child Left Behind (2002) define high-needs students as students who risk "educational failure" or need special support due to living in poverty, attending schools who serve disproportionately high populations of minority students, who are achieving below grade level as measured by state accountability assessments,
who are at risk of not graduating with a standard diploma on time, who are currently homeless, in foster care, have been incarcerated, have disabilities, or are English language learners.

## Drop Out

A dropout is defined by the National Center of Education Statistics as a student who

1. was enrolled in school at some time during the school year and was not enrolled on October 1 of the following school year, or
2. was not enrolled on October 1 of the school year although was expected to be in membership (i.e., was not reported as a dropout the year before), and
3. has not graduated from high school or completed a state or district-approved educational program, and
4. did not meet any of the following exclusionary conditions:
a. transfer to another public school district, private school, or state- or districtapproved educational program;
b. temporary school-recognized absence due to suspension or illness; or
c. death (National Center for Education Statistics, 2012).

## Dropout Factories

Balfanz, et al. (2013) defined a dropout factory as a "high school in which twelfth grade enrollment is 60 percent or less of ninth grade enrollment three years earlier" (p. 17). Freshman Experience

A one-Carnegie-credit course, relevant to this study is defined by Target School's curriculum guide as:

The Freshman Experience course is designed to acclimate ninth graders to high school life and provide them an optimal atmosphere for character development, team building and academic growth. Offering a scaffolding environment that seeks to close the academic gaps students may have upon entering high school, Freshman Experience provides the basic foundational concepts that are needed for students to have a successful first year (Orange County Public Schools, 2013, p. 30).

## Low-Performing School

The United States Department of Education and No Child Left Behind (2002) define lowperforming schools as those schools which are in the bottom $10 \%$ of performance in the state, or which indicate substantial gaps in achievement based on performance in reading and mathematics on state accountability assessments.

## Graduation Rate

The Florida Department of Education (2011) defines the graduation rate by determining a numerator and denominator based on the number of students who complete high school after four years. The denominator of the equation is determined by the number of students entering the ninth grade for the first time during the fall semester four years prior to the expected year of graduation plus incoming transfer students on the same graduation schedule. Students who are deceased prior to graduation or transfer out of the school and attend another public school, private school, home school, or an adult-education program are subtracted from this number (Florida Department of Education, 2011). The numerator is determined by the number of on-time graduates who receive a standard diploma. The numerator is then divided by the denominator
with the resulting percentage rounded to the nearest whole number (Florida Department of Education, 2011).

## Graduation Requirements

Section 1003.4282 of the Florida statutes governs the public high school standard diploma graduation requirements. For those students who entered ninth grade in the 2012-2013 school year, a total of 24 Carnegie credits were needed to successfully graduate with a standard diploma. Additionally, students were required to pass the Grade 10 reading Florida Comprehensive Assessment Test (FCAT) or earn concordant score of 19 on the American College Testing (ACT) or a 430 on the Scholastic Aptitude Test (SAT) and the Algebra I end-ofcourse (EOC) exam or a comparative score of 97 on the Postsecondary Education Readiness Test (P.E.R.T.). Students were also required to sit for the following end-of-course assessments if that student was enrolled after the 2010-2011 school year: Biology I, Geometry, and United States History. Performance on these end-of-course exams constituted $30 \%$ of the students' final course grade.

## On-Track to Graduate

Target School District's Pupil Progression Plan defines on track to graduate status as having successfully earned a minimum of six Carnegie credits at the completion of each school year. At the end of the $11^{\text {th }}$ grade year, students must have 18 credits in order to be promoted to the $12^{\text {th }}$ grade and be considered on-track to graduate.

Persistently-lowest achieving schools
Persistently low achieving schools are determined on a state-by-state basis; however the United States Department of Education and the requirements of the School Improvement Grant
program authorized by Section 1003(g) of the Elementary and Secondary Education Act of 1965 define persistently-low achieving schools as those Title I schools in "improvement, corrective action, or restructuring" which are of the lowest-achieving $5 \%$ of the Title I schools in the respective state.

## Target School

The target school is a large, persistently low achieving urban high school in central Florida. A total of 1,977 students attended the target school at the beginning of the 2012-2013 school year. The demographics of the target school are illustrated in Table 1.

## Urban

The National Center for Education Statistics distinguishes between four major locale categories (City, Suburb, Town, and Rural) each of which are further divided into three subcategories. For purposes of this study, the NCES' definition of a Large City will define an urban school district. The NCES' urban-centric classification system defines a Large City as "territory inside an urbanized area and inside a principal city with population of 250,000 or more" (Office of Management and Budget, 2000).

## Research Questions

This study investigated the impact of a school designed intervention for transition into high school, Freshman Experience, on persistence to the tenth grade and academic performance. The research questions addressed three groups. Group One was comprised of students labeled atrisk for dropping out of high school who enrolled as freshman at the target high school which employed the designed intervention at the beginning of the 2012-2013 school year. Group Two was comprised of students labeled at-risk for dropping out of high school who enrolled as
freshman at a large, socioeconomically similar urban high school which did not employ a freshman transition intervention during the 2012-2013 school year. Group Three was comprised of students labeled at-risk for dropping out of high school who enrolled as freshman at the target high school at the beginning of the 2010-2011 school year, prior to the implementation of the Freshman Experience course.

1. To what extent does the Freshman Experience course align with elements of successful programs (Freeman and Simonsen, 2015): cognitive, affective, and behavioral that is well-planned, supported, systematic, and involve a variety of stakeholders?
2. To what extent do students labeled at-risk for dropping out of high school who enroll as freshman at the beginning of the 2012-2013 school year at the target school compare with students labeled at-risk for dropping out of high school who enroll as freshman at the beginning of the 2012-2013 school year at the comparison school on persistence to the 10th grade?
3. To what extent do students labeled at-risk for dropping out of high school who enroll as freshman at the beginning of the 2012-2013 school year at the target school compare with students labeled at-risk for dropping out of high school who enroll as freshman at the beginning of the 2010-2011 school year at the target school on persistence to the 10th grade?
4. To what extent do students labeled at-risk for dropping out of high school who enroll as freshman at the beginning of the 2012-2013 school year at the target school compare with students labeled at-risk for dropping out of high school who
enroll as freshman at the beginning of the 2012-2013 school year at the comparison school on on-track to graduation status at the end of the 11th grade year?
5. To what extent do students labeled at-risk for dropping out of high school who enroll as freshman at the beginning of the 2012-2013 school year at the target school compare with students labeled at-risk for dropping out of high school who enroll as freshman at the beginning of the 2010-2011 school year at the target school on persistence to on-track to graduation status at the end of the 11th grade year?
6. To what extent do students labeled at-risk for dropping out of high school who enroll as freshman at the beginning of the 2012-2013 school year at the target school compare with students labeled at-risk for dropping out of high school who enroll as freshman at the beginning of the 2012-2013 school year at the comparison school on state standardized assessments such as FCAT Reading 10th grade and Algebra 1 EOC?
7. To what extent do students labeled at-risk for dropping out of high school who enroll as freshman at the beginning of the 2012-2013 school year at the target school compare with students labeled at-risk for dropping out of high school who enroll as freshman at the beginning of the 2010-2011 school year at the target school on state standardized assessments such as FCAT Reading 10th grade and Algebra 1 EOC?

## Conceptual Framework

Building a Grad Nation: Progress and Challenge in Ending the High School Dropout Epidemic, an annual report furnished by the Everyone Graduates Center at the School of Education at Johns Hopkins University, found that over 1,400 high schools in the United States were considered "dropout factories," which indicates a twelfth grade enrollment 60 percent or less than the ninth grade enrollment three years prior (Balfanz, et. al., 2013). While the Building a Grad Nation (2013) annual report indicates a decline in dropout rates nationally, the numbers of students in major metropolitan or urban school districts failing to complete high school continues to remain at or above $50 \%$ (Neild, et. al., 2008). In a study of Chicago Public Schools, researchers Allensworth and Easton (2007) found that almost half of the students attending Chicago Public Schools fail to graduate and in some instances, the population of students who drop out far exceeds the population of students who graduate.

The disparity evidenced by the literature relevant to this study begs for an examination of the efforts at intervention designed to mitigate the metropolitan and urban high school dropout crisis. Attempts to mitigate the dropout crisis are often unsuccessful because the causes of dropout are so complex in nature (Azzam, 2007). The existing literature on high school persistence and completion can be categorized in one of three ways: characteristics of drop outs, student drop out factors, and interventions employed to reduce dropout.

## Characteristics of Drop Outs

A third of those students living at or below the poverty line for more than half of their lives will not complete high school (Hernandez, 2011). Over a quarter of students who spend just one year of their life in poverty and do not read proficiently by the third grade will not complete
high school; a rate six times that of proficient readers (Hernandez, 2011). Further research has gone on to indicate that those students who exhibit "academic, behavioral, or attitudinal problems" are at risk for dropping out of high school (Lemon \& Watson, 2011, p. 17).

Family structure also plays a major role in a student's ability to complete high school. In a study designed to measure the impact of marital separation on high school completion, researchers Amato and Sobolewski (2001) found that when compared to students whose biological parents remain married and present throughout high school, students whose biological parents separate or divorce evidence self-destructive behaviors associated with low academic performance and an inherent increase in the risk of dropping out.

## Student Drop Out Factors

Factors such as poverty and reading proficiency play a key role in predicting whether or not a student will complete high school. Azzam (2007) indicated in Why Students Drop Out five underlying causes in student's inability to complete high school: boredom, absenteeism, disinterest, too much freedom, and failing. Students also reported that their previous schooling had failed to properly prepare them for the stresses of high school (Azzam, 2007).

Demographic variables such as low socioeconomic status and attending schools in urban areas have historically contributed to higher-dropout rates when compared to demographically advantaged counterparts (Amato \& Sobolewski, 2001; Anguiano, 2004; Azzam, 2007; Goldschmidt \& Wang, 1999). Familial variables such as educational attainment of the student's guardians and the martial status of the student's parents also contribute to a higher risk of not completing high school when compared to those students who maintain a traditional family structure and/or are raised by a guardian who have completed high school and some college
(Mackey \& Mackey, 2012; Monserud \& Elder, 2011; Owens 2009). Students from ethnic and minority groups have consistently been found to indicate much higher dropout rates (Zvoch, 2006).

Of interest to this study are the factors relevant to the ninth grade (freshman) year. Academically, students who do not complete high school typically failed more than a quarter of their freshmen classes whereas only $8 \%$ of those students who do graduate high school indicated that same difficulty (Weiss, 2001). Allensworth and Easton (2007) found that "inadequate credit accumulation" during a students' freshman year is significantly predictive with respect to that student's ability to graduate high school four years later (p. 1). National and localized studies in Chicago and New York have confirmed the finding that nearly all students who drop out of high school do so far behind in course credits (Allensworth \& Easton, 2007; Cahill, Hamilton, \& Lynch, 2006; NCES, 2011).

## Transition Interventions

Some schools have introduced a required course during either the first semester or the entirety of the student's ninth grade year (Mizelle, 2005). Other programs provide for a half-day tour or school orientation for incoming students and their parents (Mizelle, 2005). While these orientations and brief seminars indicate progress in dropout intervention, the latter fails to integrate incoming freshman, especially those labeled as at-risk for dropping out of high school, positively into the culture of the respective school.

Even when demographic indicators remain constant, students are less likely to drop out of high school when they actively participate in a freshman transition program which involves students, parents, and staff members (Herzog \& Morgan, 1999). In urban schools with large
minority populations in which transition programs were fully operational, researchers indicated a dropout rate of 8\%, while similar schools without transition programs averaged 24\% (Reents, 2002).

Freshman transition programs and interventions purposed with encouraging persistence and high school completion vary in type, curriculum, amount of school time dedicated to the program, number of activities and objectives, as well as the number of people involved in their management. In a review of literature of policy and practice on high school dropout interventions, Freeman and Simonsen (2015) noted that successful high school interventions consisted of multi-tiered approaches for support: Cognitive (academic), affective (socialemotional), and expectation (behavioral). The program must also be well-planned, supported, systematic, and involve a variety of stakeholders in order to ensure its success (Freeman and Simonsen, 2015).

## Academic Considerations

The teaching of cognitive skills such as note-taking and summarizing, when combined with academic content, Hattie (2009) writes, will translate to an effect of .59 (effective translates to $d>.4$ ). Cognitive as well as metacognitive skills do not come naturally to most adults, let alone freshman students. Teachers and learning environments must be curtailed in such a way that allows students to understand how to read for purpose, synthesize across sources of information, and create multifaceted solutions to problems (Winne, 2001). Lavery (2008) as cited in Hattie (2009) outlines a cross-comparison of metacognitive strategies or selfmanagement learning skills such as planning and monitoring, which indicate high effect sizes ( $d$ $>.4)$ such as organizing and transforming of new information ( $d=.85$ ), self-evaluation ( $d=$
.62 ), goal-setting and planning $(d=.49)$, and time management $(d=.44)$. Student self-efficacy is among the most consistent in predicting student GPA (Ley \& Young, 2001, as cited in Hattie, 2009).

## Socio-Emotional Considerations

The National Education Longitudinal Study of 1998 identified one of the most common reasons for high school dropout as attitude and dissatisfaction with the learning environment (as cited in Lan \& Lanthier, 2003). Socio-emotional learning is a process by which students and pupils alike learn to manage oneself and their relationships with others around them (Feller, 2003). Feller (2003) also writes that the purpose of socio-emotional learning is to identify and develop values, personalize career choices, and cultivate and instill the idea of lifelong learning within students at pivotal transitive points in their respective academic careers.

Cornelius-White (2007) notes most students reported that they dislike or did not attend school primarily because they did not like their teacher (as cited in Hattie, 2009). CorneliusWhite further suggests that teachers must improve their relationships with their students in a variety of ways by demonstrating that they, the teacher, care about the individual experiences brought to the classroom by that student, the learning of the students matters to the teacher, and empathizing with the student. In a meta-analysis of 229 teacher-student relationship studies, Hattie (2009) found a high ( $d=.72$ ) effect. Hattie (2009) also takes into consideration the effect sizes of teacher student relationship variables such as teacher empathy ( $d=.68$ ), encouragement of higher order thinking ( $d=.61$ ), and encouraging learning ( $d=.48$ ).

## Behavioral Considerations

Hattie (2009) writes that along with prior knowledge and achievement ( $d=.67$ ), experiences, and self-image $(d=.43)$, students come into the school building with a predisposed set of expectations that are often times immeasurable. Hattie (2009) writes that the expectations one brings with them into a school building can become "enhancers of-or inhibitors to-the opportunities provided in schools" (p. 31). Owens and Valesky (2011) write of Victor Vroom's expectancy theory in Organizational Behavior in Education that one's expectations will motivate students them to select a specific behavior over another.

Hattie (2009) writes that teachers are integral in the molding of student expectations in a way that develops that students willingness to engage in learning. Once a student has adopted the disposition that they are a learner rather than a participant, Hattie (2009) writes, schools will see a marked increase in performance and success. Teacher expectations of students ( $d=.43$ ) can have a profound impact on learning gains (Rosenthal \& Jacobsen, 1968 as cited in Hattie, 2009). Hattie (2009) suggests that teachers must be prepared to be surprised in order to avoid negative expectation effects.

The research indicates that the first year of high school is pivotal to the ultimate success of a student and that the transition into the freshman year is often characterized by declinations in grades and attendance from the junior high school or middle school level (Azzam, 2007; Balfanz, et al., 2013; Freeman \& Simonsen, 2015; Hernandez, 2011; Kerr, 2003; Weiss, 2001; Zvoch, 2006). Programs and interventions, especially for those students identified as at risk for not completing high school, when put into place can ensure a safe, smooth, and successful transition
into high school and ultimately the completion without retention of the freshmen year (Herzog \& Morgan, 1999; Kerr, 2003).

## Summary

The transition from eighth to ninth grade continues to be one wrought with stress and anxiety. Hattie (2009) writes that an alleviation of the attitudinal ( $d=-.46$ ), cognitive ( $d=-.44$ ), and emotional $(d=-.30)$ components of anxiety will translate to an increase in learning across the curriculums ( $d=.40$ ).

Freshman transition programs must include within them a rigorous plan for providing academic support especially for freshman students identified as high risk. Transition programs must cultivate the relationships and learning environments within schools in a way that invites students to participate and engage in the learning rather than simply be a recipient thereof. Successful transition programs must develop a failure is not an option culture and expectation for students, parents, and teachers alike.

## Methodology

The current study evaluated the impact of a school designed high school transition program, Freshman Experience, at an urban Central Florida high school on students labeled as at-risk for dropping out through a quantitative analysis of a variety of data. The study evaluated the extent to which the focus of the intervention was rooted in researched best practices through a qualitative analysis of historical documents which represented the curriculum and implementation of the intervention (Freeman \& Simonsen, 2015; Lincoln \& Guba, 1985).

## Context of the Study

The Freshman Experience course is a required course in which all incoming freshmen who enroll at the target school, except those who enroll in magnet programs, must complete. Successful completion earns the student one elective Carnegie high school credit. The purpose of the Freshman Experience course is to provide incoming freshmen of the target school a positive classroom environment from which the metacognitive and cognitive skills necessary for success in the student's core and elective classes stem. The target school was considered an urban, lowachieving school by state and national standards during the time period relevant to the study (2010-2015). $84.7 \%$ of students qualified for the Free and Reduced Lunch Program during the 2014-2015 school year qualifying Target School as a Title I school as defined by the Elementary and Secondary Education Act (1965).

The target school was founded in 1959 and served a predominantly rural population. The school transitioned from rural to middle class, suburban with the introduction of large engineering firms into the surrounding areas. During the last 20 years, the target school has transitioned from a suburban population to an urban, low-income population. The comparison school was founded in 1895. It was the first public school for African Americans in the Central Florida area. Historically, Comparison School has served a majority African American population (L. Bradshaw, personal communication, March 3, 2016).

## Population and Sample

The participants in this study represented three groups of students labeled as at-risk for not completing high school. These students were enrolled in two demographically and socioeconomically similar central Florida urban high schools during the 2010-2011 and 2012-

2013 school years $(N=1449)$. A purposive sample of all incoming freshmen labeled as at-risk of not completing high school who enrolled in the Freshman Experience course at the target school during the 2012-2013 school year will comprise the treatment group, or Group One, for the study (Neuman, 1997). A purposive sample was adopted in order to evaluate the academic impact of the freshman transition intervention specifically with students labeled as at-risk for not completing high school. The comparison group, Group Two, was comprised of all incoming freshmen labeled as at-risk of not completing high school who enrolled in a demographically similar large urban high school which did not employ a freshman transition intervention during the 2012-2013 school year. The purpose of this comparison group was to mitigate the effects of extraneous and modifier variables. A matched historical purposive sample comprised of freshman who enrolled at the target school during the 2010-2011, prior to the implementation of a freshman transition intervention, comprised an historical control group, or Group Three, from modifier and extraneous variables were further mitigated.

In a meta-analysis of 499 studies, Hattie (2009) found that socioeconomic status had a moderate to high effect size with respect to student achievement ( $d=0.57$ ). Therefore, the criteria by which the two school sites were selected focused on the socioeconomic status of the students who attended the target and comparison schools. Socioeconomic status was measured by the percentage of students participating in Free and Reduced Lunch Programs which existed at each of the schools during the time research took place. The control school was selected due primarily to its socioeconomic similarities and proximal location to the target school and it did not enroll freshmen in an intervention program during the 2012-2013 school year. Table 1
illustrates a comparison of the selected demographics upon which the target school, comparison school, and target school historical populations were selected.

The time period addressed in this study was the 2010-2011 school year, initial enrollment of Group Three to the 2014-2015 school year, the school year of most readily available data. The Target and Comparison groups, groups one and two respectively, enrolled as freshmen during the 2012-2013 school year.

Table 1

Demographics of the Target and Comparison Schools

|  | Target $\mathrm{N}=1977$ |  | Comparison $\mathrm{N}=827$ |  | Historical $\mathrm{N}=1880$ |  |
| :--- | :---: | :---: | :---: | :---: | :---: | ---: |
| Variables | $n$ | $\%$ | $n$ | $\%$ | $n$ | $\%$ |
| African American | 1022 | 51.7 | 753 | 91.1 | 1003 | 53.4 |
| Asian | 61 | 3.1 | 2 | 0.2 | 48 | 2.6 |
| Hispanic | 712 | 36.0 | 46 | 5.6 | 638 | 33.9 |
| Multiracial | 29 | 1.5 | 12 | 1.5 | 23 | 1.2 |
| Native American | 4 | 0.2 | 2 | 0.2 | 5 | 0.3 |
| White | 149 | 7.5 | 12 | 1.5 | 163 | 8.7 |
|  |  |  |  |  |  |  |
| FRL | 1674 | 84.7 | 735 | 88.9 | 1478 | 78.6 |
| ESE | 240 | 12.1 | 129 | 15.6 | 257 | 13.7 |

## Sources and Collection of Data

Research question one considered existing documents and records as defined by Lincoln and Guba (1985) in order to measure the extent to which the Freshman Experience course aligned with the elements of successful freshman intervention programs as recommended by Freeman and Simonsen (2015). Research questions two through seven were qualitative and focused on one independent variable, whether or not the student was enrolled in Freshman Experience. Each of the questions tested unique dependent variables in order to measure the academic impact of the Freshman Experience course.

The research focused on data relevant to the 2010-2011, 2011-2012, 2012-2013, 20132014, and 2014-2015 school years. The documents and records (Lincoln \& Guba, 1985) relevant to research question one were collected from Target School during the 2014-2015 school year. The quantitative data relevant to research questions two through seven were collected from the
school district's electronic data warehouse. Table 2 defines each of the research questions, variables, and sources of the data.

There were a variety of dependent variables analyzed in this study. Persistence to the tenth grade, on-track to graduate status at the end of the eleventh grade year, student developmental scale score on the Florida Comprehensive Assessment Test Reading during the tenth grade year, and student scale score on the Algebra I End of Course Assessment taken during high school were measured in order to determine the academic impact of the Freshman Experience course.

## Table 2

To what extent does the Freshman Experience course align with elements of successful programs (Freeman \& Simonsen, 2015): cognitive, affective, and behavioral that is well-planned, supported, systematic, and involve a variety of stakeholders?

To what extent do students labeled at-risk for dropping out of high school who enroll as freshman at the beginning of the 2012-2013 school year at the target school compare with students labeled at-risk for dropping out of high school who enroll as freshman at the beginning of the 2012-2013 school year at the comparison school on persistence to the 10th grade?

3 To what extent do students labeled at-risk for dropping out of high school who enroll as freshman at the beginning of the 2012-2013 school year at the target school compare with students labeled at-risk for dropping out of high school who enroll as freshman at the beginning of the 2010-2011 school year at the target school on persistence to the 10th grade?

4

To what extent do students labeled at-risk for dropping out of high school who enroll as freshman at the beginning of the 2012-2013 school year at the target school compare with students labeled at-risk for dropping out of high school who enroll as freshman at the beginning of the 2012-2013 school year at the comparison school on on-track to graduation status at the end of the 11th grade year?

Independent: Documents and Records (Lincoln \& Guba, 1985).

Dependent: Aligns with elements of successful programs (Freeman \& Simonsen, 2015).
Independent: Enrolled in Freshman Experience (yes/no)

Dependent: Persistence to the $10^{\text {th }}$ grade (yes/no)
Independent: Enrolled in Freshman Experience (yes/no)

Dependent: Persistence to the $10^{\text {th }}$ grade (yes $/ \mathrm{no}$ )
Independent: Enrolled in Freshman Experience (yes/no)

Dependent: On-track to graduation status (yes/no)

Data Sources
Archival Documents
(Lincoln \& Guba,
1985)

Target School District's Electronic Data Warehouse

Target School District's<br>Electronic Data<br>Warehouse

Target School District's
Electronic Data
Warehouse

| Number | Research Question | Variables | Data Sources |
| :---: | :---: | :---: | :---: |
| 5 | To what extent do students labeled at-risk for dropping out of high school who enroll as freshman at the beginning of the 2012-2013 school year at the target school compare with students labeled at-risk for dropping out of high school who enroll as freshman at the beginning of the 2010-2011 school year at the target school on persistence to on-track to graduation status at the end of the 11th grade year? | Independent: Enrolled in Freshman Experience (yes/no) <br> Dependent: On-track to graduation status (yes/no) | Target School District's <br> Electronic Data <br> Warehouse |
| 6 | To what extent do students labeled at-risk for dropping out of high school who enroll as freshman at the beginning of the 2012-2013 school year at the target school compare with students labeled at-risk for dropping out of high school who enroll as freshman at the beginning of the 2012-2013 school year at the comparison school on the Florida Comprehensive Assessment Test Reading state standardized assessments such as FCAT Reading 10th grade and Algebra 1 EOC? | Independent: Enrolled in Freshman Experience (yes/no) <br> Dependent: FCAT Reading $10^{\text {th }}$ Grade and Algebra 1 EOC developmental scale scores | Target School District's Electronic Data Warehouse |
| 7 | To what extent do students labeled at-risk for dropping out of high school who enroll as freshman at the beginning of the 2012-2013 school year at the target school compare with students labeled at-risk for dropping out of high school who enroll as freshman at the beginning of the 2010-2011 school year at the target school on state standardized assessments such as FCAT Reading 10th grade and Algebra 1 EOC? | Independent: Enrolled in Freshman Experience (yes/no) <br> Dependent: FCAT Reading $10^{\text {th }}$ Grade and Algebra 1 EOC developmental scale scores | Target School District's Electronic Data Warehouse |

## Data Analysis

Research question one addressed the extent to which the Freshman Experience course aligned with the elements of successful programs as recommended by Freeman and Simonsen (2015) through a qualitative analysis of Documents and Records relevant to the Freshman Experience course (Lincoln \& Guba, 1985). Research questions two through seven measured the academic impact of the Freshman Experience course through a quantitative analysis of the dependent variables persistence to the tenth grade, on-track to graduate status at the end of the $11^{\text {th }}$ grade year, developmental scale score on the Florida Comprehensive Assessment Test Reading during the $10^{\text {th }}$ grade year, and developmental scale score on the Algebra 1 End of Course Assessment. Table 3 presents the research questions, relevant variables, and methods of analysis.

## Research Question One

Research question one will rely on a qualitative analysis of documents and records (Lincoln \& Guba, 1985). Document analysis, a "systematic procedure for reviewing and evaluating documents" will be used to develop a context as to the extent to which the Freshman Experience course was founded in research based best practices (Bowen, 2009, p. 27). Stake (1995) found document analysis to be most appropriate as a research method when establishing context. This process will provide an understanding of the goals, objectives, and substantive content of the Freshman Experience course.

Bowen (2009) outlined the analytic procedure of document analysis as "finding, selecting, appraising, and synthesizing data contained in documents" (p. 28). The results will be organized into major themes or categories through the qualitative paradigm of document analysis
(Corbin \& Strauss, 2008). The documents and records relevant to the 2012-2013 school year will be collected from course instructors, evaluated for meaningful and relevant passages, text, and data, and then coded into three research based themes through a direct approach to content analysis: 1) Cognitive, 2) Affective, and 3) Behavioral (Corbin \& Strauss, 2008; Potter \& Levine-Donnerstein, 1999; Freeman \& Simonsen, 2015). Documents collected that do not fit one of the research based themes representative of the elements of successful transition programs will be assigned to a fourth theme: irrelevant. Relevant text and passages identified through the evaluation and document analysis process will be analyzed in order to provide a stronger context with respect to the academic impact of the Freshman Experience course.

## Research Question Two

The independent variable for research question two will be whether or not the student was enrolled in and satisfactorily completed (as defined by a "C" grade or higher) the Freshman Experience course at Target School. The dependent variable relevant to research question two will be measured dichotomously by whether or not the student persisted to the tenth grade. Group One will serve as the treatment group and Group Two will serve as the comparison group.

Data relevant to research question two will be operationalized for both groups at the beginning of the tenth grade year or the 2013-2014 school year as one dichotomous measure, whether or not the student persisted to the tenth grade. Descriptive and inferential statistics will be analyzed. Descriptive statistics will be operationalized through measures of central tendency and measures of spread, frequency and standard deviation respectively. In order to determine the statistical power of differences in the frequencies of persistence to the tenth grade, if any,
between Group One and Group Two, a nonparametric Chi-Square test will be calculated. The level of significance will be set at $p=.05$ for the Chi-Square.

In order to evaluate the magnitude of the differences between the frequencies of each group, phi $(\varphi)$ will be calculated to assign an effect size to the Freshman Experience course with respect to the interventions impact on the categorical dependent variable of persistence to the tenth grade. Cohen (1969) defined Phi as

$$
\varphi=\sqrt{\frac{\chi^{2}}{n}}
$$

Cohen (1988) defined a small effect size as $d \geq .1$, a medium effect size as $d \geq .3$, and a large effect size as $\mathrm{d} \geq .5$.

## Research Question Three

The independent variable for research question three will be whether or not the student was enrolled in and satisfactorily completed (as defined by a "C" grade or higher) the Freshman Experience course at Target School. The dependent variable relevant to research question three will be measured dichotomously by whether or not the student persisted to the tenth grade. Group One will serve as the treatment group and Group Three will serve as the comparison group.

Data relevant to research question three will be operationalized for Group One and Group Three at the beginning of the tenth grade year or the 2013-2014 and 2011-2012 school years respectively as one dichotomous measure, whether or not the student persisted to the tenth grade. Descriptive and inferential statistics were analyzed. Descriptive statistics were operationalized through measures of central tendency and measures of spread, frequency and standard deviation
respectively. In order to determine the statistical power of differences in the frequencies of persistence to the tenth grade, if any, between Group One and Group Three, a nonparametric Chi-Square test will be calculated. The level of significance will be set at $p=.05$ for the ChiSquare.

In order to evaluate the magnitude of the differences between the frequencies of each group, phi ( $\varphi$ ) will be calculated to assign an effect size to the Freshman Experience course with respect to the interventions impact on the categorical dependent variable of persistence to the tenth grade. Cohen (1969) defined Phi as

$$
\varphi=\sqrt{\frac{\chi^{2}}{n}}
$$

Cohen (1988) defined a small effect size as $d \geq .1$, a medium effect size as $d \geq .3$, and a large effect size as $\mathrm{d} \geq .5$.

## Research Question Four

The independent variable for research question four will be whether or not the student was enrolled in and satisfactorily completed (as defined by a "C" grade or higher) the Freshman Experience course at Target School. The dependent variable relevant to research question four will be measured dichotomously by whether or not the student was on-track to graduate as defined by the school district's Pupil Progression Plan at the completion of the eleventh grade year, 2014-2015 for both Group One and Group Two. Group One will serve as the treatment group and Group Two will serve as the comparison group.

Data relevant to research question four will be operationalized for Group One and Group Two at the conclusion of the eleventh grade year or the 2014-2015 school year as one
dichotomous measure, whether or not the student had attained on-track to graduation status as defined by the school district's Pupil Progression Plan. In order to evaluate the academic impact of the Freshman Experience course with respect to the dichotomous categorical dependent variable of on-track to graduation status at the completion of the eleventh grade year, descriptive and inferential statistics will be analyzed. Descriptive statistics were operationalized through measures of central tendency and measures of spread, frequency and standard deviation respectively. In order to evaluate the statistical strength of the difference between the frequencies of on-track to graduation status between Group One and Group Two, a nonparametric ChiSquare test will be calculated. The level of significance will be set at $p=.05$ for the Chi-Square.

In order to evaluate the magnitude of the differences between the frequencies of each group, phi ( $\varphi$ ) will be calculated to assign an effect size to the Freshman Experience course with respect to the interventions impact on the categorical dependent variable of on-track to graduation status. Cohen (1969) defined Phi as

$$
\varphi=\sqrt{\frac{\chi^{2}}{n}}
$$

Cohen (1988) defined a small effect size as $\mathrm{d} \geq .1$, a medium effect size as $\mathrm{d} \geq .3$, and a large effect size as $\mathrm{d} \geq .5$.

## Research Question Five

The independent variable for research question five will be whether or not the student was enrolled in and satisfactorily completed (as defined by a "C" grade or higher) the Freshman Experience course at Target School. The dependent variable relevant to research question five will be measured dichotomously by whether or not the student was on-track to graduate as
defined by the school district's Pupil Progression Plan at the completion of the eleventh grade year, 2014-2015 for Group One and 2012-2013 for Group Three. Group One will serve as the treatment group and Group Three will serve as the comparison group.

Data relevant to research question five will be operationalized for Group One and Group Three at the conclusion of the eleventh grade year or the 2014-2015 and 2012-2013 school years respectively as one dichotomous measure, whether or not the student had attained on-track to graduation status as defined by the school district's Pupil Progression Plan. In order to evaluate the academic impact of the Freshman Experience course with respect to the dichotomous categorical dependent variable of on-track to graduation status at the completion of the eleventh grade year, descriptive and inferential statistics will be analyzed. Descriptive statistics will be operationalized through measures of central tendency and measures of spread, frequency and standard deviation respectively. In order to evaluate the statistical strength of the difference between the frequencies of on-track to graduation status between Group One and Group Three, a nonparametric Chi-Square test will be calculated. The level of significance will be set at $p=.05$ for the Chi-Square.

In order to evaluate the magnitude of the differences between the frequencies of each group, phi $(\varphi)$ will be calculated to assign an effect size to the Freshman Experience course with respect to the interventions impact on the categorical dependent variable of on-track to graduation status. Cohen (1969) defined Phi as

$$
\varphi=\sqrt{\frac{\chi^{2}}{n}}
$$

Cohen (1988) defined a small effect size as $d \geq .1$, a medium effect size as $d \geq .3$, and a large effect size as $\mathrm{d} \geq .5$.

## Research Question Six

The independent variable for research question seven will be whether or not the student was enrolled in and satisfactorily completed (as defined by a "C" grade or higher) the Freshman Experience course at Target School. Two dependent interval variables will be tested for research question six: Developmental scale scores on the Florida Comprehensive Assessment Test Reading administered during the 2013-2014 school year and developmental scale scores on the Algebra I End of Course Assessment administered during the 2012-2013 and 2013-2014 school years. Group One will serve as the treatment group and Group Two will serve as the comparison group. Only those students who took the Algebra I End of Course Assessment during their ninth or tenth grade years will be considered for research question six.

The data relevant to research question six will be operationalized for Group One and Group Two at the conclusion of the tenth grade year or the 2013-2014 school year. The data for research question six will be representative of two interval dependent variables populated by developmental scale scores on two state accountability assessments. Students in Group One and Group Two are required to pass each of these assessments in order to earn a standard high school diploma in the state of Florida.

In order to evaluate the academic impact of the Freshman Experience program with respect to the dependent variables, descriptive and inferential statistics will be calculated. Descriptive statistics will be operationalized through measures of central tendency and measures of spread, arithmetic mean and standard deviation respectively. In order to determine the
statistical strength in the calculated descriptive means between Group One and Group Two, a one-way multivariate analysis of variance will be calculated. The level of significance will be set at $p=.05$ for the one-way MANOVA.

In order to evaluate the magnitude of the differences between the arithmetic means of each group, multivariate eta squared $\left(\eta^{2}\right)$ will be calculated to assign an effect size to the Freshman Experience course with respect to the interventions impact on student academic achievement as measured by the dependent variables of developmental scale scores on the Florida Comprehensive Assessment Test Reading and Algebra I End of Course Assessment. Cohen (1969) defined multivariate eta squared as

$$
\eta_{\text {partial }}^{2}=\frac{S S_{\text {effect }}}{S S_{\text {effect }}+S S_{\text {error }}}
$$

Cohen (1988) defined a small effect size as $d \leq .01$, a medium effect size as $d \geq .06$, and a large effect size as $\mathrm{d} \geq .14$.

## Research Question Seven

The independent variable for research question seven will be whether or not the student was enrolled in and satisfactorily completed (as defined by a "C" grade or higher) the Freshman Experience course at Target School. Two dependent interval variables will be tested for research question seven: Developmental scale scores on the Florida Comprehensive Assessment Test Reading administered during the 2011-2012 school year for the historical sample and 2013-2014 for the treatment group and developmental scale scores on the Algebra I End of Course Assessment administered during the 2010-2011 and 2011-2012 school years for the historical
sample and 2012-2013 and 2013-2014 school years for the treatment group. Group One will serve as the treatment group and Group Three will serve as the comparison group.

The data relevant to research question seven will be operationalized for Group One at the conclusion of the tenth grade year or the 2013-2014 school year. The data relevant to research question seven will be operationalized for Group Three at the conclusion of the tenth grade year or the 2011-2012 school year. The data for research question seven will be representative of two interval dependent variables populated by developmental scale scores on two state accountability assessments. Only those students who took the Algebra I End of Course Assessment during their ninth or tenth grade years will be considered for research question seven. An important limitation to research question seven will be that the Algebra I End of Course Assessment was not a graduation requirement for Group Three. All cases where students in Group Three did not take the Algebra I End of Course Assessment will be excluded from the statistical analyses calculated for research question seven.

In order to evaluate the academic impact of the Freshman Experience program with respect to the dependent variables, descriptive and inferential statistics will be calculated. Descriptive statistics will be operationalized through measures of central tendency and measures of spread, arithmetic mean and standard deviation respectively. In order to determine the statistical strength in the calculated descriptive means between Group One and Group Two, a one-way multivariate analysis of variance will be calculated. The level of significance will be set at $p=.05$ for the one-way MANOVA.

In order to evaluate the magnitude of the differences between the arithmetic means of each group, multivariate eta squared $\left(\eta^{2}\right)$ will be calculated to assign an effect size to the

Freshman Experience course with respect to the interventions impact on student academic achievement as measured by the dependent variables of developmental scale scores on the Florida Comprehensive Assessment Test Reading and Algebra I End of Course Assessment.

Cohen (1969) defined multivariate eta squared as

$$
\eta_{\text {partial }}^{2}=\frac{S S_{\text {effect }}}{S S_{\text {effect }}+S S_{\text {error }}}
$$

Cohen (1988) defined a small effect size as $\mathrm{d} \leq .01$, a medium effect size as $\mathrm{d} \geq .06$, and a large effect size as $\mathrm{d} \geq .14$.

## Table 3

Research Questions, Variables, and Methods of Analysis

| Number | Research Question | Variables | Method of Analysis |
| :---: | :---: | :---: | :---: |
| 1 | To what extent does the Freshman Experience course align with elements of successful programs (Freeman \& Simonsen, 2015): cognitive, affective, and behavioral that is well-planned, supported, systematic, and involve a variety of stakeholders? | Independent: Documents and Records (Lincoln \& Guba, 1985). | Document Analysis |
|  |  | Dependent: Aligns with elements of successful programs (Freeman \& Simonsen, 2015). |  |
| 2 | To what extent do students labeled at-risk for dropping out of high school who enroll as freshman at the beginning of the 2012-2013 school year at the target school compare with students labeled at-risk for dropping out of high school who enroll as freshman at the beginning of the 2012-2013 school year at the comparison school on persistence to the 10th grade? | Independent: Enrolled in Freshman Experience (yes/no) | Non-parametric ChiSquare |
|  |  | Dependent: Persistence to the $10^{\text {th }}$ grade (yes $/ n o$ ) |  |
| 3 | To what extent do students labeled at-risk for dropping out of high school who enroll as freshman at the beginning of the 2012-2013 school year at the target school compare with students labeled at-risk for dropping out of high school who enroll as freshman at the beginning of the 2010-2011 school year at the target school on persistence to the 10th grade? | Independent: Enrolled in Freshman Experience (yes/no) | Non-parametric ChiSquare |
|  |  | Dependent: Persistence to the $10^{\text {th }}$ grade (yes $/ n o$ ) |  |
| 4 | To what extent do students labeled at-risk for dropping out of high school who enroll as freshman at the beginning of the 2012-2013 school year at the target school compare with students labeled at-risk for dropping out of high school who enroll as freshman at the beginning of the 2012-2013 school year at the comparison school on on-track to graduation status at the end of the 11th grade year? | Independent: Enrolled in Freshman Experience (yes/no) | Non-parametric ChiSquare |
|  |  | Dependent: On-track to graduation status (yes/no) |  |


| Number | Research Question | Variables | Method of Analysis |
| :---: | :---: | :---: | :---: |
| 5 | To what extent do students labeled at-risk for dropping out of high school who enroll as freshman at the beginning of the 2012-2013 school year at the target school compare with students labeled at-risk for dropping out of high school who enroll as freshman at the beginning of the 2010-2011 school year at the target school on persistence to on-track to graduation status at the end of the 11th grade year? | Independent: Enrolled in <br> Freshman Experience <br> (yes/no) <br> Dependent: On-track to graduation status (yes/no) | Non-parametric ChiSquare |
| 6 | To what extent do students labeled at-risk for dropping out of high school who enroll as freshman at the beginning of the 2012-2013 school year at the target school compare with students labeled at-risk for dropping out of high school who enroll as freshman at the beginning of the 2012-2013 school year at the comparison school on the Florida Comprehensive Assessment Test Reading state standardized assessments such as FCAT Reading 10th grade and Algebra 1 EOC? | Independent: Enrolled in Freshman Experience (yes/no) <br> Dependent: FCAT Reading $10^{\text {th }}$ Grade and Algebra 1 EOC developmental scale scores | Multivariate Analysis of Variance (MANOVA) |
| 7 | To what extent do students labeled at-risk for dropping out of high school who enroll as freshman at the beginning of the 2012-2013 school year at the target school compare with students labeled at-risk for dropping out of high school who enroll as freshman at the beginning of the 2010-2011 school year at the target school on state standardized assessments such as FCAT Reading 10th grade and Algebra 1 EOC? | Independent: Enrolled in Freshman Experience (yes/no) <br> Dependent: FCAT Reading $10^{\text {th }}$ Grade and Algebra 1 EOC developmental scale scores | Multivariate Analysis of Variance (MANOVA) |

## Limitations

This study has the following limitations:

1. As the nature of the study is centered on evaluating the Freshman Experience course as an intervention aimed at reducing the frequency of high school dropout, mortality of the participants and population will be an inherent threat to the internal validity of the study.
2. The target and comparison groups of students were drawn from two urban-high schools in one central Florida school district; therefore, the results of this program evaluation may not be generalizable to all urban school districts within the state or other states.
3. A litany of variables, such as geographic mobility, family interruptions, abrupt homelessness, and special education enrollment, which could impact the internal and external validity of the study, were outside of the control of the target school and the researcher.
4. The target and comparison schools vary significantly in terms of demographics. The study does not have the intention establishing correlations among ethnicity, socioeconomic status, gender, or other demographic indicators and the academic impact of the intervention.
5. Target School District did not maintain a list of students enrolled in magnet programs prior to the 2013-2014 school year. As such, some students in the 20102011 Historical Comparison group may not be representative of the school zone relevant to Target School.
6. The author was employed as a teacher at Target School during the research, however not as an instructor of the course investigated.

## Significance of the Study

A successful transition into high school is both an integral as well as finite moment from which a student's potentials for success or failure can be measured. This is especially true of student's coming from low socioeconomic status and large, metropolitan, urban school districts.

The improvement of graduation rates among all students, especially those students labeled as at-risk for dropping out in large urban school districts, has immense and often immeasurable benefits on societies, both communally and nationally. Those students who graduate from high school are more likely to become employed as well as employ, that is, create jobs for others (Balfanz, et. al., 2013). In 1999, the income gap between those students who did not complete and those who completed high school was about \$8,000 a year (U.S. Department of Education, 2002). By 2010, that income disparity had increased to over $\$ 10,000$ a year (U.S. Census Bureau, 2012).

While the National Center for Education Statistics (2012) reported a national increase in high school completion, $50 \%$ of students enrolled in metropolitan and urban school districts continue to fail to complete high school (Balfanz, et al., 2013). When one takes into consideration the populations of these metropolitan school districts, the despondency of the situation begins to manifest itself. Therefore, it is imperative that more research be done on effective interventions, namely transition and orientation programs aimed at improving persistence in high school, be done.

The current study finds its significance in its contribution to the research of effective freshman transition programs, specifically in large urban high schools in one school district; however the results and recommendations of this study may be used to inform other schools and school districts who would like to further alleviate the frequency of dropout among those students labeled as at-risk for dropping out.

## Assumptions

This study functions under the following assumptions: (a) successful completion of a high school course is defined by the assignment of a "C" grade or better for the full school-year as well as the earning of a high school credit, a criterion valid when applied to core classes required for standard diploma graduation; (b) those students who earned a "C" grade or higher in the course also attended a preponderance of the class sessions and did not indicate propensities for absenteeism; and (c) the design, development, and implementation of the curriculum in the Freshmen Experience course are standardized based on collegial lesson planning and collaborative lesson design.

## Organization of the Study

The research is organized into five chapters. Chapter one provided an overview of the study and established a purpose and a foundational understanding of the background of the study. Chapter two introduces a conceptual framework of existing literature on the topic of interventions aimed at mitigating occurrences of high school dropout and provides a focus on transition programs with the purpose of encouraging persistence to the tenth grade. Chapters three and four explain the methodologies employed in the collection of the data relevant to the impact of one transition program as well as the various analyses done in measuring the
program's impact with respect to the research questions. The fifth chapter will present an overall discussion and summary of the data collected, the implications for policy and practice, as well as recommendations both for effective transition programs and future research.

## CHAPTER TWO: REVIEW OF LITERATURE

## Introduction

Chapter Two, review of literature, has the purpose of providing support for and background for conducting research on the academic impact of a school designed freshman transition intervention. The review of literature is introduced with a brief history of compulsory education in the United States. Following is a synthesis of high school completion literature in the United States with special attention accorded to the economic impact of dropping out of high school.

The conceptual framework revealed a number of variables critical in the predictability of high school completion: persistence to the tenth grade, staying on-track to graduate, and academic success. A comprehensive review of the literature surrounding these student level factors is presented in order to establish the need for intervention programs grounded in the purpose of mitigating the negative effects these factors might present during the transition year from eighth to ninth grade.

The established need for interventions during the transition into high school warranted a review of literature evaluating the effectiveness of interventions and programs with a conceptual focus on the elements of those programs found to be effective in positively impacting persistence to the tenth grade, on-track to graduation status, and academic success. Literature surrounding the themes common among those interventions determined to be effective is also provided.

The following literature review is illustrative of the research relevant to the study of the ninth grade year as a pivotal transition during a student's secondary educational career. The conceptual framework for this literature review was built through exhaustive searches within
several online databases subscribed to by the University of Central Florida: Education Full Text, Education Resources Information Center (ERIC), National Center for Education Statistics, PsycInfo, Science Direct, Dissertations \& Theses Full Text, and LexisNexis Academic.

Keywords used during the literature search included, drop out, drop out predictors, at-risk graduation, high school graduation rate, tenth grade persistence, drop out intervention, high school transitional programs, grade 9, academic achievement, ninth grade transition, drop out AND economy, program evaluation, metacognitive skills, high school behavior, reasons for drop out, and on-track to graduation indicators. Articles not directly related to high school transition programs were excluded from the literature review as were articles considering race, exceptional education status, and gender. Information was also collected from a selection of books is also referenced throughout the literature review. Chapter Two is arranged into four sections: (a) brief history of education, (b) high school dropout, (c) the transition into high school, and (d) effective transition interventions.

## Brief History of Compulsory Education in the United States

In the late $15^{\text {th }}$ and into the sixteenth centuries, European countries launched colonization efforts into the eastern North American continent. Small colonies, such as Roanoke, experienced very high mortality rates and inevitably failed; however with time, successful colonies were established. Jamestown, founded 1607 in the Colony of Virginia, became the first permanent settlement in the Americas, eventually becoming the capital of the Virginia Colony for 83 years. Twenty-one years later, the Puritans, a larger group than the original pilgrim settlers, established what became known as the Massachusetts Bay Colony. It is here that the history of public education in America began.

The Puritans were responsible for the beginnings of English education in Colonial America (Ornstein, 1985). The entirety of Puritan society was devoted to their religion, "to the Puritans, serving God was of utmost importance, and education was a means to that end" (Jeynes, 2007, p. 4). The puritans viewed the student's home life as the most important facet of one's education. Puritan children could attend both the best school and the best church; however if that student's home life was not desirable, then their education and interaction with literacy and religious understanding would be rendered moot.

Early education, such as that of the Puritans, was primarily religious in nature, though it brought schooling and literacy to the colonies long before the school system known today was legislated into existence. According to Allan Ornstein's 1985 book Introduction to the Foundations of Education, the history of American education can be broken up into four eras: the Permissive Era (1642-1821), the Encouraging Era (1826-1851), the Compulsory Era (18551980), and the Freedom of School Choice Era (1980-present). Each era exhibits unique characteristics among the teacher-student-parent-community relationship as well as developments with regard to the institutional requirements of education as a whole.

Ornstein (1985) characterizes the Permissive Era of education as one marked by complete parental authority as well as the beginnings of governmental approval of the establishment of public schools. The very first laws regarding education were passed by the Massachusetts General Court which required the parents of children to "make certain that their charges could read and understand the principles of religion and the laws of the Commonwealth" (Ornstein, 1985, p. 147). In effect, the very first laws enacted by the Massachusetts General Court personified the Permissive Era in that they made it a legal mandate that parents ensure literacy
among their "charges" or children in order read and understand religious teachings (Ornstein, 1985, p. 147).

Similar to the Permissive Era of education, the Encouraging Era maintained parental authority over a child's education. Children were still not compelled to attend a public school (Ornstein, 1985). The Encouraging Era indicated a marked increase in governmental involvement in the education process. State and local governments advocated for the introduction of school districts as well as the raising of tax revenues to support them; however, Ornstein (1985) writes, the governments still did not explicitly require the state establishment of schools.

By 1855 , more than 6,000 private academies and schools for occupational and college preparation serving an enrollment of about 263,000 students existed in the United States (Ornstein, 1985). The Compulsory Era derives its name from legislation which compelled the "establishment of school districts, taxation for government schools, curriculum and structure, and children's school attendance" (Ornstein, 1985, p. 160). The Compulsory Era marked the first decline of parental authority in education in American history and for a brief time, it even became illegal in some states for students not to attend government schools even if their parents could afford to pay the tuition at parochial, private, and church schools (Ornstein, 1985). Between the years 1852-1913, all states would introduce, enact, and enforce compulsory school attendance laws (Coulson, 1999).

The Freedom of School Choice Era marked a departure from the Compulsory Era in that the authority of the parent increased while educational options for students expanded through programs such as homeschooling, voucher programs, tuition tax credits, scholarship tax credits,
education deductions, and the advent and proliferation of charter schools (Coulson, 1999).
Between the years 1982 and 1992, 32 states modified their compulsory attendance laws to permit and include homeschooling as a "viable educational option to parents and students" (Coulson, 1999, p. 120). By the mid-1990s, all states passed legislation which permitted homeschooling as an alternative to traditional public school (Jeynes, 2007).

The publication and mass-dissemination of the 1983 National Commission on Excellence in Education's report "A Nation at Risk" stimulated a national education reform movement (Ravitch, 2011). The report declared that the country's educational institutions seemed "to have lost sight of the basic purposes of schooling, and of the high expectations and disciplined effort needed to attain them" and that "the educational foundations of our society are presently being eroded by a rising tide of mediocrity that threatens our very future as a Nation and a people" (U.S Department of Education, p. 1, 1983).

The report called for elected officials, parents, students, and educators, to reform what was referred to as a school system in dire need of improvement. Much of the reports criticism rested in the lowering of standards of excellence and expectations among students of all races and creeds (U.S. Department of Education, 1983). These calls for higher expectations of excellence serve as predictors for high school completion (Swanson \& Spencer, 2012). It is often during the ninth grade year that direct and indirect decisions regarding drop out, especially among minority students attending urban high schools, are made (Balfanz, et al., 2013; Weiss, 2001).

## High School Dropout

The National Center for Education Statistics (2012) defines a high school dropout as a student who was enrolled in a school at some point during a school year and was not enrolled on October 1 of the subsequent school year, has not completed high school or a comparable approved educational program, and has not transferred schools, been suspended, or died. The Alliance for Excellent Education (2010) estimates that nearly 7,000 students drop out of school each school day. Of those students dropping out, students of color and low-income students are the most affected (Balfanz, et al., 2013).

Balfanz, et al. (2013) defined a dropout factory as a "high school in which twelfth grade enrollment is 60 percent or less of ninth grade enrollment three years earlier" (p. 17). Carolyn Carlson (2014) estimated that one-in-ten schools in the United States can be defined as a dropout factory, a number disproportionately represented by schools in urban city centers. Carlson (2014) classified 52 of Miami's 106 high schools, 19 of Memphis, Tennessee's 58 high schools, 14 of Charlotte, North Carolina's 52 high schools as dropout factories (p. 2). At the height of the dropout crisis in 2002, there were over 2,000 high schools that could be classified as dropout factories (Balfanz, et al., 2013). In 2004, five states in the south, Texas, Florida, Georgia, North Carolina, and South Carolina, represented $38 \%$ of the total nationwide dropout factories (Balfanz, et al., 2013). Florida and Georgia each had over 100 schools classified as dropout factories with Texas being home to over 200 (Balfanz, et al., 2013).

From 2002 to 2011, the number of high schools classified as dropout factories decreased by $29 \%$ or 583 total schools to 1,424 (Balfanz, et al., 2013). Balfanz et al. (2013) found that Florida, North Carolina, and Tennessee had all reduced the number of schools classified as
dropout factories by more than $35 \%$ with Florida representing a decline of 93 total schools classified as dropout factories in 2002 to 69 in 2011 (p. 40). Texas, Florida, Georgia, North Carolina, and South Carolina who in 2004 represented $38 \%$ of the nation's dropout factories, along with Alabama and Tennessee reduced the number of dropout factories by 439, a $49 \%$ decline from 2001 (Balfanz, et al., 2013).

Although Balfanz et al. (2013) found that the nation is making significant progress toward graduating $90 \%$ of students by 2020, African American, Hispanic, and students of lowincome families are still graduating at a rate far below their peers, $66 \%$ or less in 18 states. Students with limited English proficiency, graduation rates in 33 states are at $66 \%$ or less (Balfanz, et al, 2013). No states recorded a graduation rate below $66 \%$ for white students and only four states reported a graduation rate for white students below 75\% (Balfanz, et al., 2013). There are 11 states where the graduation rate for white students is at or above $89 \%$, a statistic which is true of zero states for African American, Hispanic, or economically disadvantaged students (Balfanz, et al., 2013).

Florida, Georgia, New York, and California, who collectively educate more than a quarter of the nation's African American students, have done little to improve the aggregate graduation rate of those students beyond $60 \%$ since 2001 (Balfanz, et al., 2013). The graduation gap among White students and African American students in Florida continues to hover around $17 \%$ and White students and Hispanic students hovers around $11 \%$ (Balfanz, et al., 2013).

Put succinctly, while minority students represent less than half of the nation's total student population, they constitute more than $50 \%$ of the nation's dropouts (Amos, 2008). If the graduation rate of African American, Hispanic, and Native American students were to reach that
of white students by the year 2020, it is estimated that more than $\$ 310$ billion in income would be added to the United States' economy (Amos, 2008).

## The Economic Impact of Not Completing High School

Students who drop out of high school transition into the workforce with inadequate academic and professional skills (Carlson, 2014). The introduction of 7,000 dropouts each day into the workforce has a multifaceted detrimental effect on the economy, earning less, contributing less, and costing more (Carlson, 2014). This section presents the literature relevant to the economic impact of not completing high school from a variety of perspectives: (a) national, (b) state, (c) metropolitan, and (d) individual.

## National

The United States Department of Labor reported a national unemployment rate at the end of 2014 of $5.6 \%$. However, the national unemployment rate of high school dropouts aged 25 and older was $9.0 \%$ compared to $6.0 \%$ for those who completed high school and did not attend college, and $3.5 \%$ for those who attended college and ultimately earned a bachelor's degree (U.S. Department of Labor, 2014). Those without a high school diploma who do secure employment often earn far less than those with a diploma, \$9,000 a year less on average (Carlson, 2014).

Jason Amos (2008) writes that one person who drops out of high school will cost the nation an estimated $\$ 260,000$ over the course of their life through lost wages, spending potential, and a loss of overall productivity. A preponderance of these costs are comprised of government provided healthcare, food assistance programs such as food stamps, housing supplements, and costs associated with criminal activity (Carlson, 2014). The Class of 2011 would have benefitted
from an additive $\$ 154$ billion in income had those students who dropped out instead earned a high school diploma (Carlson, 2014).

National tax revenues and consumer spending are also impacted by dropout rates. Those students who drop out contribute $\$ 60,000$ less in taxes over their lifetime (Carlson, 2014). An additional 666,000 graduating students in the Class of 2012 would have added a $\$ 6.1$ billion in annual spending (Alliance for Excellent Education, 2013a). If the current dropout rate persists, the nation stands to lose $\$ 1.5$ trillion in tax revenue and spending (Carlson, 2014). Increasing a national high school graduation rate by $5 \%$ would lead to an increase of $\$ 8$ billion in combined revenue and savings each subsequent year (Amos, 2008). Conservative estimates indicate that equalizing the high school graduation rate for minority students to that of white students by 2020 would add $\$ 310$ billion to the national economy (Amos, 2008). The $1.7 \%$ increase in the graduation rate from the Class of 2011 to the Class of 2012 is estimated to increase lifetime earnings by over $\$ 17$ billion and lead to an increase in tax revenues of $\$ 63$ million (Alliance for Education, 2013).

Historically, high school completion was not directly related to earning potential. In 1967, half of families headed by someone who did not complete high school and over two-thirds of those families headed by someone who did complete high school were in the middle class as defined by earnings between $\$ 21,000$ and $\$ 81,000$ in current dollars (Amos, 2008). By 2004, $33 \%$ of families headed by someone who did not complete high school and $50 \%$ of families headed by someone who did complete high school were still in the middle class (Amos, 2008). Virtually all families headed by someone who did not complete high school had dropped below the poverty line (Amos, 2008).

## State

Amos (2008) writes that students who complete high school with a diploma save their respective state an "average of $\$ 13,706$ in Medicaid and expenditures for uninsured care over the course of his or her lifetime" (p. 2). States stand to save more than $\$ 17$ billion if those students who historically drop out instead earn a high school diploma (Amos, 2008). The five biggest states by population as of July 1, 2014, California, Texas, Florida, New York, and Illinois, lost an aggregate estimate of $\$ 128$ billion in earning potential, lost tax revenue, and welfare assistance costs to those students who dropped out of the Class of 2008 (Alliance for Education, 2013).

If increases in graduation rates continue at the same rate experienced from 2009 to 2013, California, Texas, and New York will reach 90\% graduation by 2020 (Balfanz, et al, 2013). Florida and Illinois are not on pace to reach the $90 \%$ graduation threshold (Balfanz, et al, 2013). The economic impact of high school completion for these five states was explored.

As of 2013, California was on track to reach a $90 \%$ graduation rate by the year 2020 (Balfanz, et al., 2013). The 2012 graduation rate in California was $71 \%$ (Alliance for Excellent Education, 2013a). A 90\% graduation rate in 2012 would translate to an additional 98,000 students completing high school (Alliance for Excellent Education, 2013a). The Alliance for Excellent Education (2013a) estimated that a $90 \%$ graduation rate in 2012 would lead to increases of $\$ 1.4$ billion in annual earnings, $\$ 1.1$ billion in annual spending, a combined $\$ 3.67$ billion in auto and home sales, $\$ 2$ billion in gross state product, and a combined $\$ 356$ million in annual federal, state, and local taxes.

Texas transitioned from a state making "limited improvement" in 2010 to being on track to reach a graduation rate of $90 \%$ by 2020 (Balfanz, et al., 2013, p. 24). A $90 \%$ graduation rate in 2012 would translate to an additional 70,000 students completing high school (Alliance for Education, 2013f). With a 90 percent graduation rate in 2012, the additional graduates could deliver an estimated $\$ 511$ million in increased annual earnings, $\$ 31$ million in increased annual state and local tax revenues, and an increase in the Gross State Product of $\$ 603$ million. (Alliance for Excellent Education, 2013f; Balfanz, et al, 2013). High school dropouts in Texas earned $\$ 9,000$ less per year over the course of their life than those students who completed high school (Carlson, 2014).

Florida is considered a state which is improving with respect to the graduation rate; however it is currently not on pace to reach a $90 \%$ graduation rate by 2020 (Balfanz, et al., 2013). The 2011 graduation rate in Florida has remained at about $70 \%$ from 2010 to 2012, an increase from the 2005 graduation rate of $61 \%$ (Alliance for Excellent Education, 2013b; Amos, 2008). Each additional graduate in Florida in the Class of 2006 would save the state $\$ 26,000$ in Medicaid and other health spending (Amos, 2008). A five-percent increase in the 2006 graduation rate among high school males would result in $\$ 332$ million crime-related savings (Amos, 2008).

With a $90 \%$ graduation rate in 2012, Florida would have seen an additional 42,000 high school graduates (Alliance for Excellent Education, 2013b). A 90\% graduation rate in 2012 would lead to increases of $\$ 436$ million in annual earnings, $\$ 344$ million in annual spending, a combined $\$ 881$ million in home and automobile sales, $\$ 606$ million to the gross state product,
and a combined $\$ 90$ million in federal, state, and local tax revenues (Alliance for Excellent Education, 2013b).

The number of students who did not complete high school in New York State for the Class of 2008 was 83,905 , a graduation rate of $68 \%$ (Amos, 2008). Graduating $90 \%$ of students in 2008 would have led to an additional $\$ 21$ billion in income over the lifetimes of these students (Amos, 2008). With a $90 \%$ graduation rate, the additional graduates in the state of New York would deliver increases of $\$ 368$ million in annual earnings, $\$ 90$ million in annual tax revenue, and $\$ 483$ million to the gross state product (Balfanz, et al., 2013).

By 2012, New York had increased the state-wide graduation rate to $78 \%$ (Alliance for Excellent Education, 2013d). A $90 \%$ graduation rate in 2012 would increase the number of graduates with a high school diploma in New York state by 27,000 (Alliance for Excellent Education, 2013d). These additional students would lead to the creation of over 2,000 jobs and aggregate increases of $\$ 261$ million in annual spending and $\$ 491$ million to the gross state product (Alliance for Excellent Education, 2013d).

Illinois is not considered to be on pace to reach a graduation rate of $90 \%$ by 2020 (Balfanz, et al., 2013). An increase of $19 \%$ to $90 \%$ of the 2012 graduation rate in Illinois would lead add 33,000 students with high school diplomas to the state's population (Alliance for Excellent Education, 2013c). Amos (2008) estimated that Illinois could save over \$15,000 in lifetime Medicaid expenditures with each additional high school diploma earned by students in that state. Increasing the graduation rate in 2012 to $90 \%$ would have led to an additional $\$ 376$ million in annual earnings, $\$ 279$ million in annual spending, $\$ 893$ million in combined home and
automobile sales, over 3,000 new jobs, $\$ 518$ million in the gross State product, and a combined $\$ 95$ million in federal, state, and local tax revenue (Alliance for Excellent Education, 2013c).

## Central Florida Metropolitan Area

The Central Florida Orlando-Kissimmee urban metropolitan area recorded a 72\% 2012 graduation rate (Alliance for Excellent Education, 2013e). A 90\% graduation rate in 2012 would translate to an additional 5,100 students with high school diplomas in the area (Alliance for Excellent Education, 2013e). The additive economic effects of a 2012 90\% graduation rate include increases of $\$ 48$ million in annual earnings, $\$ 37$ million in annual spending, $\$ 91.5$ million in combined home and automobile sales, 350 new jobs, $\$ 62$ million to the gross regional product, and a combined $\$ 9.8$ million in federal, state, and local taxes (Alliance for Excellent Education, 2013e).

## Individual

Occupations traditionally filled by high school dropouts or those with little education are rapidly being replaced by machines and automation or being transitioned overseas. The United States' economy is trending toward a more skilled labor force, further exacerbating the economic condition of high school dropouts (Carter \& House, 2010). According to the Bureau of Labor Statistics (2014c), high school dropouts are three times as likely to be unemployed than those who complete a four-year college program. Not completing high school can lead to feelings of economic uncertainty, health issues resulting in reliance on state and federal assistance programs, increased propensity for incarceration, and dramatic decreases in wage and spending potential (Fisher, 2010; Amos, 2008, Balfanz et al., 2013; Azzam, 2007; Kerr, 2003).

Over the course of his or her lifetime, a high school dropout stands to earn an average of $\$ 260,000$ less than someone with a high school diploma (Amos, 2008). For every $\$ 500$ of wealth that households headed by a high school dropout accumulate, households headed by high school graduates possess approximately $\$ 5,000$. This means that there would be an additional $\$ 74$ billion in collective wealth in the United States if every household were headed by an individual with at least a high school diploma (Amos, 2008, p. 2)

Decreasing the frequency of high school dropout will have a positive impact on national, state, and local economies by increasing lifetime earnings and spending while concurrently reducing cost factors associated with poverty. Increasing the graduation rate will lead to increases in individual standards of living through wages earned and spending potential. Amos (2008) posits that a high school diploma thus becomes the "best economic stimulus package" ( p . 1). In order to increase all student's potential for completing high school, it is imperative that the factors contributing to a student's decision to drop out of high school be explored.

## Factors Impacting Dropout

The current status of high school completion across the nation and in individual communities as well as the national, state, local, and individual economic impact of not completing high school warrants an exploration of why students are choosing to not complete high school. Categorizing reasons for dropout between individual factors (student specific characteristics) and institutional factors (community, family, and school characteristics) dates back to early research by Russell Rumberger (1983).

Living at or below the poverty line, not reading proficiently by the third grade, family structure, divorce, race, geographic location, and educational attainment by the student's parents,
along with a myriad other variables can be used to predict and contextualize a student's choice to not complete high school (Hernandez, 2011; Amato \& Sobolewski, 2001; Azzam, 2007; Anguiano, 2004; Mackey \& Mackey, 2012; Zvoch, 2006). However, scholars contend that many of the aforementioned dropout factors are proxies for family background and individual student characteristics (Rumberger, 1983; Balfanz \& Letgers, 2005; Plank, DeLuca, \& Estacion, 2005). In his book Dropping Out: Why Students Drop Out of High School and What Can be Done About It, Russel Rumberger (2011) revisits earlier categorization and causation frameworks, stating that it is hopeless to assign a single causal factor to dropout, widely considered to be the last phase of a process of disengagement.

Of interest to this literature review are the student level factors associated with dropout which can be controlled by school administration, curriculum design, and teaching. Literature related to the student level factors associated with dropout consistently identified three key student-level predictors: (a) grade retention (Orfield, 2004; Neild, et. al., 2008; Plank, DeLuca, \& Estracion, 2005; Balfanz, et al., 2013; Zvoch, 2006; Weiss, 2001; Roderick \& Camburn, 1999; Stearns \& Glennie, 2006), (b) credit accumulation deficits (Zvoch, 2006; Weiss, 2001; Neild, et. al., 2008; Lemon \& Watson, 2011; Allensworth \& Easton, 2007; Hartman, Wilkins, Gregory, Gould, \& D'Souza, 2011; Norbury, Wong, Wan, Reese, Dhillon, \& Gerdeman, 2012; Cahill, Hamilton, \& Lynch, 2006), and (c) academic success (De Witte, Cabus, Thyssen, Groot, \& Maasen van den Brink, 2013; Allensworth \& Easton, 2007; Neild \& Balfanz, 2006; Entwisle, Alexander, \& Steffel-Olson, 2004; Dalton, Gennie, \& Ingels, 2009; Zvoch, 2006; Neild, et al, 2008; Roderick \& Camburn, 1999).

## Ninth Grade Retention

Teenagers who dropout often indicate trouble during the ninth grade year (Neild, et al., 2008). In the cities with the highest rates of high school dropout, $40 \%$ of students repeat the ninth grade (Orfield, 2004). Of those students who repeat the ninth grade, only $15 \%$ continue on to graduate (Orfield, 2004; Neild, et. al., 2008; Balfanz, et al., 2003).

Students in the ninth grade represent the largest percentage of the high school population due largely to additive factors of incoming ninth grade students, repeating of ninth grade courses, and ninth-grade retention, creating what is known as the ninth-grade bulge (Zvoch, 2006). In a synthesis of seven meta-analyses of studies on retention, Hattie (2009) attributes an effect size of -0.16 and acknowledges that few studies exist regarding retention with a positive ( $d>0.0$ ) effect. Plank, DeLuca, and Estracion (2005) found age to be highly significant on dropping out for those students who were older than 16 upon entering the ninth grade ( $p<.001$ ). De Witte, et al. (2013) ascribed this relationship to the "stigma of being unintelligent... and lagging behind" (p. 18).

Students who do not complete high school typically failed more than a quarter of their freshman year courses (Weiss, 2001). Comparatively, only $8 \%$ of students who do go on to complete high school indicated the same difficulty (Weiss, 2001). Students who earned fewer than two credits at the conclusion of the ninth grade, missed more than $30 \%$ of the school year, or repeated ninth grade courses two or three times increased their likelihood for drop out by $75 \%$ (Neild, et al, 2008).

The trend of ninth-grade retention impacting dropout is one repeated in various regions of the United States. In the study of a large urban school district in the southwest United States, "the odds of dropping out for a student overage for grade level were more than 35 times greater
than they were for students of average age for grade level" (Zvoch, 2006, p. 105). In Philadelphia, students who repeated the ninth grade indicated an increased risk of dropping out of high school within the next four years (Neild, et al., 2008). More than $40 \%$ of freshmen in a Chicago study were found to have failed a core subject during the first semester of the freshman year (Roderick \& Camburn, 1999).

In an analysis of North Carolina high school students, Elizabeth Stearns and Elizabeth Glennie (2006) found that students who were retained during the ninth grade, mostly male students representative of minority subgroups, dropped out due to academic reasons. Stearns and Glennie (2006) also found a statistically significant difference in the rates of white students who dropped out during the ninth ( $7.51 \%$ ) and twelfth ( $4.01 \%$ ) grade years $(p<.001)$.

To isolate the independent relationship between ninth grade year performance and high school dropout, Neild et al. (2008) controlled for pre-high school academic variables such as attendance, achievement, and grade-point average. The purpose of Neild et al.'s (2008) research was to examine if ninth grade performance and subsequent retention was a predictor of dropout and to counter the argument that ninth grade performance and subsequent retention was a reflection of preexisting conditions such as poverty, race, and family structure. Four logistic regression models were used to measure the predictor power of the ninth grade year. Neild et al. (2008) concluded that experiences during the freshman year, specifically course failure, retention, and attendance, significantly contributed to a student's propensity for dropout when demographic and student specific preexisting conditions such as poverty and parent's educational attainment were controlled ( $p<.01$ ).

## On-Track to Graduation Status

On-track to graduation status can be traced back to the freshman year. Students who fail more than one core class for one semester and possess fewer than five credits at the completion of the freshman year will not be on track to graduate (Allensworth \& Easton, 2007; Zvoch, 2006; Weiss, 2001). Of the $26 \%$ of Philadelphia Education Longitudinal Study data students who ultimately dropped out of high school, $60 \%$ dropped out during their third or fourth year of high school; however many of those students were still listed as ninth or tenth graders (Neild, et al., 2008). A majority of the students were "seriously behind" on credit accumulation by the conclusion of the third year in high school (Neild, et al., 2008, p. 552).

There are a variety of on-track indicators which are used to determine whether or not a student is on-track to graduate high school (Allensworth \& Easton, 2007; Lemon \& Watson, 2011; Weiss, 2001; Zvoch, 2006). On-track indicators are used as early warning indicators of potential for dropout among high school youth (Lemon \& Watson, 2011). The genesis of the research on on-track to graduation status stems from the University of Chicago's Consortium on Chicago School Research.

The freshman on-track indicator was developed by the University of Chicago's Consortium on Chicago School Research in the 1990s (Allensworth \& Easton, 2007). The indicator classifies freshman as on-track to graduate at the completion of the first year of high school if a student has "accumulated five full credits... and has no more than one semester F in a core subject (English, math [sic], or social science) by the end of the first year in high school" (Allensworth \& Easton, 2007, p. 4).

The Consortium on Chicago School Research later found that of those students identified as being on-track to graduate at the conclusion of the freshman year, $81 \%$ graduated within four years compared to $22 \%$ of students who were classified as off track (Allensworth \& Easton, 2007). Allensworth and Easton (2007) discussed the generalizability of their research as a potential limitation warranting further research.

The freshman on-track indicator methodology developed by the Consortium on Chicago School Research was replicated by the Regional Educational Laboratory Southwest's study of five school districts in Texas and the Regional Educational Laboratory Midwest's study of two urban school districts (Allensworth \& Easton, 2007; Hartman, et al., 2011; Norbury, et al., 2012). Both of the regional Educational Laboratory studies controlled for student demographics and prior academic achievement.

Norbury et al. (2012) analyzed the overall freshman on-track rates for two high school cohorts, compared four-year graduation rates for on- and off-track freshmen in those cohorts, and evaluated the predictability of the freshman on-track indicator as applied in two urban Midwest school districts. For cohort one (2005-2006) in District A, $80.7 \%$ of students who were on-track to graduate at the conclusion of their freshman year completed high school whereas $30.2 \%$ of students identified as off-track graduated within four years. Cohort two (2006-2007) reported $77.7 \%$ of on-track students and $30 \%$ of off-track students graduated. Cohort one in District B reported a graduation rate of $90.6 \%$ for those students identified as on-track and $46.1 \%$ for those students identified as off-track. Cohort two reported a $90.5 \%$ graduation rate for on-track students and a $44.7 \%$ graduation rate for off-track students (Norbury, et al., 2012). Students who
left the district during the ninth grade or entered the district after ninth grade were not included in the sample.

Using a regression analysis which controlled for student demographic characteristics and grade eight state accountability assessment scores, Norbury, et al. (2012) found a significant relationship between on-track status at the conclusion of the freshmen year and on-time graduation ( $p<.01$ ). The odds of on-time graduation for students identified as on-track to graduate at the conclusion of their freshman year were found to be 6.6 times in District A and 5.5 times in District B that of students identified as off-track (Norbury, et al., 2012).

Hartman, et al. (2011) found similar results using the freshman on-track indicator across five school districts in Texas. National and localized studies in Chicago and New York have confirmed the finding that nearly all students who drop out of high school do so far behind in course credits (Allensworth \& Easton, 2007; Cahill, Hamilton, \& Lynch, 2006; NCES, 2011).

## Academic Success

Freshman course performance and overall academic success during the early years of high school can be used to identify those students who are at an increased risk of dropping out of high school (Allensworth \& Easton, 2007). Neild and Balfanz (2006) found that many of the struggles predictive of dropping out could be traced back to the first marking period of high school, noting that $20 \%$ of first-time freshmen in Philadelphia schools recorded straight F's in core classes during the first marking period. Over two-thirds of those students who failed all of their courses during the first marking period recorded the same grades at the conclusion of the school year (Neild \& Balfanz, 2006).

Academic success is commonly triangulated through operationalization of standardized test scores in reading and mathematics, grade point average, and local summative assessments (De Witte, et al., 2013; Entwisle, et al., 2004; Dalton, et al., 2009). In a review of literature on dropout factors, De Witte, et al. (2013) found early academic achievement at the secondary level, more so than demographic characteristics, to be predictive of dropout. Allensworth and Easton (2007) further contend that academic success leads to a decrease in retention and a subsequent decrease in dropout.

Sixth graders who record a final grade of F in mathematics or English had a 75\% chance of dropping out of school within six years (Neild, et al, 2008). Further, more than $40 \%$ of freshmen in a Chicago study were found to have failed a core subject during the first semester of the freshman year (Roderick \& Camburn, 1999).

Students who comprise the lowest quartile of achievement are 20 times more likely to drop out of high school (De Witte, et al., 2013). Increasing academic achievement is associated with decreases in odds of dropping out during ninth grade (Zvoch, 2006). The odds of dropping out of high school can be decreased by $35 \%$ with each standard deviation increase in student achievement (Zvoch, 2006). In the same study, Zvoch (2006) found academic achievement to be a significant predictor of drop out $(p<.0001)$.

Failing courses is also illustrative of overall disengagement with the school (Neild, et al., 2008; Lan \& Lanthier, 2003). This disengagement typically begins or is heightened during the transition into high school (Zvoch, 2006). Subsequently, noted De Witte et al. (2013), course failure, lagging credit accumulation, and weak academic study skills may foster an inability to be promoted beyond the ninth grade, regardless of perceived level of engagement. These findings
all lend credence to the contention that dropout is the last phase a long, symbiotic, and multidimensional process (Rumberger, 2011).

While there can be no single identified school level or academic reason why students choose to drop out, many of the predictors associated with early school leaving or noncompletion can be traced back to the transition into high school. Ninth grade retention and the repeating of ninth grade courses, credit accumulation during the ninth grade and subsequent years of high school, and academic success as measured by performance on state accountability assessments and course performance were recurring themes identified throughout the literature on student-level factors impacting high school dropout which can all be traced back to the ninth grade year.

## The Transition into High School

As noted previously, many of the variables associated with dropout can be traced back to the ninth grade year (Neild, et. al., 2008; Zvoch, 2006; Weiss, 2001; Allensworth \& Easton, 2007; De Witte, et al., 2013). The transition into high school greatly increases academic and social stressors (Stein \& Hussong, 2007). In a study on academic achievement during the transition into middle school from elementary school and high school from middle school, John Alspaugh (1998) found that moving from one educational facility into another was statistically significant with respect to its correlation to academic achievement loss ( $p<.0001$ ).

During the transition into high school, ninth grade students often encounter educational experiences different than those during middle school (Haviland, 2005). High schools are considered to be large, impersonal, and disorganized (Weiss, 2001). Due to this impersonality and disorganization, ninth grade students learn new behaviors without consequence and fail
classes without intervention by the school (Weiss, 2001). Many transition students, especially those entering the ninth grade, are not provided the support needed to make a smooth transition and end up lost within the school (Allensworth \& Easton, 2007).

As noted previously, students who encounter academic difficulties during the ninth grade year may never recover (Roderick \& Camburn, 1999). Course failure during the ninth grade year leads to course repetition, retention, academic disengagement, and behavioral issues, ultimately leading to drop out (Orfield, 2004; Neild, et. al., 2008; Allensworth \& Easton, 2007; De Witte, et al., 2013; Neild \& Balfanz, 2006).

Further, many high school teachers adopt a sink-or-swim mentality toward their students (Roderick \& Camburn, 1999). Transitioning ninth grade students, especially those in urban metropolitan areas, enter the ninth grade lagging behind their suburban and socioecomically advantaged peers in both reading and mathematics (Allensworth \& Easton, 2007; Balfanz, et al., 2013; Neild \& Balfanz, 2006). Additionally, students find high school to be larger, unfamiliar, and socially complex than previous educational experiences, especially when several middle schools feed into one high school (Roderick \& Camburn, 1999; Neild \& Balfanz, 2006).

Research has consistently found the transition, or the moving from one school to another, as the root cause for distress during the ninth grade (Allensworth \& Easton, 2007; Freeman \& Simonsen, 2015; Herzog \& Morgan, 1999; Roderick \& Camburn, 1999). Even when studentand school-level factors are controlled for, the transition into high school, rather than developmental processes or changes, causes anxiety, stress, and academic disengagement (Roderick \& Camburn, 1999; De Witte, et al., 2013).

## Establishing a Need for Transition Interventions

The No Child Left Behind Act of 2001 placed a large emphasis on school performance and graduation. Performance on standardized state accountability assessments for reading and mathematics and the graduation rate are integral components to the adequate yearly progress standard of proficiency for high schools (National High School Center, 2007). Because most students are tested during the tenth grade year, it is important the high school monitor and understand the variables predictive of academic disengagement linked to the ninth grade.

The major factors impacting dropout can be traced to a student's transition into high school during the months prior to and throughout the ninth grade year (Neild, et al., 2008; Weiss, 2001; Neild \& Balfanz, 2006; Zvoch, 2006). The factors consistently tied to a student's decision to drop out of high school must be addressed through interventions aimed at increasing persistence to the tenth grade, developing the metacognitive and cognitive skills necessary for academic success, and encouraging a smooth transition into the ninth grade (Haviland, 2005). Even though the graduation rate has steadily increased over the past decade, the challenges for those students who continue to not complete high school can be traced back to the ninth grade (Balfanz, et al., 2013; Allensworth \& Easton, 2007).

The transition into high school introduces students to an increase in workload, more independence, and greater responsibility (Neild, et al., 2008). In order to mitigate the challenges associated with the transition into ninth grade, high schools have started to introduce intervention programs aimed at encouraging students to succeed academically and persist toward graduation. Schools have designed and introduced a variety of transition and orientation programs for ninth grade students (Walker, 2007).

Students, even when demographic indicators remain constant, are less likely to drop out of high school when they actively participate in a freshman transition program which involves students, parents, and staff members (Freeman \& Simonsen, 2015; Herzog \& Morgan, 1999). Freshman academies in one large urban southwestern United States school district were found to have a statistically significant impact on dropout prevention among non-white Latino students ( $p$ <.10) (Zvoch, 2006).

In a qualitative study of student perspectives on a transition academy employed in Philadelphia high schools, students reported an appreciation for the development of metacognitive skills such as note taking, organization, and study skills (Corbett \& Wilson, 2000). Corbett and Wilson (2000) found that teachers in Philadelphia high schools which did not utilize a school-wide intervention aimed at encouraging a smooth transition into ninth grade felt that broad course failure was unavoidable.

The first year of high school is pivotal to the ultimate success of a student and that the transition into the freshman year is often characterized by declinations in grades and attendance from the junior high school or middle school level. It is imperative that programs and interventions, especially for those students identified as at risk for not completing high school, be put into place to ensure a safe, smooth, and successful transition into high school and ultimately the completion without retention of the freshmen year.

## Effective Transition Interventions

The following literature provides context for effective transition programs using Walker's (2007) outline of research based freshman orientation programs. Special consideration was given to four evaluations of existing, research based, freshman transition programs. Recurring themes
identified by Freeman and Simonsen (2015) in a synthesis of related literature on ninth-grade orientation and transition interventions were used to develop a conceptual framework for research based elements of effective transition programs.

## Program Evaluations of Freshman Transition Models

Transition programs manifest in a variety of forms, from one-time orientation program interventions to long-term courses specifically designed to guide transition students through their freshman year (Walker, 2007). The goals of these programs vary as well, from acclimating and orienting students with a school, the building, and the services offered to developing mentormentee relationships, providing guidance, and supplementing core-curriculum instruction (Walker, 2007).

Literature on three freshman transition interventions was reviewed to provide a conceptual context for the freshman transition intervention of interest to this study. Each article reviewed provided context for a different type of transition program (Walker, 2007). First, research on Check and Connect, a Minneapolis, MN based transition program based on research completed by Finn (1989) is presented (Scheel, Madabhushi, Backhaus, 2009). Second, a program evaluation on Project Transition, a transition program focused on teacher-level variables such as planning time and instructional coaching (Quint, Miller, Pastor, \& Cytron, 1999). Last, Talent Development High School's Ninth-Grade Success Academy, a component of a reform initiative purposed with personalizing the learning environment of ninth graders and transforming the curriculum and structure of large high schools in urban areas is presented (Kemple, Herlihy, \& Smith, 2005).

## Check and Connect

The Check and Connect program is founded on the premise that dropout is not an event, but rather the end of a long process of academic and social disengagement (Finn, 1989). Program evaluations of Check and Connect have provided "empirical support for the prevention of school dropout" (Scheel, et al., 2009, p. 1150). Check and Connect is conceptually founded on three supports: (a) keeping in contact with students, (b) not give up on students who are struggling, and (c) assist students in problem solving stressors (Scheel, et al., 2009). The Check and Connect transition intervention is intended for at-risk students in highly mobile environments.

The Check and Connect program is broken up into two functions. The check function places the onus on adults to "monitor absenteeism, suspensions, and academic credit earned" (Scheel, et al., 2009, p. 1151). The connect function of the program requires methodical and timely interventions comprised of partnerships among community stakeholders, family, and school faculty (Scheel, et al., 2009). Another component of the Check and Connect program is "persistence plus", a support structure which encourages educational perseverance, credit accumulation, and overall promotion of education (Scheel, et al., 2009, p. 1151).

Each Check and Connect student is paired with a mentor. While Hattie (2009) attributes a low effect size $(d=.15)$ to mentoring programs, the attitudinal variable of satisfaction throughout a mentorship was represented by a very high effect size $(d=.60)$. Unique to the Check and Connect program, mentors follow students from school to school in order to ensure satisfaction and continuity (Scheel, et al., 2009). Check and Connect is structured to maximize meaningful relationships among at-risk students and adults (Sinclair, Christenson, \& Thurlow, 2005). The
presence of a caring adult can increase positive school engagement and reduce risk for failure (Masten \& Coatsworth, 1998; Masten, 2001).

Effectiveness of the Check and Connect program was assessed using an experimental model by Sinclair, Christenson, and Thurlow (2005). Participants in the Check and Connect program were found to be significantly less likely to drop out of high school than those students who did not participate in the program ( $p=.006$; Sinclair, Christenson, \& Thurlow, 2005). Attendance among those students identified as highly mobile who participated in the Check and Connect program also increased (Sinflair, Christenson, \& Thurlow, 2005).

## Project Transition

Project Transition focusses on the instructional side of transition interventions through the development of student-teacher small groups, purposeful extensions of planning time to encourage collegial collaboration among freshman teachers, and coaching intended to encourage changes in ineffective instruction (Quint, et al., 1999). Research has confirmed that coaching models, community involvement, and teacher collaboration are meaningfully associated with increases in academic achievement (Tornatzky, Cutler, \& Lee, 2002).

The Project Transitions intervention was implemented in two large urban high schools in Milwaukee, Wisconsin and Kansas City, Kansas by the Manpower Demonstration Research Corporation (Quint, et al., 1999). The underlying purpose of the program was to improve student attendance and academic performance during the ninth grade year (Quint, et al., 1999).

The intervention employed three key strategies with the goal of encouraging engagement during the ninth grade year: (a) established "student-teacher teams of four core academic teachers (for math [sic], English, science, and history)" (p. 8), (b) provided time for teachers to
meet daily and collaborate on student issues and professional development, and (c) created an instructional coach position with the purpose of assisting with professional development and improving instructional practice (Quint, et al., 1999).

The formative program evaluation of Project Transition used data from student surveys and qualitative observations, interviews with teachers, and focus groups (Quint, et al., 1999). The evaluation found the Milwaukee implementation to lack planning and support when compared to the Kansas City implementation which saw an actively involved faculty and administration throughout the planning process (Quint, et al., 1999). Qualitative interviews and focus groups revealed that Project Evaluation was successful in improving student-teacher relationships in Kansas City and student-student relationships in Milwaukee (Quint, et al., 1999). No measurable effect on self-perception was measured throughout the program evaluation.

Quantitative data were analyzed during the second year of implementation of Project Transition. Project Transition produced limited to small effects on student achievement in Milwaukee, none of which were statistically significant. The Kansas City implementation found a statistically significant difference of $6.2 \%$ for the percentage of students with a grade-point average of a D (1.0) or higher among pre-Project Transition students (74.5\%) and Project Transition students ( $80.7 \% ; p<.05$; Quint, et al., 1999). The percentage of courses passed increased significantly by $4.3 \%$ from $77.1 \%$ for pre-Project Transition students to $81.4 \%$ for Project Transition students ( $p<.05$; Quint, et al., 1999).

## Talent Development High School's Ninth-Grade Success Academy

Talent Development High Schools were developed as a reform initiative to address the challenges of urban youth who attend low-performing high schools (Kemple, Herlihy, \& Smith,
2005). The overall framework for the model is to raise teacher expectations of students and to prepare students for postsecondary education and employment (National High School Center, 2007). The goal is to raise overall student achievement throughout high school. The component of interest to this literature review is the Talent Development High School's freshman intervention program: Ninth-Grade Success Academy.

The Ninth-Grade Success Academy is a small, off-campus, learning community for ninth grade students and teachers (Kemple, Herlihy, \& Smith, 2005). The Talent Development Schools Ninth-Grade Success Academy is comprised of five features: (a) a "self-contained school-within-a-school" learning environment for ninth-grade students (p. 30-31); (b) a team-teaching model in order to divide freshman into smaller groups and differentiate instruction through immediate and actionable feedback and assistance; (c) incentivize academic achievement and school attendance; (d) a regimented curriculum with double-doses of reading and mathematics in order to overcome academic deficiencies; and (e) ongoing professional development specifically catered to content area teachers with a pedagogical and classroom management strategies (Kemple, Herlihy, \& Smith, 2005).

The Manpower Demonstration Research Center evaluated the implementation of the Talent Development High School in four Philadelphia schools. Manpower Demonstration Research Center followed a cohort of predominantly African-American and Hispanic ninth-grade students for five years, ending with the 2003-2004 school year. Over half of the students were considered over-age for the ninth grade, missed an average of six school days per month, and scored in the $20^{\text {th }}$ percentile on accountability assessments in reading and mathematics (Kemple, Herlihy, \& Smith, 2005).

Kemple, Herlihy, and Smith (2005) found that the Ninth Grade Success Academy was the "most strongly and consistently implemented element of the Talent Development model" (p. 14). The Ninth-Grade Success Academy produced significant gains in attendance, adding an average of nine-days of attendance for each student, a $6.7 \%$ impact ( $p<.01$; Kemple, Herlihy, \& Smith, 2005). Further, the Ninth-Grade Success Academy saw an additional 125 student pass algebra, an increase of $18 \%$ ( $p<.01$; Kemple, Herlihy, \& Smith, 2005).

The Ninth Grade Success Academy also significantly reduced ninth-grade retention and subsequently increased persistence to the tenth-grade. Ninth grade retention was reduced significantly by $9.5 \%$ ( $p<.05$; Kemple, Herlihy, \& Smith, 2005). The number of sophomores enrolled increased by $10.1 \%$, a statistically significant deviation from reported baseline data points ( $p<.01$; Kemple, Herlihy, \& Smith, 2005). Overall, the Ninth-Grade Success Academy encouraged the persistence to tenth grade for an additional 40 students when compared to nonTalent Development High Schools (Kemple, Herlihy, \& Smith, 2005). Those students who did repeat ninth-grade in the Talent Development High Schools were still found to have an increased likelihood of dropout (Kemple, Herlihy, \& Smith, 2005).

## Elements of Effective Transition Programs

When early warning indicators for dropping out of high school, the warning signs which are often quantified when measuring school performance, were paired contextually with qualitative indicators for dropping out, Neild, Balfanz, and Herzog (2007) found contextual connections between failing academic courses and struggles with motivation, high frequency of absenteeism and lack of engagement with the school, and how discipline incidents can indicate emotional challenges. Program evaluations consistently point to the various impacts which
transition interventions have on ninth-grade achievement and acclimation (Scheel, et al., 2009; Quint, et al., 1999; Kemple, Herlihy, \& Smith, 2005). Freeman and Simonsen (2015) noted that the most successful interventions considered multi-tiered levels of support: academic, socioemotional, and behavioral, which are organized, well-planned, and involved a variety of stakeholders.

## Academic Considerations

To prepare incoming freshman students, especially those identified as high risk for not completing high school, it is imperative that the academic skills, such as purposeful note taking, studying, and organization, of those students be cultivated, bolstered, and supported. It is necessary that students be taught ways to commit learning to long-term memory. When students are provided with meaningful strategies for processing new information, the learner begins to own and internalize new information and subsequently commit it for long-term retention and application (Bransford, 2000).

Hattie (2009) found that teaching of cognitive skills such as note-taking and summarizing, when combined with academic content had an effect of .59 (effective translates to $d>.4)$. Cognitive as well as metacognitive skills do not come naturally to most adults, let alone freshman students. Teachers and learning environments must be curtailed in such a way that allows students to understand how to read for purpose, synthesize across sources of information, and create multifaceted solutions to problems (Neild, et al., 2008).

Lavery (2008) as cited in Hattie (2009) outlines a cross-comparison of metacognitive strategies or self-management learning skills such as planning and monitoring, which indicate high effect sizes $(d>.4)$ such as organizing and transforming of new information ( $d=.85$ ), self-
evaluation $(d=.62)$, goal-setting and planning $(d=.49)$, and time management $(d=.44)$. Student self-efficacy is among the most consistent in predicting student GPA (Ley \& Young, 2001, as cited in Hattie, 2009).

Instructors tasked with monitoring the freshman transition program, be it an extracurricular or curriculum embedded model (Walker, 2007), must provide feedback regarding the stated academic strategies in a timely manner in order to alleviate negative suggestion effects (McTighe \& O’Connor, 2005). McTighe and O’Connor (2005) write that though feedback is necessary to all kinds of learning, it is often limited or nonexistent in many classrooms. Feedback must be prompt for the learner to improve. Hattie (2009) describes feedback as one of "the most powerful influences on [student] achievement" (p.173). Programs, regardless of their purpose and objectives, function best when they focused on the quality of feedback provided to the student $(d=.73)$.

Cognitive and metacognitive skills are the key academic strategies that must be considered and addressed as the foundation of the academic component of all freshman transition programs. The standard for passing in middle school is considered to be lower than that set in high school (Neild, et al, 2008). Due to this discrepancy in expectation, many transition students, especially freshman in high school, are unprepared to handle the increased rigor of high school curriculums (Neild, et al., 2008). The inability to handle increased rigor leads to an increase in course failure and ultimately, retention and repetition of ninth grade courses (Orfield, 2004; Neild, et. al., 2008; Zvoch, 2006). Through the introduction, strengthening, and support of cognitive and metacognitive academic tools in a freshman transition course, students labeled as
high risk will have a better chance at long-term success in high school (Freeman \& Simonsen, 2015).

## Socio-Emotional Considerations

Thapa, Cohen, Guffey, and Higgens-D'Alessandro (2013) stated that one of the most important factors of relationships within a school is how connected students and teachers feel to each other and the school as a whole. Student engagement has become a critical factor of dropout interventions at all levels, especially during the ninth grade year (Freeman \& Simonsen, 2015; Stout \& Christenson, 2009).

Engagement is defined by individual constructs of a sense of belonging, identification, and involvement (Finn, 1989). School-engagement requires the developing of psychological and emotional connections to an academic environment (Stout \& Christenson, 2009). Dropout is the eventual culmination of a disengagement process (Stout \& Christenson, 2009). Adolescents progress through a period of self-identification and exploration during the transitive years of maturity and puberty (Wallace-Broscious, Serafica, \& Osipio, 1994).

Socio-emotional learning is a process by which students and pupils alike learn to manage themselves and their relationships with others around them (Feller, 2003). Feller (2003) also writes that the purpose of socio-emotional learning is to identify and develop values, personalize career choices, and cultivate and instill the idea of lifelong learning within students at pivotal transitive points in their respective academic careers. Students who receive life-skills coaching through a socioemotional approach learn metacognitive appreciation for learning and schooling (Holland \& Mazzoli, 2001). Life-skills provide a "meaningful and comprehensive context for
learning" and connects school work to life following graduation (Dedmond, Brown, \& LaFauci, 2006, p. 3).

Engaging students is predictive of dropping out, even when previous academic achievement and student background are controlled (Allensworth \& Easton, 2007). Effective transition and orientation programs consistently help students develop values, career aspirations, and appreciations for learning (Freeman \& Simonsen, 2015; Kerr, 2003; Corbett \& Wilson, 2000; Reents, 2002). Neild, et al. (2008) found a statistically significant relationship between social engagement and teacher engagement on persistence toward graduation ( $p<.05$ ).

Cornelius-White (2007) notes most students reported that they dislike or did not attend school primarily because they did not like their teacher (as cited in Hattie, 2009). CorneliusWhite further suggests that teachers must improve their relationships with their students in a variety of ways by demonstrating that they, the teacher, care about the individual experiences brought to the classroom by that student, the learning of the students' matters to the teacher, and empathizing with the student. In a meta-analysis of 229 teacher-student relationship studies, Hattie (2009) found a high ( $d=.72$ ) effect. Hattie (2009) also takes into consideration the effect sizes of teacher student relationship variables such as teacher empathy ( $d=.68$ ), encouragement of higher order thinking ( $d=.61$ ), and encouraging learning ( $d=.48$ ).

The National Education Longitudinal Study of 1998 identified one of the most common reasons for high school dropout as attitude and dissatisfaction with the learning environment (Lan \& Lanthier, 2003). This trend can be alleviated through the effective use of freshman transition programs which shift the idea of schooling from one that is compulsory to one where something mutually beneficial is offered to the students (Purkey, 2001, as cited in Hattie, 2009).

Through the climate, culture, and relationships developed within the school building, students need to be invited to become a part of the learning process rather than the recipient thereof (Hattie, 2009). Purkey (2001, as cited in Hattie, 2009) suggests four propositions: Trust, respect, optimism, and intentionality. Hattie (2009) writes that altering the culture and climate through Invitational Learning can make learning "exciting, engaging, and enduring" (p. 34).

The purposes of addressing the affective components of the cognitive matrix are to establish and support successful teacher-student relationships, provide peer mentorships for students, facilitate extra-curricular activities, orient students to the climate and culture of high school in a way that alleviates anxiety ( $d=.40$ ), and most importantly, establish and support clear connections with caring adults and reengage students in a positive academic environment during the transition process (Hattie, 2009; Freeman \& Simonsen, 2015; Herzog \& Morgan, 1999; Stout \& Christenson, 2009).

## Behavioral Considerations

The theoretical framework of school engagement and its power to affect graduation and school completion dates back to the 1970s (Tinto, 1975). When students drop out of school, it is the culmination of a process of disengagement due in large part to the failure to make a connection with a school (Griffin, 2002; Lan \& Lanthier, 2003). When a student begins the process of academic rejection, they often turn to delinquent behavior and withdrawal from positive academic processes (Entwisle, et al., 2004).

Swanson and Spencer (2012) write that it is the transitive period through which adolescents apply and adapt normative socio-emotional behaviors to problem-solving and selfesteem as well as the social and educational environment. It is the responsibility of freshman
transition programs to establish and support within students the behavioral as well as academic expectations of high school in order to more effectively prevent drop-out, especially among those students labeled as high-risk.

Hattie (2009) writes that along with prior knowledge and achievement ( $d=.67$ ), experiences, and self-image ( $d=.43$ ), students come into the school building with a predisposed set of expectations that are often times immeasurable. Hattie (2009) writes that the expectations one brings with them into a school building can become "enhancers of-or inhibitors to-the opportunities provided in schools" (p. 31). Owens and Valesky (2011) write of Victor Vroom's expectancy theory in Organizational Behavior in Education that one's expectations will motivate them to select a specific behavior over another.

Negative attitudes, feelings, and perceptions are associative with academic and scholastic disengagement which often result in problematic behavior and discipline issues (Griffin, 2002; Entwisle, et al., 2004). Low expectations are associated with low motivation, problematic temperament, feelings of inferiority, lacking resiliency, anxiety, and aggression (De Witte, et al., 2013; Entwisle, et al., 2004; Herbert \& Reis, 1999, Vizcain, 2005).

Hattie (2009) writes that teachers are integral in the molding of student expectations in a way that develops that students willingness to engage in learning. Teacher expectations of students ( $d=.43$ ) can have a profound impact on learning gains (Rosenthal \& Jacobsen, 1968 as cited in Hattie, 2009). Once a student has adopted the disposition that they are a learner rather than a participant, Hattie (2009) writes, schools will see a marked increase in performance and success. Teacher teams within freshman transition interventions possess the capability to
establish a common system of expectations as well as discuss within their collegial communities specific students and potential interventions Quint, et al., 1999).

## School-Based Considerations

Successful freshman transition programs have documented increased engagement with the school among all stakeholders, parents, faculty, and the community (Freeman \& Simonsen, 2015). Herzog and Morgan (1999) found that active involvement by the school of students, parents, and staff members throughout the transition process reduces the likelihood of drop out when demographics were held constant. Freshman must believe that their school and community exist as allies of their education rather than hurdles (Morgan \& Herzog, 2007).

Hattie (2009) found parent involvement in learning to have a high effect size $(d=0.51)$. Schools possess the ability through freshman transition courses to emphasize the involvement of parents and the community in a way that encourages students to see the relevance in their coursework (Feller, 2003). Parents must be taught to speak the language of schooling in a way that enhances through sharing an engagement and expectation of learning rather than inhibits the learning happening throughout the school day (Hattie, 2009). Parent involvement in education manifests in a variety of ways, some of which translate to a negative effect such as surveillance approach and some of which translate to a positive effect such as shared expectations and aspirations through an active approach (Hattie, 2009).

Limited parental involvement such as monitoring homework ( $d=.19$ ), television time ( $d$ $=0.0$ ), or time spent with friends $(d=-.09)$ possesses limited to negative effect sizes (Casto \& Lewis, 1984; White, et al, 1992, Innocenti, et al. 1992; as cited in Hattie, 2009). Parent aspirations for education and supportive parenting, however, do have a positive effect ( $d=.56$ ).

Effective freshman transition programs are often tasked with helping students and parents alike understand the language of schooling so that parental involvement can be affective rather than defective (Kerr, 2003).

Many unsuccessful interventions were found to be unsupported both by school districts and the host schools (Dedmond, et al., 2006; National High School Center, 2007). Dedmond et al. (2006) also noted that unsuccessful programs received little to no direction in the form of "only vague notions of what is required to motivate the least motivated students" (p. 2). Structural implementations are not sufficient interventions for improving student achievement (Horwitz \& Snipes, 2008). Districts must provide "meaningful curricular and instructional supports" in order to implement and sustain successful freshman transition interventions (Horwitz \& Snipes, 2008).

The development of community within a school building and access to adults outside of the immediate family almost always translate to personal and academic growth (Israel, et al., 2001). Neild et al. (2008) corroborated this, finding that positive relationships with teachers, peers, and parents as well as perceptions of safety and social-inclusion within a school affected overall ninth grade performance.

Students, even when demographic indicators remain constant, are less likely to drop out of high school when they actively participate in a freshman transition program which involves students, parents, staff members, and community stakeholders (Herzog \& Morgan, 1999).

Community engagement with a school in both urban and non-urban school settings was found to lead to improvements in learning across all levels and ages of students (Blank, Jacobson, \& Melaville, 2012).

A successful orientation program coupled with strong communal intervention and cultivation of relationships will introduce students into the school system ready to enter school, eager to attend school more consistently, become involved in their learning and in their community, increases among familial involvement in the school, and improvements in academic performance (Blank, Jacobson, \& Melaville, 2012). Ultimately, Blank, Jacobsen, and Melaville (2012) write, successful schools are driven by the community when resources are aligned with the purpose of producing successful students, strong families, and engaged communities.

## Summary

Chapter Two explained the purpose of conducting research on the academic impact of a school designed freshman transition intervention. Balfanz et al. (2013) reported that the nation is making progress toward the 2020 goal of a $90 \%$ graduation rate; however African American, Hispanic, and students of low-income families are still graduating at a rate far below their peers. Economically, those students who leave high school without a diploma earn an average \$9,000 a year less than their peers who complete high school (Carlson, 2014). A high school dropout will cost the nation an estimated $\$ 260,000$ over the course of his or her life (Amos, 2008).

Research continually described demographic and socioeconomic variables as causal links to dropout; however Rumberger (2011) has redefined dropout as the final phase of a process of disengagement. Due to the increase in accountability brought on by No Child Left Behind (2001), schools and school districts are taking a closer look at dropout and examining what is causing it and how to prevent it or intervene in the process (Neild, et. al., 2008). When demographic and economic variables are held constant, retention during the ninth grade, credit accumulation, and academic achievement have consistently been found to be early warning
indicators putting students at an increased risk for dropping out of high school (Neild, et. al., 2008; Lemon \& Watson, 2011; De Witte et al., 2013).

The transition into high school greatly increases academic and social stressors (Stein \& Hussong, 2007). The transition into high school is not a solitary event; but rather, one which takes place over time (Morgan \& Herzog, 2007; Neild, et al., 2008). High schools are considered to be large, impersonal, and disorganized (Weiss, 2001). The major factors impacting dropout can be traced to a student's transition into high school during the months prior to and throughout the ninth grade year (Allensworth \& Easton, 2007; Neild, et al., 2008; Weiss, 2001; Neild \& Balfanz, 2006; Zvoch, 2006).

Although a variety of models exist within the freshman transition intervention architecture, programs which employ a year-long course focused on an application of skillsbased, social, and behavioral learning are consistently more effective with encouraging academic achievement, persistence, and staying on-track to graduate (Walker, 2007; Freeman \& Simonsen, 2015; Dedmond, et al., 2006). Empirical evidence from program evaluations of a variety of freshman transition models related the transition intervention to persistence, academic achievement, and ultimately preventing dropout (Scheel, et al., 2009; Quint, et al., 1999; Kemple, Herlihy, \& Smith, 2005).

The most successful components of effective programs were found to authenticate student learning, develop relationships and engagement with the school, challenge students cognitively, provide support from the school and community, and apply learning to real-world opportunities (Freeman \& Simonsen, 2015; Feller, 2003). Freeman and Simonsen (2015) noted that the most successful interventions considered multi-tiered levels of support: academic, socio-
emotional, and behavioral, which are organized, well-planned, and involved a variety of stakeholders.

The understandings brought on by this review of literature have provided a conceptual framework for compulsory education, dropout, and interventions purposed with mitigating the dropout process. This researcher will investigate the impact of an existing school designed intervention program in one large urban high school in Central Florida with the purpose of identifying the extent to which the intervention aligned with the elements of effective transition programs (Freeman and Simonsen, 2015).

## CHAPTER THREE: METHODOLOGY

## Introduction and Design

The central purpose of this study was to identify the extent to which the intervention, Freshman Experience, was aligned with recommendations by Freeman and Simonsen (2015) and to determine the extent to which the intervention impacted persistence towards tenth grade, on-track-to-graduation status at the completion of eleventh grade, and academic success. The research questions introduced in Chapter One consider the context of the intervention program and the extent to which it is founded in research based curricular objectives. Research questions two through seven quantified the academic impact of the intervention through an evaluation of student persistence to the tenth grade, on-track to graduation status at the end of eleventh grade, and student performance on state standardized assessments.

Each of the seven research questions were embedded within the context of students labeled as at-risk for not completing high school completing high school within the traditional four years. A limitation of this objective was that the most readily available data for the cohort who participated in the intervention was at the conclusion of the 2014-2015 school year, three years after the cohort's initial year of enrollment, 2012-2013. Due to this, on-time graduation is not the central focus of this study; rather, persistence to the tenth grade, on-track to graduation status at the end of the 2014-2015 school year, and performance on the Florida Comprehensive Assessment Test Reading during the tenth grade year and Algebra I End of Course assessment were operationalized in order to assess the academic impact of the intervention. Due to the limitation of readily available data, these dependent variables were used in order to determine success toward on-time completion of high school.

This study is comprised of seven research questions. The research questions, initially stated in Chapter One, are restated as follows:

1. To what extent does the Freshman Experience course align with elements of successful programs (Freeman \& Simonsen, 2015): cognitive, affective, and behavioral that is well-planned, supported, systematic, and involve a variety of stakeholders?
2. To what extent do students labeled at-risk for dropping out of high school who enroll as freshman at the beginning of the 2012-2013 school year at the target school compare with students labeled at-risk for dropping out of high school who enroll as freshman at the beginning of the 2012-2013 school year at the comparison school on persistence to the 10th grade?
3. To what extent do students labeled at-risk for dropping out of high school who enroll as freshman at the beginning of the 2012-2013 school year at the target school compare with students labeled at-risk for dropping out of high school who enroll as freshman at the beginning of the 2010-2011 school year at the target school on persistence to the 10th grade?
4. To what extent do students labeled at-risk for dropping out of high school who enroll as freshman at the beginning of the 2012-2013 school year at the target school compare with students labeled at-risk for dropping out of high school who enroll as freshman at the beginning of the 2012-2013 school year at the comparison school on on-track to graduation status at the end of the 11th grade year?
5. To what extent do students labeled at-risk for dropping out of high school who enroll as freshman at the beginning of the 2012-2013 school year at the target school compare with students labeled at-risk for dropping out of high school who enroll as freshman at the beginning of the 2010-2011 school year at the target school on persistence to on-track to graduation status at the end of the 11th grade year?
6. To what extent do students labeled at-risk for dropping out of high school who enroll as freshman at the beginning of the 2012-2013 school year at the target school compare with students labeled at-risk for dropping out of high school who enroll as freshman at the beginning of the 2012-2013 school year at the comparison school on state standardized assessments such as FCAT Reading 10th grade and Algebra 1 EOC?
7. To what extent do students labeled at-risk for dropping out of high school who enroll as freshman at the beginning of the 2012-2013 school year at the target school compare with students labeled at-risk for dropping out of high school who enroll as freshman at the beginning of the 2010-2011 school year at the target school on state standardized assessments such as FCAT Reading 10th grade and Algebra 1 EOC?

This chapter presents the methodology employed to test the research questions. This chapter is organized into three sections: (a) selection of participants, (b) data collection, and (c) data analysis.

## Selection of Participants

This study took place in a large urban school district in Central Florida. The participants in this study enrolled in two demographically and socioeconomically similar central Florida urban high schools during the 2010-2011 and 2012-2013 school years ( $N=1449$ ). The participants of the study were comprised of three groups: (a) a target group, (b) a comparison group, and (c) an historical control group.

A purposive sample of all incoming freshmen labeled as at-risk of not completing high school who enrolled in the Freshman Experience course at the target school during the 20122013 school year comprised the target group, or Group One, for the study (Neuman, 1997). A purposive sample was adopted in order to evaluate the academic impact of the freshman transition intervention specifically with students labeled as at-risk for not completing high school. The comparison group, Group Two, was comprised of all incoming freshmen labeled as at-risk of not completing high school who enrolled in a demographically similar large urban high school which did not employ a freshman transition intervention during the 2012-2013 school year. The purpose of this comparison group was to mitigate the effects of extraneous and modifier variables. A matched historical purposive sample comprised of freshman who enrolled at the target school during the 2010-2011, prior to the implementation of a freshman transition intervention, comprised an historical control group, or Group Three, from modifier and extraneous variables were further mitigated.

In a meta-analysis of 499 studies, Hattie (2009) found that socioeconomic status had a moderate to high effect size with respect to student achievement ( $d=0.57$ ). The criteria by which the two school sites were selected focused on the socioeconomic status of the populations who
attended the schools. Socioeconomic status of the schools was measured by the percentage of students participating in the Free and Reduced Lunch Program. The target and comparison schools varied slightly demographically. The comparison school was selected due to the socioeconomic and geographic similarities between it and the target school. The comparison school did not employ a freshman transition intervention during the 2012-2013 school year.

Groups One and Two enrolled in the Target and Comparison Schools respectively during the 2012-2013 school year. The historical comparison group, Group Three, enrolled in the Target School during the 2010-2011 school year, prior to the implementation of a freshman transition intervention.

## Data Collection

The study followed all rules and regulations regarding research required by the local school district and the university. All individual identifiers within the data were destroyed upon receipt from the school district in adherence to the Family Education Rights Privacy Act (U.S. Department of Education, 2012). The study relied on data from two schools not publicly available through the Florida Department of Education. Furthermore, the study was a major requirement in the fulfillment of a university doctoral program. The following sections outline the protocols for data collection from the university and local school district.

This study employed a qualitative and quantitative methodology of data collection and analysis. The methodologies used to obtain these data are explained separately.

## University Protocol

The university required approval by its Institutional Review Board (IRB) prior to the conduction of research. The researcher submitted application to the Institutional Review Board and subsequently received approval to conduct the research described (Appendix).

## Local School District Protocol

The local school district required an application for research be submitted and approval of the application before any data were collected. The application included general information about the researcher, the topic to be researched including the problem and purpose of the research, the research questions, the specific data required to answer the research questions, and a description of how the findings would be used. Chapter one was submitted with the application for approval. Approval was received on October 29, 2015. Data relevant to each of the groups was received from Target School District on January 5, 2016.

## Qualitative Data Collection Details

Existing documents and records as defined by Lincoln and Guba (1985) were used in order to measure the extent to which the Freshman Experience course aligned with the cognitive, affective, and behavioral elements of successful freshman intervention programs as well as establish the context of the Freshman Experience course (Freeman \& Simonsen, 2015). The focus of the qualitative component of this research was to contextualize the studied intervention program and understand the extent to which the program aligned with research, was wellplanned, supported, systematic, and involved a variety of stakeholders during the 2012-2013 school year.

Data were collected through documents and records obtained from Target School (Lincoln \& Guba, 1985). Non-technical literature in the form of documents and records serve as a source of empirical data in order to contextualize a program and are a valid vehicle of interpretation of meaning, insight, and understanding in educational research (Merriam, 1988). Qualitative data were comprised of Target School's curriculum guide, course syllabus, student work product, correspondence, minutes of meetings, lesson plans, evidences of teacher collaboration, and individual teacher notes (see Appendices A and B).

All qualitative data were collected from school personnel including the school principal and key instructional staff members who designed the curriculum and taught the course. Documents were obtained both physically through personal contact and digitally through email. Physical documents were scanned, digitized, and saved to a hard drive for analysis. Identifiable information was removed from all documents in order to preserve the anonymity of Target School and instructional personnel. No instrumentation was used in order to obtain the qualitative data relevant to this research.

## Quantitative Data Collection Details

All quantitative data collected were provided by the local school district. All identifying characteristics within the data were destroyed upon collection in order to maintain the anonymity of the students involved. Records for individual students representative of the population involved in the study were provided to the researcher. Quantitative data were used to answer research questions two through seven.

The data requested represented students who enrolled as ninth graders at two demographically and socioeconomically similar urban high schools at the beginning of the 2012-

2013 school year and students who enrolled as ninth graders at the target school at the beginning of the 2010-2011 school year. Specific data requested for this study included the school of enrollment, year of enrollment, student demographics, Freshman Experience course enrollment indicator, English Language Learner (ELL) status, Free-and-Reduced Lunch (FRL) status used to determine socioeconomic status, Exceptional Student Education (ESE) status, ninth and tenth grade Florida Comprehensive Assessment (FCAT) Reading developmental scale scores (DSS), Algebra I End of Course (EOC) Assessment developmental scale scores if taken during the ninth or tenth grade year, retained student indicator for the ninth grade year, credits earned at the conclusion of the eleventh grade year, and graduation status for the historical control group (Group Three).

The quantitative data relevant to research questions two through seven were collected from the school district's electronic data warehouse. Table 2 in chapter one defined each of the research questions, variables, and sources of the data.

## Data Analysis

This study employed qualitative and quantitative data analysis methods. Research question one used qualitative analysis to address the extent to which the Freshman Experience course aligned with the research based elements of successful transition programs (Freeman \& Simonsen, 2015). Research questions two through seven used two quantitative analyses in order to measure the statistical strength of the academic impact of the Freshman Experience course. All quantitative data were analyzed using IBM SPSS version 20 in order to maintain objective fidelity. Descriptive and inferential statistics were used to determine the academic impact of the Freshman Experience course.

The dependent variables used for research questions two through seven were persistence to the tenth grade, on-track to graduate status at the end of the $11^{\text {th }}$ grade year, individual student developmental scale score on the Florida Comprehensive Assessment Test Reading during the $10^{\text {th }}$ grade year, and individual student developmental scale score on the Algebra 1 End of Course Assessment. Persistence to the tenth grade, a dichotomous categorical variable, served as the dependent variable for research questions two and three. The number of credits a student earned at the conclusion of the eleventh grade year were operationalized as a dichotomous categorical variable based on the school district's definition of on-track to graduation status (accumulation of 18 credits by the conclusion of year three) and served as the dependent variable for research questions four and five. Student developmental scale scores on the Florida Comprehensive Reading Assessment $2.010^{\text {th }}$ Grade Reading and Algebra I End of Course Assessment were operationalized as interval variables and used as the dependent variable for research questions six and seven.

Group One served as the treatment group for all quantitative research questions. Group Two served as the comparison group for research questions two, four, and six. Group Three served as the comparison group for research questions three, five, and seven.

## Research Question One

Research question one relied on a qualitative analysis of documents and records (Lincoln \& Guba, 1985). Document analysis, a "systematic procedure for reviewing and evaluating documents" was used to develop a context as well as understand the extent to which the Freshman Experience course was founded in research based best practices (Bowen, 2009, p. 27). This process provided an understanding of the goals, objectives, and substantive content of the

Freshman Experience course. Stake (1995) found document analysis to be most appropriate as a research method when establishing context.

Bowen (2009) outlined the analytic procedure of document analysis as "finding, selecting, appraising, and synthesizing data contained in documents (p. 28). The results were then organized into major themes or categories through the qualitative paradigm of document analysis (Corbin \& Strauss, 2008). The documents and records relevant to the 2012-2013 school year and the intervention under investigation were collected from course instructors and school administrators, evaluated and analyzed for meaningful and relevant passages, text, and data, and then coded into three research based themes through a direct approach to content analysis: 1) Cognitive, 2) Affective, and 3) Behavioral (Corbin \& Strauss, 2008; Potter \& LevineDonnerstein, 1999; Freeman \& Simonsen, 2015). Documents collected that did not fit one of the research based themes representative of the elements of successful transition programs were assigned to a fourth theme: irrelevant. Relevant text and passages identified through the evaluation and document analysis process were further analyzed in order to provide a stronger context with respect to the academic impact of the Freshman Experience course.

## Research Question Two

The independent variable for research question two was whether or not the student was enrolled in and satisfactorily completed (as defined by a "C" grade or higher) the Freshman Experience course at Target School. The dependent variable relevant to research question two was measured dichotomously by whether or not the student persisted to the tenth grade. Group One served as the treatment group and Group Two served as the comparison group.

Data relevant to research question two were operationalized for both groups at the beginning of the tenth grade year or the 2013-2014 school year as one dichotomous measure, whether or not the student persisted to the tenth grade. Descriptive and inferential statistics were analyzed. Descriptive statistics were operationalized through measures of central tendency including frequency, raw percentages, and mode. In order to determine if the difference between frequencies of persistence to the tenth grade for Group One and Group Two was statistically significant, a nonparametric Chi-Square test was calculated. The level of significance was set at $p=.05$ for the Chi-Square.

In order to evaluate the magnitude of the differences between the frequencies of each group, phi $(\varphi)$ was calculated to assign an effect size to the Freshman Experience course with respect to the interventions impact on the categorical dependent variable of persistence to the tenth grade. Cohen (1969) defined Phi as

$$
\varphi=\sqrt{\frac{\chi^{2}}{n}}
$$

Cohen (1988) defined a small effect size as $d \geq .1$, a medium effect size as $d \geq .3$, and a large effect size as $d \geq .5$.

## Research Question Three

The independent variable for research question three was whether or not the student was enrolled in and satisfactorily completed (as defined by a "C" grade or higher) the Freshman Experience course at Target School. The dependent variable relevant to research question three was measured dichotomously by whether or not the student persisted to the tenth grade. Group One served as the treatment group and Group Three served as the comparison group.

Data relevant to research question three were operationalized for Group One and Group Three at the beginning of the tenth grade year or the 2013-2014 and 2011-2012 school years respectively as one dichotomous measure, whether or not the student persisted to the tenth grade. Descriptive and inferential statistics were analyzed. Descriptive statistics were operationalized through measures of central tendency including frequency, raw percentages, and mode. In order to determine if the difference between frequencies of persistence to the tenth grade for Group One and Group Three was statistically significant, a nonparametric Chi-Square test was calculated. The level of significance was set at $p=.05$ for the Chi-Square.

In order to evaluate the magnitude of the differences between the frequencies of each group, phi $(\varphi)$ was calculated to assign an effect size to the Freshman Experience course with respect to the interventions impact on the categorical dependent variable of persistence to the tenth grade. Cohen (1969) defined Phi as

$$
\varphi=\sqrt{\frac{\chi^{2}}{n}}
$$

Cohen (1988) defined a small effect size as $d \geq .1$, a medium effect size as $d \geq .3$, and a large effect size as $\mathrm{d} \geq .5$.

## Research Question Four

The independent variable for research question four was whether or not the student was enrolled in and satisfactorily completed (as defined by a "C" grade or higher) the Freshman Experience course at Target School. The dependent variable relevant to research question four was measured dichotomously by whether or not the student was on-track to graduate as defined by Target School District's Pupil Progression Plan as the completion of the eleventh grade year,

2014-2015 for both Group One and Group Two. Group One served as the treatment group and Group Two served as the comparison group.

Data relevant to research question four were operationalized for Group One and Group Two at the conclusion of the eleventh grade year or the 2014-2015 school year as one dichotomous measure, whether or not the student had attained on-track to graduation status as defined by the school district's Pupil Progression Plan. In order to evaluate the academic impact of the Freshman Experience course with respect to the dichotomous categorical dependent variable of on-track to graduation status at the completion of the eleventh grade year, descriptive and inferential statistics were analyzed. Descriptive statistics were operationalized through measures of central tendency including frequency, raw percentages, and mode. In order to evaluate the statistical strength of the difference between the frequencies of on-track to graduation status between Group One and Group Two, a nonparametric Chi-Square test was calculated. The level of significance was set at $p=.05$ for the Chi-Square.

In order to evaluate the magnitude of the differences between the frequencies of each group, phi $(\varphi)$ was calculated to assign an effect size to the Freshman Experience course with respect to the interventions impact on the categorical dependent variable of on-track to graduation status. Cohen (1969) defined Phi as

$$
\varphi=\sqrt{\frac{\chi^{2}}{n}}
$$

Cohen (1988) defined a small effect size as $d \geq .1$, a medium effect size as $d \geq .3$, and a large effect size as $\mathrm{d} \geq .5$.

## Research Question Five

The independent variable for research question five was whether or not the student was enrolled in and satisfactorily completed (as defined by a "C" grade or higher) the Freshman Experience course at Target School. The dependent variable relevant to research question five was measured dichotomously by whether or not the student was on-track to graduate as defined by the school district's Pupil Progression Plan as the completion of the eleventh grade year, 2014-2015 for Group One and 2012-2013 for Group Three. Group One served as the treatment group and Group Three served as the comparison group.

Data relevant to research question five were operationalized for Group One and Group Three at the conclusion of the eleventh grade year or the 2014-2015 and 2012-2013 school years respectively as one dichotomous measure, whether or not the student had attained on-track to graduation status as defined by the school district's Pupil Progression Plan. In order to evaluate the academic impact of the Freshman Experience course with respect to the dichotomous categorical dependent variable of on-track to graduation status at the completion of the eleventh grade year, descriptive and inferential statistics were analyzed. Descriptive and inferential statistics were analyzed. Descriptive statistics were operationalized through measures of central tendency including frequency, raw percentages, and mode. In order to evaluate the statistical strength of the difference between the frequencies of on-track to graduation status between Group One and Group Three, a nonparametric Chi-Square test was calculated. The level of significance was set at $p=.05$ for the Chi-Square.

In order to evaluate the magnitude of the differences between the frequencies of each group, phi $(\varphi)$ was calculated to assign an effect size to the Freshman Experience course with
respect to the interventions impact on the categorical dependent variable of on-track to graduation status. Cohen (1969) defined Phi as

$$
\varphi=\sqrt{\frac{\chi^{2}}{n}}
$$

Cohen (1988) defined a small effect size as $d \geq .1$, a medium effect size as $d \geq .3$, and a large effect size as $\mathrm{d} \geq .5$.

## Research Question Six

The independent variable for research question seven was whether or not the student was enrolled in and satisfactorily completed (as defined by a "C" grade or higher) the Freshman Experience course at Target School. Two dependent interval variables were tested for research question six: Developmental scale scores on the Florida Comprehensive Assessment Test Reading administered during the 2013-2014 school year and developmental scale scores on the Algebra I End of Course Assessment administered during the 2012-2013 and 2013-2014 school years. Group One served as the treatment group and Group Two served as the comparison group. Only those students who took the Algebra I End of Course Assessment during their ninth or tenth grade years were considered for research question six.

The data relevant to research question six were operationalized for Group One and Group Two at the conclusion of the tenth grade year or the 2013-2014 school year. The data for research question six were representative of two interval dependent variables populated by developmental scale scores on two state accountability assessments. Students in Group One and Group Two are required to pass each of these assessments in order to earn a standard high school diploma in the state of Florida.

In order to evaluate the academic impact of the Freshman Experience program with respect to the dependent variables, descriptive and inferential statistics were calculated. Descriptive statistics were operationalized through measures of central tendency such as arithmetic mean, raw percentages, and mode. Descriptive statistics were also reported as measures of spread, standard deviation, range, and variance. In order to determine the statistical strength in the descriptive means between Group One and Group Two, a one-way multivariate analysis of variance was calculated. The level of significance was set at $p=.05$ for the one-way MANOVA.

In order to evaluate the magnitude of the differences between the arithmetic means of each group, multivariate eta squared $\left(\eta^{2}\right)$ was calculated to assign an effect size to the Freshman Experience course with respect to the interventions impact on student academic achievement as measured by the dependent variables of developmental scale scores on the Florida Comprehensive Assessment Test Reading and Algebra I End of Course Assessment. Cohen (1969) defined multivariate eta squared as

$$
\eta_{\text {partial }}^{2}=\frac{S S_{\text {effect }}}{S S_{\text {effect }}+S S_{\text {error }}}
$$

Cohen (1988) defined a small effect size as $\mathrm{d} \leq .01$, a medium effect size as $\mathrm{d} \geq .06$, and a large effect size as $\mathrm{d} \geq .14$.

## Research Question Seven

The independent variable for research question seven was whether or not the student was enrolled in and satisfactorily completed (as defined by a "C" grade or higher) the Freshman Experience course at Target School. Two dependent interval variables were tested for research
question seven: Developmental scale scores on the Florida Comprehensive Assessment Test Reading administered during the 2011-2012 school year for the historical sample and 2013-2014 for the treatment group and developmental scale scores on the Algebra I End of Course Assessment administered during the 2010-2011 and 2011-2012 school years for the historical sample and 2012-2013 and 2013-2014 school years for the treatment group. Group One served as the treatment group and Group Three served as the comparison group.

The data relevant to research question seven were operationalized for Group One at the conclusion of the tenth grade year or the 2013-2014 school year. The data relevant to research question seven were operationalized for Group Three at the conclusion of the tenth grade year or the 2011-2012 school year. The data for research question seven were representative of two interval dependent variables populated by developmental scale scores on two state accountability assessments. Only those students who took the Algebra I End of Course Assessment during their ninth or tenth grade years were considered for research question seven. An important limitation to research question seven was that the Algebra I End of Course Assessment was not a graduation requirement for Group Three. All cases where students in Group Three did not take the Algebra I End of Course Assessment were excluded from the statistical analyses calculated for research question seven.

In order to evaluate the academic impact of the Freshman Experience program with respect to the dependent variables, descriptive and inferential statistics were calculated. Descriptive statistics were operationalized through measures of central tendency such as arithmetic mean, raw percentages, and mode. Descriptive statistics were also reported as measures of spread, standard deviation, range, and variance. In order to determine the statistical
strength in the calculated descriptive means between Group One and Group Two, a one-way multivariate analysis of variance was calculated. The level of significance was set at $p=.05$ for the one-way MANOVA.

In order to evaluate the magnitude of the differences between the arithmetic means of each group, multivariate eta squared $\left(\eta^{2}\right)$ was calculated to assign an effect size to the Freshman Experience course with respect to the interventions impact on student academic achievement as measured by the dependent variables of developmental scale scores on the Florida Comprehensive Assessment Test Reading and Algebra I End of Course Assessment. Cohen (1969) defined multivariate eta squared as

$$
\eta_{\text {partial }}^{2}=\frac{S S_{\text {effect }}}{S S_{\text {effect }}+S S_{\text {error }}}
$$

Cohen (1988) defined a small effect size as $\mathrm{d} \leq .01$, a medium effect size as $\mathrm{d} \geq .06$, and a large effect size as $\mathrm{d} \geq .14$.

## Summary

This chapter presented the methodologies used to conduct this mixed-methods study including the design, selection of the participants, the methods and sources of data collection, and the statistical tests used to analyze the collected data for each of the seven research questions. The three groups of interest to the study were populated by students attending two socio-economically similar urban high schools in a large urban school district in Central Florida. A discussion of data collection methods, as well as the approvals and processes required before the commencement of data collection, was presented. The last section discussed the statistical
analyses, both descriptive and inferential, calculated to answer each of the research questions. The findings from the discussed statistical analyses are presented in chapter four.

## CHAPTER FOUR: ANALYSIS AND PRESENTATION OF DATA

Introduction
The central purpose of this study was to identify the extent to which the intervention, Freshman Experience, was aligned with recommendations by Freeman and Simonsen (2015) and to determine the extent to which the intervention impacted persistence to tenth grade, on-track-to-graduation status at the completion of eleventh grade, and academic success. The participants of the study were comprised by three groups: (a) a target group, (b) a comparison group, and (c) an historical control group.

Group One, the target group, was comprised of students labeled at-risk for dropping out of high school who enrolled as freshman at the target high school which employed the designed intervention at the beginning of the 2012-2013 school year. Group Two, the comparison group, was comprised of students labeled at-risk for dropping out of high school who enrolled as freshman at a large, socioeconomically similar urban high school which did not employ a freshman transition intervention during the 2012-2013 school year. Group Three, the historical control group, was comprised of students labeled at-risk for dropping out of high school who enrolled as freshman at the target high school at the beginning of the 2010-2011 school year, prior to the implementation of the Freshman Experience course.

The purpose of this study was achieved through the use of both qualitative and quantitative methodologies. The qualitative methodology of document analysis was used to answer research question one (Bowen, 2009). A nonparametric Chi-Square test was calculated for research questions two, three, four, and five. A one-way multivariate analysis of variance (MANOVA) was calculated to answer research questions six and seven. Additional analyses
compared those students who enrolled in Freshman Experience to those students who did not at Target School during the 2012-2013 school year.

The results of this study were intended to contribute to the research of effective freshman transition programs, specifically at large urban high schools. The qualitative data gathered were intended to provide a contextual framework for the transition course being investigated. The quantitative data gathered were intended to measure the academic impact of the transition course as defined by three dependent variables: persistence to the tenth grade, on-track to graduation status, and academic success.

This chapter is organized in 10 sections. The first section provides contextual demographics of each of the groups relevant to the study. The second section provides the results of the document analysis (Bowen, 2009). Sections three through eight present the inferential and descriptive statistics and analyses relevant to each of the research questions. The findings of additional analyses are presented in the ninth section and the chapter concludes with a summary of the findings.

## Demographics

The participants in this study represented three groups of students labeled as at-risk for not completing high school. These students were enrolled in two demographically and socioeconomically similar central Florida urban high schools during the 2010-2011 and 20122013 school years $(N=1449)$. A purposive sample of all incoming freshmen labeled as at-risk of not completing high school who enrolled in the Freshman Experience course at Target School during the 2012-2013 school year will comprise the treatment group, or Group One ( $n=644$ ), for the study (Neuman, 1997). A purposive sample was adopted in order to evaluate the academic
impact of the freshman transition intervention specifically with students labeled as at-risk for not completing high school. The comparison group, Group Two ( $n=250$ ), was comprised of all incoming freshmen labeled as at-risk of not completing high school who enrolled in a demographically similar large urban high school which did not employ a freshman transition intervention during the 2012-2013 school year. The purpose of this comparison group was to mitigate the effects of extraneous and modifier variables. A matched historical purposive sample comprised of freshman who enrolled at Target School during the 2010-2011, prior to the implementation of a freshman transition intervention, comprised an historical control group, or Group Three $(n=555)$. The purpose of the historical comparison group was to mitigate the effects of extraneous and modifier variables.

Table 4 presents the demographic variables among the three research populations of concern to this study. The reported demographic is presented in column one. The frequency and percentage of representation in each of the Research Groups are presented in columns two through seven. The frequency and percentage of students who qualify for the Free and Reduced Lunch Program and those students who receive Exceptional Student Education services are also presented.

## Table 4

Demographic Variables of the Research Groups

|  | Group 1 $N=644$ |  | Group 2 $N=250$ |  | Group $3 N=555$ |  |
| :--- | :---: | :---: | :---: | :---: | :---: | ---: |
| Variables | $n$ | $\%$ | $n$ | $\%$ | $n$ | $\%$ |
| African American | 312 | 48.4 | 224 | 89.6 | 285 | 51.4 |
| Asian | 17 | 2.6 | 0 | 0.0 | 15 | 2.7 |
| Hispanic | 255 | 39.6 | 16 | 6.4 | 212 | 38.2 |
| Multiracial | 7 | 1.1 | 9 | 3.6 | 6 | 1.1 |
| Native American | 0 | 0.0 | 0 | 0.0 | 2 | 0.4 |
| White | 51 | 7.9 | 1 | 0.4 | 35 | 6.3 |
| Free and Reduced | 586 | 91.0 | 256 | 90.4 | 484 | 87.2 |
| Lunch |  |  |  |  |  |  |
| Exceptional Student <br> Education | 92 | 14.3 | 50 | 20.0 | 107 | 19.3 |

## Testing the Research Questions

Research question one was tested through the qualitative methodology of document analysis (Bowen, 2009). Research questions two, three, four, and five were tested with a nonparametric Chi-Square. Phi ( $\varphi$ ) was calculated to assign an effect size with respect to the dependent variables relevant to research questions two, three, four, and five to the intervention under investigation (Cohen, 1965). Cohen (1988) defined a small effect size as $\mathrm{d}<.3$, a medium effect size as $\mathrm{d} \geq .3$, and a large effect size as $\mathrm{d} \geq .5$ for $\operatorname{Phi}(\varphi)$. Research questions six and seven were tested with a one-way multivariate analysis of variance (MANOVA). Partial eta squared $\left(\eta^{2}\right)$ was calculated to assign an effect size with respect to the dependent variables relevant to research questions six and seven and the intervention under investigation (Cohen, 1965). Cohen (1988) defined a small effect size as $\mathrm{d} \leq .01$, a medium effect size as $\mathrm{d} \geq .06$, and a large effect size as $\mathrm{d} \geq .14$ for multivariate eta-squared $\left(\eta^{2}\right)$.

## Research Question One

To what extent does the Freshman Experience course align with elements of successful programs Freeman and Simonsen (2015): cognitive, affective, and behavioral that is well-planned, supported, systematic, and involve a variety of stakeholders?

## Procedure

In order to answer research question one, the qualitative methodology of document analysis was used (Bowen, 2009). Bowen (2009) outlined the analytic procedure of document analysis as "finding, selecting, appraising, and synthesizing data" contained in documents (p. 28).

The documents and records relevant to the 2012-2013 school year and the intervention under investigation were collected from course instructors and school administrators at Target School, evaluated, analyzed for meaningful and relevant passages, text, and data, and then coded into three research based themes through a direct approach to content analysis: 1) Cognitive, 2) Affective, and 3) Behavioral (Corbin \& Strauss, 2008; Potter \& Levine-Donnerstein, 1999; Freeman \& Simonsen, 2015). Documents collected that did not fit one of the research based themes representative of the elements of successful transition programs were assigned to a fourth theme: irrelevant. Irrelevant documents were then excluded from the document analysis. Relevant text and passages identified through the evaluation and document analysis process were further analyzed in order to provide a stronger context with respect to the academic impact of the Freshman Experience course.

## Findings

The retrieved documents relevant to this study were Target School's curriculum guide, course syllabus, an instructional focus calendar, program flyer, departmental collaborative plan, phone call log, and a weekly curriculum agenda. Document analysis found 38 words or phrases relevant to the cognitive domain, 20 relevant to the affective domain, and 21 relevant to the behavioral domain. A total of 79 words and phrases were evaluated in order to answer Research Question One. Table 5 illustrates the frequency of presence of the research based thematic codes within the collected documents. The following sections present the findings of the document analysis for each document collected.

Table 5

Presence of Research Based Themes in Collected Documents

|  | Research Based Theme |  |  |
| :--- | :--- | :--- | :--- |
| Document | Cognitive | Affective | Behavioral |
| Curriculum Guide | 1 | 1 | 1 |
| Syllabus | 7 | 2 | 6 |
| Instructional Focus | 6 | 1 | 1 |
| Calendar |  |  |  |
| Departmental <br> Collaborative Plan | 7 | 7 | 1 |
| Program Flyer | 2 | 5 | 5 |
| Phone Call Log | 4 | 2 | 3 |
| Weekly Curriculum | 11 | 2 | 4 |
| Agenda |  | 20 | 21 |
| Total | 38 |  |  |

Note. Documents received a score of +1 for each iteration of the research based theme observed.

## Target School Curriculum Guide

Target School's Curriculum Guide was furnished to the researcher by Target School's
principal. Target School's Curriculum Guide serves the purpose of assisting students in making choices regarding core and elective courses for the forthcoming school year. This was
accomplished by outlining course and program descriptions of the academic offerings available at Target School. The Curriculum Guide also informed students of their cohort's graduation and testing requirements as well as scholarship opportunities and magnet schools which existed within Target School.

The Curriculum Guide relevant to this research was from the 2012-2013 school year. The course offerings for freshman students are outlined on page 23 of the Curriculum Guide. The Freshman Experience course is not denoted as a required core class. It is also not denoted as an available ninth grade elective. All incoming freshman to Target School not enrolled in a magnet program or AVID (Achievement Via Individual Determination) must enroll in Freshman Experience. The intervention under investigation, Freshman Experience, was mentioned four times throughout the document. The Curriculum Guide described the Freshman Experience course as:

The Freshman Experience course is designed to acclimate ninth graders to high school life and provide them an optimal atmosphere for character development, team building and academic growth. Offering a scaffolding environment that seeks to close the academic gaps students may have upon entering high school, Freshman Experience provides the basic foundational concepts that are needed for students to have a successful first year. (Orange County Public Schools, 2013, p. 30)

Each passage has been coded into one of three research based themes through a direct approach to content analysis: 1) Cognitive, 2) Affective, and 3) Behavioral (Corbin \& Strauss, 2008; Potter \& Levine-Donnerstein, 1999; Freeman \& Simonsen, 2015). Each of the themes were observed once in the curriculum guide. Target School's Curriculum Guide describes the

Freshman Experience course as "designed to acclimate ninth graders to high school life and provide them an optimal atmosphere for character development, team building and academic growth" (Orange County Public Schools, 2013, p. 30). Further, the Curriculum Guide's description of Freshman Experience outlines the purpose of the course: "Freshman Experience provides the basic foundational concepts that are needed for students to have a successful first year." (Orange County Public Schools, 2013, p. 30). Passages found within the curriculum guide relevant to the research based elements of successful transition intervention programs are reported in Table 6. Column one presents the coded theme, column two presents the frequency that theme was observed in the analyzed document, and column three presents the relevant passage observed in the observed document.

Table 6
Meaningful Passages Relevant to the Research Based Themes: Curriculum Guide

| Theme | Frequency | Relevant passages from the Curriculum Guide |
| :--- | :---: | :--- |
| Cognitive | 1 | "provide them an optimal atmosphere for ... academic growth" (p.30) |
| Affective | 1 | "designed to acclimate ninth graders to high school life" (p. 30) |
| Behavioral | 1 | "provide them an optimal atmosphere for character development" (p. 30) |

Note. Only the description of the Freshman Experience course was used for this analysis.

## Freshman Experience Syllabus

The Freshman Experience Syllabus is the syllabus, a document which outlines subjects to be taught in a teaching, for the intervention under investigation. It was furnished to the researcher by the Freshman Experience lead teacher. The document was authored by the lead teacher prior to the 2012-2013 school year. The purpose of the course syllabus is to outline instructional expectations, establish a course description, set goals for students, establish a relationship between the course instructor and students and parents, and provide contact
information for the course teacher. The document was written for students enrolled in the Freshman Experience course and their parents and guardians during the school year of interest to the current study.

The teacher's name and contact information are found at the top of the document. The classroom hours, including lunch, planning, and afterschool hours are also provided for students. The course textbook, Seven Habits of Highly Effective Teens (Covey, 1998) is then described. Course competencies which focus largely on behavioral characteristics such as the difference between reactive and proactive behavior and expectations were observed. Cognitive elements, such as setting academic goals, and Affective elements such as relationship building were also observed in the course competencies. Course policies for attendance, participation, technology, and respect followed (Orange County Public Schools, 2012a).

A course description focusing on the course text was observed. This was not the same course description presented in the Curriculum Guide. Passages reflecting all three research based elements of successful transition interventions were observed in the course description provided in the syllabus. Required materials and a grading policy were also included. An invitation for students to contact the course instructor to discuss short and long term goals, college and career aspirations, and challenges was observed. The syllabus also included a signature form where students and parents acknowledged receipt of the Syllabus and provided contact information, preferred methods of contact, and information regarding computer access outside of the classroom (Orange County Public Schools, 2012a).

The analysis of the Syllabus yielded a total of 15 words and passages. Each passage has been coded into one of three research based themes through a direct approach to content
analysis: 1) Cognitive, 2) Affective, and 3) Behavioral (Corbin \& Strauss, 2008; Potter \& Levine-Donnerstein, 1999; Freeman \& Simonsen, 2015). The major themes observed throughout the Freshman Experience Syllabus were cognitive $(n=7)$ and affective $(n=6)$. The behavioral theme was observed twice. All Freshman Experience instructors utilized the same syllabus during the year under investigation. Passages found within the Freshman Experience Syllabus relevant to the research based elements of successful transition intervention programs are reported in Table 7. Column one presents the coded theme, column two presents the frequency that theme was observed in the analyzed document, and column three presents the relevant passage observed in the observed document.

Table 7

Meaningful Passages Relevant to the Themes: Syllabus (Orange County Public Schools, 2012a)


## Instructional Focus Calendar

The Instructional Focus Calendar is a curriculum calendar that was furnished to the researcher by the Freshman Experience lead teacher. The document was authored by the lead teacher during the 2012-2013 school year. The purpose of the document was to provide a weekly instructional focus to teachers on the Freshman Experience team as well as involved stakeholders, such as Target School's administrative team. It also served the purpose of establishing the benchmark focus for each week. The benchmark focus was often English Language Arts or Reading. Personal communication revealed that the purpose of the EnglishLanguage Arts focus was to improve cross-curricular literacy as literacy is a central focus of all academic proficiency assessments (L. Bradshaw, personal communication, 2016).

The course name and the school year are found at the top center of the first page of the document. Following are definitions of acronyms found on the calendar which provide meaning to course resources such as textbooks and academic programs used in the course. The dominant component of the document is the weekly calendar. Bellwork activities, small assignments which engage students in a lesson at the outset of a class period or check for understanding of previously taught content, are listed for each school day. Under each bellwork activity is the lesson focus for that day. Monday and Tuesday are focused on the course textbook, The 7 Habits of Highly Effective Teens: The Ultimate Teenage Success Guide (Covey, 1998). Wednesday is reserved for a literacy initiative. Thursday provided students an opportunity to catch up on missing work from their other classes. Friday used a vocabulary rap video to guide the lesson (Orange County Public Schools, 2012b).

The bottom half of the document is divided into two columns. On the left hand side is the benchmark focus. The benchmark focus is reflected in the bellwork outlined on the weekly agenda. Links to internet resources to help teachers instruct the benchmark focus are also provided. On the right hand side is the literacy focus which incorporates language arts standards into the curriculum for the week. Following this is a round robin writing activity and a link to a video of the vocabulary rap song (Orange County Public Schools, 2012b).

The second page of the document continues with two columns. On the left side is test preparation guidelines for teachers to follow. The right column reflects a focus on course grades and academic persistence through data tracking. The remainder of the second page is one column. The academic focus is restated. Directions for the building and maintaining of data notebooks are also provided. Directives for each class are also presented including mandatory wall postings and weekly recurring lessons (Orange County Public Schools, 2012b).

The analysis of the Instructional Focus Calendar yielded a total of eight words and passages. Each passage has been coded into one of three research based themes through a direct approach to content analysis: 1) Cognitive, 2) Affective, and 3) Behavioral (Corbin \& Strauss, 2008; Potter \& Levine-Donnerstein, 1999; Freeman \& Simonsen, 2015). The major theme observed throughout the Instructional Focus Calendar was cognitive with six instances observed compared to one instance for each affective and behavioral. Passages found within the Instructional Focus Calendar relevant to the research based elements of successful transition intervention programs are reported in Table 8. Column one presents the coded theme, column two presents the frequency that theme was observed in the analyzed document, and column three presents the relevant passage observed in the observed document.

Table 8

Meaningful Passages Relevant to the Research Based Themes: Instructional Focus Calendar (Orange County Public Schools, 2012b)

| Theme | Frequency | Relevant passages from the Instructional Focus Calendar |
| :---: | :---: | :---: |
| Cognitive | 6 | "Intro Habit 3-Put 1st Things ${ }^{\text {st }}$. ${ }^{\text {( }}$ p. 1) |
|  |  | "Habit 3: Time Management." (p. 1) |
|  |  | "*Grade Trackers Due." (p.1) |
|  |  | "GRADES: Students should be checking Progress Book DAILY on their own and logging on Wednesday." (p. 2) |
|  |  | "Please make sure you are building the DATA NOTEBOOKS, Students should have a copy of the graduation requirements, 1st nine-weeks progress reports and 1st Nine-Weeks Report Card." (p. 2) |
|  |  | "DATA NOTEBOOKS-copies of REPORT CARDS should go inside this week" (p. 2) |
| Affective | 1 | "Begin to share student data with your classes and celebrate success using report card results! (e. g. Honor Roll Wall)" (p. 2) |
| Behavioral | 1 | "7H=7 Habits of Highly Effective Teens" (p. 1) |

Note. Habits refer to the book The 7 Habits of Highly Effective Teens: The Ultimate Teenage Success Guide (Covey, 1998)

Program Flyer
The Program Flyer was furnished to the researcher by the Freshman Experience lead teacher. The flyer was authored and designed by the lead teacher. The Program Flyer is a one page document whose purpose was to inform incoming ninth grade students and their parents about the Freshman Experience course during Target School's open house.

The central element to the Program Flyer is the introduction of incoming freshman students to the school. The flyer presents a narrative describing the first day of school. The first
day of school described focusses on the development of pride in and connection to the target school. At the top center of the flyer is a quote from Kemple, Herlihy, and Smith (2005) describing the importance of the freshman year of high school. The bottom of the flyer briefly outlines a week of course activities, a career focused research project, and student learning objectives in the course (Orange County Public Schools, 2012c).

The analysis of the Program Flyer yielded a total of 12 words and passages. Each passage has been coded into one of three research based themes through a direct approach to content analysis: 1) Cognitive, 2) Affective, and 3) Behavioral (Corbin \& Strauss, 2008; Potter \& Levine-Donnerstein, 1999; Freeman \& Simonsen, 2015). The major themes observed throughout the Program Flyer were affective and behavioral, each with five observed utterances. Passages found within the Program Flyer relevant to the research based elements of successful transition intervention programs are reported in Table 9. Column one presents the coded theme, column two presents the frequency that theme was observed in the analyzed document, and column three presents the relevant passage observed in the observed document.

Table 9
Meaningful Passages Relevant to the Research Based Themes: Course Flyer (Orange County
Public Schools, 2012c)

| Theme | Frequency | Relevant passages from the Course Flyer |
| :--- | :---: | :--- |
| Cognitive | 2 | "The program is slated to equip our newest scholars with academic <br> awareness." (p. 1) |

"Research techniques will be utilized in order to conceptualize their biggest and brightest ideas, goals, and dreams." (p. 1)

Affective 5 "You can hear the whispers of what would soon come: new teachers, new friends, and more importantly a new culture-[Target School] PRIDE!" (p. 1)
"...cohesive culture of students..." (p. 1)
"...a proud group of 9th grade students that will carry out the culture of our school." (p. 1)
"Students will learn to build relationships with their instructors for future endeavors." (p. 1)
"Students will nurture and mold these relationships realizing the 'give and take' concept." (p.1)

Behavioral 5 "These students will build on the pillars of Trust, Respect, Responsibility, Fairness, Caring, and Good Citizenship." (p. 1)
"The program is slated to equip our newest scholars with ... better judgment and more sound decision making." (p. 1)
"Classroom Snap Shot: Day 4: Bad Habits vs. Good Habits" (p. 1)
"RESEARCH YOUR WILDEST DREAM! DREAM BIG!" (p. 1)
"Maybe it's visiting the rich city of Dubai or reaching the highest peak of Mt. Everest-if you can conceive it, you can accomplish it!" (p. 1)

Freshman Experience Departmental Collaborative Plan
The Freshman Experience Departmental Collaborative Plan document was furnished to the researcher by the Freshman Experience lead teacher. The document was authored by the lead
teacher and the Freshman Experience Department in 2012 during the pre-planning week prior to the start of the 2012-2013 school year. The purpose of the collaborative planning document was to collaboratively plan the purpose of the Freshman Experience course for the forthcoming school year. The document is one page in length.

The document identifies each of the teachers on the Freshman Experience team, as well as the deans and school administrators relevant to the Freshman Experience department. It then outlines an agenda including a discussion of the Program Flyer, administrative expectations, resources needed for the course, the role of the Freshman Experience teachers, items worth sharing including the Program Flyer, Syllabus, Instructional Focus Calendar, and the large urban school district's lesson plan template, and action items for each teacher member. Each teacher was assigned a role within the department based on a perceived expertise including a focus on motivational videos, collaborative activities for all Freshman Experience courses to interact with, field trips, classroom speakers, promotion of student involvement, and athletics (Orange County Public Schools, 2012d).

The analysis of the Freshman Experience Departmental Collaborative Plan yielded a total of 15 words and passages. Each passage has been coded into one of three research based themes through a direct approach to content analysis: 1) Cognitive, 2) Affective, and 3) Behavioral (Corbin \& Strauss, 2008; Potter \& Levine-Donnerstein, 1999; Freeman \& Simonsen, 2015). The major themes observed throughout the Collaborative Lesson Plan were cognitive and affective, each with seven observed instances. Passages found within the Freshman Experience Departmental Collaborative Plan relevant to the research based elements of successful transition intervention programs are reported in Table 10. Column one presents the coded theme, column
two presents the frequency that theme was observed in the analyzed document, and column three presents the relevant passage observed in the observed document.

Table 10

Meaningful Passages Relevant to the Research Based Themes: Freshman Experience
Departmental Collaborative Plan (Orange County Public Schools, 2012d)

| Theme | Frequency | Relevant passages from the Freshman Experience Departmental Collaborative Plan |
| :---: | :---: | :---: |
| Cognitive | 7 | "Admin Expectations <br> ALL FRESHMEN <br> Promoted to the $10^{\text {th }}$ Grade. <br> Earn 7 credits or more $9^{\text {th }}$ Grade Year. <br> Students maintain a GPA of 2.0 or higher. <br> Monitor Student Data, Provide Feedback <br> Consistently." (p. 1) |
|  |  | "Resources <br> 7 Habits." (p. 1) |
|  |  | "Our Role. <br> Setting Grade Expectations. <br> Monitoring Grades \& Data." (p. 1) |
| Affective | 7 | "Resources <br> Mentors." (p. 1) |
|  |  | "Our Role <br> Building Relationships. <br> Establishing Trust. <br> Making ourselves Available. <br> Encouraging school involvements. <br> MOTIVATE MOTIVATE MOTIVATE!! <br> They Should NOT want to disappoint you!" (p. 1) |
| Behavioral | 1 | "Our Role <br> Addressing Attendance \& Behavior." (p. 1) |

Note. 7 Habits refers to the book The 7 Habits of Highly Effective Teens: The Ultimate Teenage Success Guide (Covey, 1998)

## Phone Call Log

The Phone Call Log document is a telephone call $\log$ which was furnished to the researcher by the Freshman Experience lead teacher. The document was authored by the lead teacher in order to track phone calls to parents regarding student academics and behavior. The version furnished for the current study was two pages in length. The purpose of the Phone Call Log was to develop relationships between the teacher and student and between the teacher and parents. Special circumstances, such as divorce or a death in the family, relevant to individual students were recorded by the teacher.

The document begins by identifying the Freshman Experience teacher's name. A table indicating the date, student's name, and the person contacted. It also provides a column for notes, a place to indicate that the phone call was not answered, a check box for a phone number which has been disconnected, whether or not a message was left, special considerations for students, and whether or not tutoring was discussed (Orange County Public Schools, 2012e).

The analysis of the Phone Call Log yielded a total of nine words and passages. Each passage has been coded into one of three research based themes through a direct approach to content analysis: 1) Cognitive, 2) Affective, and 3) Behavioral (Corbin \& Strauss, 2008; Potter \& Levine-Donnerstein, 1999; Freeman \& Simonsen, 2015). All relevant passages were observed in the phone call notes column. The major themes observed throughout the Phone Call Log were cognitive and behavioral, with four and three instances respectively. Passages found within the Phone Call Log relevant to the research based elements of successful transition intervention programs are reported in Table 11. Column one presents the coded theme, column two presents
the frequency that theme was observed in the analyzed document, and column three presents the relevant passage observed in the observed document.

Table 11
Meaningful Passages Relevant to the Themes: Phone Call Log (Orange County Public Schools, 2012e)

| Theme | Frequency | Relevant passages from the Phone Call Log |
| :--- | :---: | :--- |
| Cognitive | 4 | "[Student Name] mom and I decided to go through his baseball coach and ask that he allow [Student Name] <br> to go to Ms. [Teacher Name] once per week after school to help improve his grade. I sent Coach [Baseball <br> Coach] an email." (p. 1) |
|  | "Spoke with [Student Name] mother, shared with her that [Student Name] grades are slipping..." (p. 1) |  |
|  | "Spoke with students [sic] mother, mentioned his grade in Chemistry and Algebra. I let her know about <br> tutoring afterschool on Tues \& Thurs she wants him to take advantage of that." (p. 1) |  |
|  | "Spoke with [Student Name] Aunt [Name] who says she is involved along with [Student Name] mom <br> concerning her grades and behavior. I also emailed her the most recent grades showing on progressbook |  |
| [sic]." (p. 1) |  |  |

Note. FRESH EX stands for Freshman Experience

## Weekly Curriculum Agenda

The Weekly Curriculum Agenda is a daily instructional agenda which was furnished to the researcher by the Freshman Experience lead teacher. The document was authored by the lead teacher during the 2012-2013 school year in order to establish daily routines and procedures and as well as daily instructional expectations. The document is two pages in length. The document was written for the Freshman Experience team as well as involved stakeholders such as Target School's administrative team.

The course description as defined by Target School's Curriculum Guide was found at the top of the Weekly Curriculum Agenda. A Weekly Agenda At-A-Glance follows. Two days a week are set aside for missing assignments and make-up work. Freshman Experience students are expected to keep detailed notes in order to track progress toward the successful completion of missing assignments. Freshman Experience teachers serve the role of monitoring student use of the tracking forms (Orange County Public Schools, 2012f).

One day a week is set aside for Florida Comprehensive Assessment Test (FCAT) Reading practice and a literacy program. On these days, Freshman Experience teachers engage students in one-on-one conferences in order to discuss academic progress and improvement. One day a week is set aside for the course text, Seven Habits of Highly Effective Teens (Covey, 1998). Lessons are focused on organization, note-taking, recording and representing knowledge, goal setting, and reading strategies (Orange County Public Schools, 2012f).

Thursdays and Fridays are reserved for team building and character development respectively. Team building days are led by student groups engaging in academic games with the purpose of encouraging sportsmanship, positive behavior, and peer relationship building.

Character development days are often led by a community member as well as an academic activity which assesses the student's understanding of that character trait (Orange County Public Schools, 2012f).

The analysis of the Phone Call Log yielded a total of 17 words and passages. Each passage has been coded into one of three research based themes through a direct approach to content analysis: 1) Cognitive, 2) Affective, and 3) Behavioral (Corbin \& Strauss, 2008; Potter \& Levine-Donnerstein, 1999; Freeman \& Simonsen, 2015). The major theme observed throughout the Weekly Curriculum Agenda was cognitive with 11 observed instances compared to two and four instances for affective and behavioral respectively. Passages found within the Weekly Curriculum Agenda relevant to the research based elements of successful transition intervention programs are reported in Table 12. Column one presents the coded theme, column two presents the frequency that theme was observed in the analyzed document, and column three presents the relevant passage observed in the observed document.

Table 12
Meaningful Passages Relevant to the Themes: Weekly Curriculum Agenda (Orange County Public Schools, 2012f)

| Theme | Frequency | Relevant Passages from the Weekly Curriculum Agenda |
| :---: | :---: | :---: |
| Cognitive | 11 | "Students are expected to complete a 'Tracker' form that documents... Subject, Teacher, Details about the assignment, Class Attendance. Dates the student checked ProgressBook. Communication with Instructor regarding the assignment. Date assignment was turned in." (p. 1) |
|  |  | "FE Teachers monitor these tracker forms to ensure the student get [sic] a satisfactory grade in a reasonable amount of time. Students are expected to stay in constant communication with their teachers regarding work missed due to an absence, any extra credit available, and improving a low grade." (p.1) |
|  |  | "We maintain "Data Notebooks" that include...Report Cards from all 4 Nine Weeks. Graduation Requirements. FCAT Scores and Benchmark Data." (p. 1) |
|  |  | "One-on-One FE Teacher/ Student conferences are conducted to discuss academic success and areas of improvement." (p. 1) |
|  |  | "...students keep track of their weekly lessons/notes for the semester." (p. 1) |
|  |  | "[S]everal topics we have covered this semester: organizational skills, how to study for tests, goal setting, reading strategies..." (p. 1) |
| Affective | 2 | "My students have benefitted from having a member of the community who is a youth director come in twice a month..." (p. 2) |
|  |  | "...students were engaged in developing a fundraiser to assist several needy families on campus." (p.2) |
| Behavioral | 4 | "...positive verbal engagement, positive peer relationship building..." (p. 2) |
|  |  | "Fridays are Character Development and Enrichment." (p. 2) |
|  |  | "...invited a speaker to come in from our county to talk to the students and he did a great job engaging the students and promoting positive character!" (p. 2) |

Note. FE = Freshman Experience

## Research Question Two

To what extent do students labeled at-risk for dropping out of high school who enroll as freshman at the beginning of the 2012-2013 school year at the target school compare with students labeled at-risk for dropping out of high school who enroll as freshman at the beginning of the 2012-2013 school year at the comparison school on persistence to the 10th grade?

The purpose of the second research question was to determine the impact participation in Freshman Experience had on persistence to the tenth grade when compared to students who enrolled at a demographically and socioeconomically similar high school. The independent variable for research question two was whether or not the student was enrolled in and satisfactorily completed (as defined by a "C" grade or higher) the Freshman Experience course at Target School during the 2012-2013 school year. The dependent variable relevant to research question two was measured dichotomously by whether or not the student persisted to the tenth grade. Group One, those students who enrolled as freshmen at Target School and participated in Freshman Experience, served as the treatment group and Group Two, students who enrolled as freshmen at a demographically and socioeconomically similar large urban high school who did participate in a transition intervention, served as the comparison group.

Target School District provided three identification codes for retention: Y, N, and U. A retention code of Y indicated that a student did not persist to the tenth grade and was retained in the ninth grade. A retention code of N indicated that a student did persist to the tenth grade. A retention code of U indicated that Target School District did not have information on the student. Additionally, students who did not return to a school within Target School District the following year did not receive a retention code. No students in the data relevant to Research Question Two
were identified with a retention code $U$. Students who did not receive a retention code were excluded from all statistical analyses relevant to Research Question Two ( $n=81$ ). Students who did not enroll in Freshman Experience at Target School during their freshman year were excluded from all statistical analyses relevant to Research Question Two ( $n=267$ ).

Group One was represented by 328 cases. Group Two was represented by 230 cases. Of the students who enrolled at Target School as freshmen during the 2012-2013 school year and participated in Freshman Experience intervention, $97.3 \%$ persisted to the tenth grade ( $n=319$ ) while $2.7 \%$ did not $(n=9)$. Of the students who enrolled as freshmen at a demographically and socioeconomically similar high school during that same year, $89.1 \%$ persisted to the tenth grade $(n=205)$ while $10.9 \%$ did not $(n=25)$. Table 13 presents the frequencies and percentages relevant to Research Question Two. The retention code is presented in column one. The frequency and percentage of representation for each of the Research Groups relevant to Research Question Two are presented in columns two through five.

Table 13
Crosstabulation of Retention for Target and Comparison Groups

|  | Target $N=328$ |  | Comparison $N=230$ |  |
| :--- | :---: | :---: | :---: | :---: |
| Student Retained | $n$ | $\%$ | $n$ | $\%$ |
| Yes | 9 | 2.7 | 25 | 10.9 |
| No | 319 | 97.3 | 205 | 89.1 |

Chi-Square analysis was used to identify if a statistically significant relationship existed among participation in the Freshman Experience transition course and persistence to the tenth grade. The magnitude of the association between the independent and dependent variable for Research Question Two was measured by phi ( $\varphi$ ) (Cohen, 1965).

The Chi-square test for independence with Yates Continuity Correction indicated a statistically significant relationship between participation in the Freshman Experience transition course (Group One) and persistence to the tenth grade, $\chi^{2}(1, n=466)=17.03, p<.001$. Yates Continuity Correction was used due to the categorical dichotomous nature of the independent and dependent variables. No cells in the cross-tabulation violated the minimum expected cell frequency assumption of Chi-Square. The minimum expected count in each cell was eight. The magnitude of the relationship between Freshman Experience as described by phi was $\varphi=.201$ indicating a small effect size of the Freshman Experience transition course on persistence to the tenth grade. Table 14 presents the inferential statistics relevant to Research Question Two.

Table 14

Results of Chi-Square Test with Yates Continuity Correction and Phi on Retention for Target and

## Comparison Groups

|  | Value | Significance |
| :--- | :---: | :---: |
| Pearson's Chi-Square with Continuity | 17.03 | $.000^{* * *}$ |
| $\quad$ Correction | 466 |  |
| $N$ of Valid Cases | .201 | $.000^{* * *}$ |
| Phi |  |  |

Note. *** $p<.001$

## Research Question Three

To what extent do students labeled at-risk for dropping out of high school who enroll as freshman at the beginning of the 2012-2013 school year at the target school compare with students labeled at-risk for dropping out of high school who enroll as freshman at the beginning of the 2010-2011 school year at the target school on persistence to the 10th grade?

The purpose of the third research question was to determine the impact participation in Freshman Experience had on persistence to the tenth grade when compared to a cohort of
students who enrolled at Target School prior to the implementation of the intervention. The independent variable for research question three was whether or not the student was enrolled in and satisfactorily completed (as defined by a "C" grade or higher) the Freshman Experience course at Target School during the 2012-2013 school year. The dependent variable relevant to research question three was measured dichotomously by whether or not the student persisted to the tenth grade. Group One, those students who enrolled as freshmen at Target School and participated in Freshman Experience, served as the treatment group and Group Three, students who enrolled as freshmen at Target School prior to the implementation of Freshman Experience, served as the comparison group.

Target School District provided three identification codes for retention: Y, N, and U. A retention code of Y indicated that a student did not persist to the tenth grade and was retained in the ninth grade. A retention code of N indicated that a student did persist to the tenth grade. A retention code of $U$ indicated that Target School District did not have information on the student. Additionally, students who did not return to a school within Target School District the following year did not receive a retention code. No students in the data relevant to Research Question Three were identified with a retention code U. Students who did not receive a retention code were excluded from all statistical analyses relevant to Research Question Three ( $n=130$ ). Students who did not enroll in Freshman Experience at Target School during their freshman year were excluded from all statistical analyses relevant to Research Question Two ( $n=267$ ).

Group One was represented by 328 cases. Group Three was represented by 486 cases. Of the students who enrolled at Target School as freshmen during the 2012-2013 school year and participated in Freshman Experience intervention, $97.3 \%$ persisted to the tenth grade. $(n=319)$
while $2.7 \%$ did not $(n=9)$. Of the students who enrolled at Target School as freshmen during the 2010-2011 school prior to the implementation of the Freshman Experience intervention, 87.2\% persisted to the tenth grade $(n=424)$ while $12.8 \%$ did not $(n=62)$. Table 15 presents the frequencies and percentages relevant to Research Question Three. The retention code is presented in column one. The frequency and percentage of representation for each of the Research Groups relevant to Research Question Three are presented in columns two through five.

Table 15

## Crosstabulation of Retention for Target and Historical Control Groups

|  | Target $N=328$ |  | Historical Control $N=486$ |  |
| :--- | :---: | :---: | :---: | :---: |
| Retained in Ninth Grade | $n$ | $\%$ | $n$ | $\%$ |
| Yes | 9 | 2.7 | 62 | 12.8 |
| No | 319 | 97.3 | 424 | 87.2 |

Chi-Square analysis was used to identify if a statistically significant relationship existed among participation in the Freshman Experience transition course and persistence to the tenth grade. The magnitude of the association between the independent and dependent variable for Research Question Three was measured by phi ( $\varphi$ ) (Cohen, 1965).

The Chi-square test for independence with Yates Continuity Correction indicated a statistically significant relationship between participation in the Freshman Experience transition course (Group One) and persistence to the tenth grade, $\chi^{2}(1, n=814)=23.42, p<.001$. Yates Continuity Correction was used due to the categorical dichotomous nature of the independent and dependent variables. No cells in the cross-tabulation violated the minimum expected cell frequency assumption of Chi-Square. The minimum expected count in each cell was 28.61. The magnitude of the relationship between Freshman Experience as described by phi was $\varphi=.174$
indicating a small effect size of the Freshman Experience transition course on persistence to the tenth grade. Table 16 presents the inferential statistics relevant to Research Question Three.

Table 16
Results of Chi-Square Test with Yates Continuity Correction and Phi on Retention for Target and Historical Control Groups

|  | Value | Significance |
| :--- | :---: | :---: |
| Pearson's Chi-Square with Continuity <br> Correction | 23.421 | $.000^{* * *}$ |
| N of Valid Cases | 814 |  |
| Phi | .174 | $.000^{* * *}$ |
| Note. ${ }^{* * *} p<.001$ |  |  |
| Research Question Four |  |  |
| To what extent do students labeled at-risk for dropping out of high school who enroll as |  |  |
| freshman at the beginning of the 2012-2013 school year at the target school compare with |  |  |
| students labeled at-risk for dropping out of high school who enroll as freshman at the beginning |  |  |
| of the 2012-2013 school year at the comparison school on on-track to graduation status at the |  |  |
| end of the 11th grade year? |  |  |

The purpose of the fourth research question was to determine the impact participation in Freshman Experience had on on-track to graduation status as defined by Target School District's Pupil Progression Plan when compared to students who enrolled at a demographically and socioeconomically similar large urban high school. The independent variable for research question four was whether or not the student was enrolled in and satisfactorily completed (as defined by a "C" grade or higher) the Freshman Experience course at Target School during the 2012-2013 school year. The dependent variable relevant to research question four was measured dichotomously by whether or not the student was on-track to graduate as defined by Target

School District's Pupil Progression Plan as the completion of the eleventh grade year, 2014-2015 for both Group One and Group Two. Group One, those students who enrolled as freshmen at Target School and participated in Freshman Experience, served as the treatment group and Group Two, students who enrolled as freshmen at a demographically and socioeconomically similar large urban high school who did participate in a transition intervention, served as the comparison group.

Target School District provided the total number of high school credits earned for students within each of the research groups. Nine cases in Group One were missing and five cases in Group Two were missing. These students were excluded from all statistical analyses relevant to Research Question Four $(n=14)$ Table 17 presents the descriptive statistics for Group One and Group Two with respect to the total number of high school credits earned at the completion of the student's eleventh grade year. The descriptive statistic is presented in column one. The nominal representations of those statistics are presented in columns two and three for Group One and Group Two respectively. The arithmetic mean for Group One was 27.39 with a standard deviation of 8.70. The arithmetic mean for Group Two was 24.35 with a standard deviation of 10.42 . The minimum total high school credits earned for Group One was zero and the maximum was 41 . The minimum total high school credits earned for Group Two was zero and the maximum was 40 .

Table 17

Descriptive Statistics: Total High School Credits Earned for Target and Comparison Groups

| Total High School Credits Earned | Target $N=368$ | Comparison $N=146$ |
| :--- | :---: | :---: |
| Mean | 27.39 | 24.35 |
| Standard Deviation | 8.70 | 10.42 |
| Range | 41.00 | 40.00 |
| Minimum | .00 | .00 |
| Maximum | 41.00 | 40.00 |

Data relevant to research question four were operationalized by the researcher for Group One and Group Two as one dichotomous measure, whether or not the student had attained ontrack to graduation status as defined by the school district's Pupil Progression Plan. Group One was represented by 368 cases. Group Two was represented by 146 cases. Of the students who enrolled at Target School as freshmen during the 2012-2013 school year and participated in Freshman Experience intervention, $83.7 \%$ were on-track to graduate at the completion of the eleventh grade year $(n=308)$ while $16.3 \%$ were not $(n=60)$. Of the students who enrolled as freshmen at a demographically and socioeconomically similar high school during that same year, $69.9 \%$ were on-track to graduate at the completion of the eleventh grade year $(n=102)$ while $30.1 \%$ were not $(n=44)$. Table 18 presents the frequencies and percentages relevant to Research Question Four. The On-Track to Graduation Status code is in column one. The frequency and percentage of representation for each of the Research Groups relevant to Research Question Four are presented in columns two through five.

Table 18

| Crosstabulation of On-Track to Graduation Status for Target and Comparison Groups |
| :--- |
|  |
|  |
| On-Track to Graduate |

Chi-Square analysis was used to identify if a statistically significant relationship existed among participation in the Freshman Experience transition course and on-track to graduation status at the completion of the eleventh grade year. The magnitude of the association between the independent and dependent variable for Research Question Four was measured by phi ( $\varphi$ ) (Cohen, 1965).

The Chi-square test for independence with Yates Continuity Correction indicated a statistically significant relationship between participation in the Freshman Experience transition course (Group One) and on-track to graduation status at the completion of the eleventh grade year, $\chi^{2}(1, n=514)=11.55, p<.005$. Yates Continuity Correction was used due to the categorical dichotomous nature of the independent and dependent variables. No cells in the cross-tabulation violated the minimum expected cell frequency assumption of Chi-Square. The minimum expected count in each cell was 29.54. The magnitude of the relationship between Freshman Experience as described by phi was $\varphi=.155$ indicating a small effect size of the Freshman Experience transition course on on-track to graduation status. Table 19 presents the inferential statistics relevant to Research Question Four.

Table 19

Results of Chi-Square Test with Yates Continuity Correction and Phi on On-Track to Graduation Status for Target and Comparison Groups

|  | Value | Significance |
| :--- | :---: | :---: |
| Pearson's Chi-Square with Continuity <br> $\quad$ Correction | 11.55 | $.000^{* * *}$ |
| $N$ of Valid Cases | 514 |  |
| Phi | .155 | $.000^{* * *}$ |
| Note. ${ }^{* * *} p<.001$ |  |  |

## Research Question Five

To what extent do students labeled at-risk for dropping out of high school who enroll as freshman at the beginning of the 2012-2013 school year at the target school compare with students labeled at-risk for dropping out of high school who enroll as freshman at the beginning of the 2010-2011 school year at the target school on persistence to on-track to graduation status at the end of the 11th grade year?

The purpose of the fourth research question was to determine the impact participation in Freshman Experience had on on-track to graduation status as defined by Target School District's Pupil Progression Plan when compared to a cohort of students who enrolled at Target School prior to the implementation of the intervention. The independent variable for research question five was whether or not the student was enrolled in and satisfactorily completed (as defined by a "C" grade or higher) the Freshman Experience course at Target School during the 2012-2013 school year. The dependent variable relevant to research question five was measured dichotomously by whether or not the student was on-track to graduate as defined by Target School District's Pupil Progression Plan as the completion of the eleventh grade year, 2014-2015 for Group One and 2012-2013 for Group Three. Group One, those students who enrolled as
freshmen at Target School and participated in Freshman Experience, served as the treatment group and Group Three, students who enrolled as freshmen at Target School prior to the implementation of Freshman Experience, served as the comparison group.

Target School District provided the total number of high school credits earned for students within each of the research groups. Nine cases in Group One were missing and 30 cases in Group Three were missing. These students were excluded from all statistical analyses relevant to Research Question Five $(n=39)$. The arithmetic mean for Group One was 28.37 with a standard deviation of 8.39. The arithmetic mean for Group Three was 14.74 with a standard deviation of 6.89. The minimum total high school credits earned for Group One was zero and the maximum was 41 . The minimum total high school credits earned for Group Three was zero and the maximum was 30 . Table 20 presents the descriptive statistics for Group One and Group Three with respect to the total number of high school credits earned at the completion of the student's eleventh grade year. The descriptive statistic is presented in column one. The nominal representations of those statistics are presented in columns two and three for Group One and Group Three respectively.

## Table 20

Descriptive Statistics: Total High School Credits Earned for Target and Historical Control

## Groups

| Total High School Credits Earned | Target $N=368$ | Historical Control N = 525 |
| :--- | :---: | :---: |
| Mean | 27.39 | 14.74 |
| Standard Deviation | 8.70 | 6.89 |
| Range | 41.00 | 30.00 |
| Minimum | .00 | .00 |
| Maximum | 41.00 | 30.00 |

Data relevant to research question five were operationalized by the researcher for Group One and Group Three as one dichotomous measure, whether or not the student had attained ontrack to graduation status as defined by Target School District's Pupil Progression Plan. Group One was represented by 368 cases. Group Two was represented by 525 cases. Of the students who enrolled at Target School as freshmen during the 2012-2013 school year and participated in Freshman Experience intervention, $83.7 \%$ were on-track to graduate at the completion of the eleventh grade year $(n=308)$ while $16.3 \%$ were not $(n=60)$. Of the students who enrolled at Target School as freshmen during the 2012-2013 school year and participated in Freshman Experience intervention, $52 \%$ were on-track to graduate at the completion of the eleventh grade year $(n=273)$ while $48 \%$ were not $(n=252)$. Table 21 presents the frequencies and percentages relevant to Research Question Five. The On-Track to Graduation Status code is in column one. The frequency and percentage of representation for each of the Research Groups relevant to Research Question Five are presented in columns two through five.

Table 21
Crosstabulation of On-Track to Graduation Status for Target and Historical Control Groups

|  | Target $n=368$ |  | Historical Control $n=525$ |  |
| :--- | :---: | :---: | :---: | :---: |
| On-Track to Graduate | $N$ | $\%$ | $N$ | $\%$ |
| Yes | 308 | 83.7 | 273 | 52.0 |
| No | 60 | 16.3 | 252 | 48.0 |

Chi-Square analysis was used to identify if a statistically significant relationship existed among participation in the Freshman Experience transition course and on-track to graduation status at the completion of the eleventh grade year. The magnitude of the association between the independent and dependent variable for Research Question Five was measured by phi ( $\varphi$ ) (Cohen, 1965).

The Chi-square test for independence with Yates Continuity Correction indicated a statistically significant relationship between participation in the Freshman Experience transition course (Group One) and on-track to graduation status at the completion of the eleventh grade year, $\chi^{2}(1, n=893)=94.23, p<.001$. Yates Continuity Correction was used due to the categorical dichotomous nature of the independent and dependent variables. No cells in the cross-tabulation violated the minimum expected cell frequency assumption of Chi-Square. The minimum expected count in each cell was 128.57. The magnitude of the relationship between Freshman Experience as described by phi was $\varphi=.327$ indicating a medium effect size of the Freshman Experience transition course on on-track to graduation status. Table 22 presents the inferential statistics relevant to Research Question Five.

Table 22
Results of Chi-Square Test with Yates Continuity Correction and Phi on On-Track to Graduation Status for Target and Historical Control Groups

|  | Value | Significance |
| :--- | :---: | :---: |
| Pearson's Chi-Square with Continuity | 94.23 | $.000^{* * *}$ |
| $\quad$Correction | 893 |  |
| Nof Valid Cases | .327 | $.000^{* * *}$ |
| Phi |  |  |

Research Question Six
To what extent do students labeled at-risk for dropping out of high school who enroll as freshman at the beginning of the 2012-2013 school year at the target school compare with students labeled at-risk for dropping out of high school who enroll as freshman at the beginning of the 2012-2013 school year at the comparison school on state standardized assessments such as FCAT Reading 10th grade and Algebra 1 EOC?

The purpose of the sixth research question was to determine the impact participation in Freshman Experience had on performance on the Florida Comprehensive Assessment Test (FCAT) Reading and Algebra 1 End of Course Assessment when compared to students who enrolled at a demographically and socioeconomically similar large urban high school. The independent variable for research question six was whether or not the student was enrolled in and satisfactorily completed (as defined by a "C" grade or higher) the Freshman Experience course at Target School. Two dependent interval variables were tested for research question six: Developmental scale scores on FCAT Reading administered during the 2013-2014 school year and the higher of two developmental scale scores on the Algebra I End of Course Assessment administered during the 2012-2013 and 2013-2014 school years. Students in Group One and Group Two were required to pass each assessment in order to earn a standard high school diploma in the state of Florida. Group One, those students who enrolled as freshmen at Target School and participated in Freshman Experience, served as the treatment group and Group Two, students who enrolled as freshmen at a demographically and socioeconomically similar large urban high school who did participate in a transition intervention, served as the comparison group.

Target School District provided achievement levels and developmental scale scores for students who took FCAT Reading during their tenth grade year (2013-2014) and achievement levels and developmental scale scores for students who took the Algebra 1 End of Course Assessment during their ninth or tenth grade year (2012-2013 or 2013-2014). The data for research question six were representative of two interval dependent variables populated by developmental scale scores on two state accountability assessments. Students who did not pass
the Algebra 1 End of Course Assessment during the ninth grade year retook the assessment their tenth grade year. For purposes of this study, the higher of the two scores for the Algebra 1 End of Course Assessment was considered. Students who took and passed the Algebra 1 End of Course Assessment prior to ninth grade were excluded from all statistical analyses relevant to Research Question Six. Cases where scores were missing for one of the two assessments were excluded from all statistical analyses relevant to Research Question Six.

The average scores for Group One $(\bar{x}=230.64)$ and Group Two $(\bar{x}=229.40)$ on FCAT Reading were below the threshold for passing. A developmental scale score of 245 was required for passing for the Spring 2014 administration of FCAT Reading. The average score for Group One ( $\bar{x}=401.12$ ) on the Algebra 1 End of Course Assessment was above the threshold for passing. The average score for Group Two ( $\overline{\mathrm{X}}=393.80$ ) on the Algebra 1 End of Course Assessment was below the threshold for passing. A developmental scale score of 399 was required for passing for the 2013-2014 school year. Descriptive statistics for developmental scale scores on FCAT Reading and Algebra 1 End of Course Assessment are presented in Table 23 for Groups One and Two. The name of the assessment is reported in column one. The means and standard deviations relevant to research question six are presented in columns two through five.

Table 23
Descriptive Statistics: FCAT Reading and Algebra 1 End of Course Assessment Developmental Scale Scores for Target and Comparison Groups

|  | Target $N=250$ |  | Comparison $N=82$ |  |
| :--- | :---: | :---: | :---: | :---: |
| Assessment | $\overline{\mathbf{X}}$ | $\sigma$ | $\overline{\mathbf{x}}$ | $\sigma$ |
| FCAT Reading | 230.64 | 17.03 | 229.40 | 18.27 |
| Algebra 1 EOC | 401.12 | 22.50 | 393.80 | 28.34 |

Note. The range of scores for FCAT Reading were 114 for Group 1 and 107 for Group 2. The range of scores for Algebra 1 EOC was 150 for both Groups.

A one-way between groups multivariate analysis of variance (MANOVA) was performed to investigate the academic impact of participation in the Freshman Experience transition course. The magnitude of the association between participation in the course and the dependent variables for Research Question Six was measured by partial eta squared $\left(\eta^{2}\right)$. No serious violations of the normality, linearity, univariate and multivariate outliers, homogeneity of variance-covariance matrices, and multicollinearity assumptions of MANOVA were noted. MANOVA indicated a statistically significant difference between Group One and Group Two on the combined dependent variables, Wilk's $\Lambda(2,329)=.981, p=.046$; partial $\eta^{2}=.019$. The results of MANOVA favored Group One on the combined dependent variables. The null hypothesis was rejected for the academic impact on the combined dependent variables.

Univariate analysis of variance (ANOVA) indicated statistical significance between the means of the developmental scale scores reported for Group One and Group Two on the Algebra 1 End of Course Assessment $\left(\mathrm{F}(1,330)=5.70, p=.019\right.$, partial $\left.\eta^{2}=.018\right)$ but not FCAT Reading $(\mathrm{F}(1,330)=.314, p=.575)$ when considered using a Bonferroni adjusted alpha level of . 025 (Tabachnick \& Fidell, 2012). The null hypothesis was rejected for the dependent variable of Algebra 1 End of Course Assessment; however it failed to be rejected for the dependent variable of FCAT Reading. The statistically significant academic impact of Freshman Experience favored the Algebra 1 End of Course Assessment. The findings suggested that there may be an academic impact on FCAT Reading however it could not be rejected that participation in Freshman Experience had no measurable impact on FCAT Reading. Table 24 presents the descriptive and inferential statistics relevant to the ANOVA.

Table 24
Results of Univariate analysis of Variance for FCAT Reading and Algebra 1 End of Course Assessment for Target and Comparison Groups

|  | Target $n=250$ |  |  |  |  |  |  |  | Comparison $n=82$ |  |  |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Assessment | $\overline{\mathrm{X}}$ | $\sigma$ | $\overline{\mathbf{x}}$ | $\sigma$ | $(1,330)$ | $p$ |  |  |  |  |  |  |
| $\eta^{2}$ |  |  |  |  |  |  |  |  |  |  |  |  |  |
| FCAT Reading | 230.64 | 17.03 | 229.40 | 18.27 | .31 | .575 |  |  |  |  |  |  |  |
| Algebra 1 EOC | 401.12 | 22.50 | 393.80 | 28.34 | 5.70 | .019 | .018 |  |  |  |  |  |  |

Note. The range of scores for FCAT Reading were 114 for Group 1 and 107 for Group 2. The range of scores for Algebra 1 EOC was 150 for both Groups. Partial eta squared was not reported for FCAT Reading because the null hypothesis failed to be rejected.

## Research Question Seven

To what extent do students labeled at-risk for dropping out of high school who enroll as freshman at the beginning of the 2012-2013 school year at the target school compare with students labeled at-risk for dropping out of high school who enroll as freshman at the beginning of the 2010-2011 school year at the target school on state standardized assessments such as FCAT Reading 10th grade and Algebra 1 EOC?

The purpose of the seventh research question was to determine the impact participation in Freshman Experience had on performance on the Florida Comprehensive Assessment Test (FCAT) Reading and Algebra 1 End of Course Assessment when compared to a cohort of students who enrolled at Target School prior to the implementation of the intervention. The independent variable for research question six was whether or not the student was enrolled in and satisfactorily completed (as defined by a "C" grade or higher) the Freshman Experience course at Target School. Two dependent interval variables were tested for research question six:

Developmental scale scores on FCAT Reading administered during the 2013-2014 school year for Group One and 2011-2012 school year for Group Three and the higher of two developmental scale scores on the Algebra I End of Course Assessment administered during the 2012-2013 and

2013-2014 school years for Group One and 2010-2011 and 2011-2012 school years for Group Three. Students in Group One and Group Three were required to pass each assessment in order to earn a standard high school diploma in the state of Florida. Group One, those students who enrolled as freshmen at Target School and participated in Freshman Experience, served as the treatment group and Group Three, students who enrolled as freshmen at Target School prior to the implementation of Freshman Experience, served as the comparison group.

Target School District provided achievement levels and developmental scale scores for students who took FCAT Reading during their tenth grade year and achievement levels and developmental scale scores for students who took the Algebra 1 End of Course Assessment during their ninth or tenth grade year for both groups. The data for research question seven were representative of two interval dependent variables populated by developmental scale scores on two state accountability assessments. Students who did not pass the Algebra 1 End of Course Assessment during the ninth grade year retook the assessment their tenth grade year. For purposes of this study, the higher of the two scores for the Algebra 1 End of Course Assessment was considered. Students who took and passed the Algebra 1 End of Course Assessment prior to ninth grade were excluded from all statistical analyses relevant to Research Question Seven. Cases where scores were missing for one of the two assessments were excluded from all statistical analyses relevant to Research Question Seven.

The average scores for Group One $(\bar{x}=230.64)$ and Group Three ( $\overline{\mathrm{X}}=229.87$ ) on FCAT Reading were below the threshold for passing. A developmental scale score of 245 was required for passing for both administrations of FCAT Reading. The average score for Group One ( $\overline{\mathrm{X}}=$ 401.12) on the Algebra 1 End of Course Assessment was above the threshold for passing. The
average score for Group Three ( $\overline{\mathrm{X}}=380.02$ ) on the Algebra 1 End of Course Assessment was below the threshold for passing. A developmental scale score of 399 was required for passing for both administrations of the Algebra 1 End of Course Assessment. Descriptive statistics for developmental scale scores on FCAT Reading and Algebra 1 End of Course Assessment are presented in Table 25 for Groups One and Three. The name of the assessment is reported in column one. The means and standard deviations relevant to Research Question Seven are presented in columns two through five.

Table 25

Descriptive Statistics: FCAT Reading and Algebra 1 End of Course Assessment Developmental Scale Scores for Target and Historical Control Groups

|  | Target $n=250$ |  | Historical Control $n=343$ |  |
| :--- | :---: | :---: | :---: | :---: |
| Assessment | $\overline{\mathbf{x}}$ | $\sigma$ | $\overline{\mathbf{X}}$ | $\sigma$ |
| FCAT Reading | 230.64 | 17.03 | 229.87 | 16.39 |
| Algebra 1 EOC | 401.12 | 22.50 | 380.09 | 26.23 |

Note. The range of scores for FCAT Reading were 114 for Group 1 and 124 for Group 3. The range of scores for Algebra 1 EOC was 150 for Group 1 and 110 for Group 3.

A one-way between groups multivariate analysis of variance (MANOVA) was performed to investigate the academic impact of participation in the Freshman Experience transition course. The magnitude of the association between participation in the course and the dependent variables for Research Question Seven was measured by partial eta squared ( $\eta^{2}$ ). No serious violations of the normality, linearity, univariate and multivariate outliers, homogeneity of variance-covariance matrices, and multicollinearity assumptions of MANOVA were noted. MANOVA indicated a statistically significant difference between Group One and Group Three on the combined dependent variables, Wilk's $\Lambda(2,590)=.817, p<.000$; partial $\eta^{2}=.183$. The results of MANOVA favored Group One on the combined dependent variables. The null hypothesis was rejected for the academic impact on the combined dependent variables.

Univariate analysis of variance (ANOVA) indicated statistical significance between the means of the developmental scale scores reported for Group One and Group Three on the Algebra 1 End of Course Assessment $\left(\mathrm{F}(1,591)=104.55, p<.000\right.$, partial $\left.\eta^{2}=.15\right)$ but not FCAT Reading $(\mathrm{F}(1,591)=.305, p=.581)$ when considered using a Bonferroni adjusted alpha level of .025 (Tabachnick \& Fidell, 2012). The null hypothesis was rejected for the dependent variable of Algebra 1 End of Course Assessment; however it failed to be rejected for the
dependent variable of FCAT Reading. The statistically significant academic impact of Freshman Experience favored the Algebra 1 End of Course Assessment. The findings suggested that there may be an academic impact on FCAT Reading; however it could not be rejected that participation in Freshman Experience had no measurable impact on FCAT Reading. Table 26 presents the descriptive and inferential statistics relevant to the ANOVA.

Table 26

Results of Univariate analysis of Variance for FCAT Reading and Algebra 1 End of Course Assessment for Target and Historical Control Groups

|  | Target |  |  | Historical Control |  |  |  |  |  |  |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $n=250$ |  |  | $F$ |  |  |  |  |  |  |  |  |
| Assessment | $\overline{\mathrm{X}}$ | $\sigma$ | $\overline{\mathrm{x}}$ | $\sigma$ | $(1,591)$ | $p$ | $\eta^{2}$ |  |  |  |  |  |
| FCAT Reading | 230.64 | 17.03 | 229.87 | 16.39 | .31 | .581 |  |  |  |  |  |  |
| Algebra 1 EOC | 401.12 | 22.50 | 380.09 | 26.23 | 104.55 | $.000^{*}$ | .15 |  |  |  |  |  |

Note. $* p<.000$. The range of scores for FCAT Reading were 114 for Group 1 and 107 for Group 2. The range of scores for Algebra 1 EOC was 150 for both Groups. Partial eta squared was not reported for FCAT Reading because the null hypothesis failed to be rejected.

## Additional Analyses

Additional analyses were calculated in order to investigate the mean differences among freshmen students who enrolled in Freshman Experience at Target School during the 2013-2014 school year $(n=377)$ and those who did not $(n=267)$ within Group One $(N=644)$ on each of the dependent variables. Students who enroll in magnet programs at Target School are not required to participate in Freshman Experience. Chi-Square analysis was calculated to identify if a statistically significant relationship existed among participation in the Freshman Experience transition course and persistence to the tenth grade and on-track to graduation status at the completion of the eleventh grade year. A one-way between groups multivariate analysis of
variance (MANOVA) was calculated to investigate the academic impact of participation in the Freshman Experience transition course.

Descriptive statistics for the dependent variable of persistence to the tenth grade revealed that among students who enrolled as freshmen at Target School during the 2013-2014 school year, $97.3 \%$ persisted to the tenth grade $(n=567)$ while $2.7 \%$ did not persist to the tenth grade $(n$ $=16)$. Of the students who did not persist to the tenth grade, $56 \%$ were enrolled in Freshman Experience $(n=9)$ and $44 \%$ were not $(n=7)$. Of the 567 students who did persist to the tenth grade, $56 \%$ were enrolled in Freshman Experience $(n=319)$ and $44 \%$ were not $(n=248)$. Data were missing or not reported for 61 students. Table 27 presents the frequencies and percentages relevant to persistence to the tenth grade.

Table 27
Crosstabulation of Participation in Freshman Experience for Students Who Persisted to the

## Tenth Grade

|  | Persisted $N=567$ |  | Did Not Persist $N=16$ |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: |
| Enrolled in Freshman Experience | $n$ | $\%$ | $n$ | $\%$ |  |
| Yes | 319 | 56.0 | 9 | 56.0 |  |
| No | 248 | 44.0 | 7 | 44.0 |  |

The Chi-square test for independence with Yates Continuity Correction indicated no statistical significance in the relationship of participation in the Freshman Experience transition course and persistence to the tenth grade among students who enrolled as freshmen at Target School during the 2012-2013 school year, $\chi^{2}(1, n=583)=.000, p=1.00$. Yates Continuity Correction was used due to the categorical dichotomous nature of the independent and dependent variables. No cells in the cross-tabulation violated the minimum expected cell frequency assumption of Chi-Square. The minimum expected count in each cell was seven. The null
hypothesis, that Freshman Experience had no measurable impact on persistence to the tenth grade, failed to be rejected. Table 28 presents the results of the Chi-Square Analysis.

Table 28

Results of Chi-Square Test with Yates Continuity Correction on Retention for Students Enrolled in Freshman Experience and Not Enrolled in Freshman Experience at Target School

|  | Value | Significance |
| :--- | :---: | :---: |
| Pearson's Chi-Square with Continuity | .000 | 1.00 |
| $\quad$ Correction | 583 |  |
| $N$ of Valid Cases |  |  |

Descriptive statistics for the dependent variable of on-track to graduation status revealed that among students who enrolled as freshmen at Target School during the 2013-2014 school year $(n=633), 13.6 \%$ were not on-track to graduate $(n=86)$ and $86.4 \%$ were on-track to graduate $(n=547)$ as measured by Target School District's pupil progression plan. Of those students who were not on-track to graduate, $68 \%$ were enrolled in Freshman Experience ( $n=60$ ) and $32 \%$ were not $(n=26)$. Of those students who were on-track to graduate, $56 \%$ were enrolled in Freshman Experience $(n=308)$ and $44 \%$ were not $(n=239)$. Data were missing or not reported for 11 students. Table 29 presents the frequencies and percentages relevant to on-track to graduation status.

Table 29
Crosstabulation of Participation in Freshman Experience for Students On-Track to Graduate

|  | On-Track | Not On-Track |  |  |
| :--- | :---: | :---: | :---: | :---: |
|  | $N=547$ |  | $N=86$ | $\%$ |
| Enrolled in Freshman Experience | $n$ | $\%$ | $n$ | $\%$ |
| Yes | 308 | 56.0 | 60 | 68.0 |
| No | 239 | 44.0 | 26 | 32.0 |

The Chi-square test for independence with Yates Continuity Correction indicated a statistically significant relationship between participation in the Freshman Experience transition course and on-track to graduation status at the completion of the eleventh grade year among students who enrolled as freshmen at Target School during the 2012-2013 school year, $\chi^{2}$ (1, $n=$ 633) $=4.99, p=.025$. Yates Continuity Correction was used due to the categorical dichotomous nature of the independent and dependent variables. No cells in the cross-tabulation violated the minimum expected cell frequency assumption of Chi-Square. The minimum expected count in each cell was 36. Though the null hypothesis, that Freshman Experience had no measurable impact on on-track to graduation status, was rejected, Chi-square favored those students who were not enrolled in Freshman Experience.

Table 30
Results of Chi-Square Test with Yates Continuity Correction on On-Track to Graduation Status for Students Enrolled in Freshman Experience and Not Enrolled in Freshman Experience at Target School

|  | Value | Significance |
| :--- | :---: | :---: |
| Pearson's Chi-Square with Continuity | 4.99 | .025 |
| $\quad$ Correction | 633 |  |
| $N$ of Valid Cases |  |  |

The dependent variable of academic success was operationalized through developmental scale scores on FCAT Reading and Algebra 1 End of Course Assessment for students who enrolled as freshmen at Target School during the 2012-2013 school year $(N=644)$. Students who did not pass the Algebra 1 End of Course Assessment during the ninth grade year retook the assessment their tenth grade year. For purposes of this study, the higher of the two scores for the Algebra 1 End of Course Assessment was considered. Students who enrolled as freshmen at

Target School during the 2012-2013 school year were required to pass each assessment in order to earn a standard high school diploma in the state of Florida.

Students who took and passed the Algebra 1 End of Course Assessment prior to ninth grade were excluded from all additional analyses. Cases where scores were missing for one of the two assessments were excluded from all additional analyses. Developmental scale scores on FCAT Reading were missing for 136 students. Developmental scale scores on Algebra 1 End of Course Assessment were missing for 165 students. When combined, developmental scale scores on one or both assessments were missing for 230 students.

The average score for students who enrolled as freshmen at Target School during the 2012-2013 school year on FCAT Reading $(\bar{x}=235.33)$ was below the threshold for passing. A developmental scale score of 245 was required for passing for the Spring 2014 administration of FCAT Reading. The average scores for students who enrolled as freshmen at Target School during the 2012-2013 school year on the Algebra 1 End of Course Assessment $(\bar{X}=400.11)$ was above the threshold for passing. A developmental scale score of 399 was required for passing for the Algebra 1 End of Course Assessment. Students who participated in Freshman Experience ( $N$ $=250)$ indicated a lower mean developmental scale score $(\bar{x}=230.64)$ on FCAT Reading than students who did not participate in the course ( $N=164 ; \overline{\mathrm{X}}=237.98$ ). Students who participated in Freshman Experience $(N=250)$ indicated a lower mean developmental scale score $(\overline{\mathrm{X}}=$ 401.12) on the Algebra 1 End of Course Assessment than students who did not participate in the course ( $N=164 ; \overline{\mathrm{X}}=404.43$ ). Descriptive statistics for developmental scale scores on FCAT Reading and Algebra 1 End of Course Assessment are presented in Table 31.

Table 31

Descriptive Statistics: FCAT Reading and Algebra 1 End of Course Assessment Developmental Scale Scores for Students Who Enrolled in Freshman Experience and Students Who Did Not Enroll in Freshman Experience at Target School

|  | Enrolled in Freshman <br> Experience <br> $N=250$ |  | Not Enrolled in Freshman <br> Experience <br> $N=164$ |  |
| :--- | :---: | :---: | :---: | :---: |
| Assessment | $\overline{\mathrm{X}}$ | $\sigma$ | $\overline{\mathrm{X}}$ | $\sigma$ |
| FCAT Reading | 230.64 | 17.03 | 237.98 | 18.30 |
| Algebra 1 EOC | 401.12 | 22.50 | 404.43 | 24.53 |

A one-way between groups multivariate analysis of variance (MANOVA) was performed to investigate the academic impact of participation in the Freshman Experience transition course among students who enrolled as freshmen at Target School during the 2012-2013 school year. The magnitude of the association between participation in the course and the dependent variables was measured by partial eta squared $\left(\eta^{2}\right)$. No serious violations of the normality, linearity, univariate and multivariate outliers, homogeneity of variance-covariance matrices, and multicollinearity assumptions of MANOVA were noted. MANOVA indicated a statistically significant difference between students who enrolled in Freshman Experience and those who did not on the combined dependent variables (Wilk's $\Lambda(2,411)=.958, p<.000$; partial $\eta^{2}=.042$ ); however those students who did not enroll in the course scored higher on both FCAT Reading and the Algebra 1 End of Course Assessment. The results of MANOVA favored those students who did not enroll in Freshman Experience on the combined dependent variables. The null hypothesis was rejected for the academic impact on the combined dependent variables.

Univariate analysis of variance (ANOVA) indicated statistical significance between the means of the developmental scale scores reported for those students who enrolled in Freshman

Experience and those who did not on FCAT Reading $\left(\mathrm{F}(1,412)=17.31, p<.000\right.$, partial $\eta^{2}=$ .04) but not the Algebra 1 End of Course Assessment $(\mathrm{F}(1,412)=1.99, p=.16)$ when considered using a Bonferroni adjusted alpha level of . 025 (Tabachnick \& Fidell, 2012). The null hypothesis was rejected for the dependent variable of FCAT Reading; however it failed to be rejected for the dependent variable of Algebra 1 End of Course Assessment.

## Summary

Chapter four began with a review of the purpose of the study followed by descriptions of the three groups to be studied, data sources, demographics, and the statistical methods used to answer the research questions. The central objective of this study was to identify the extent to which the intervention, Freshman Experience, was aligned with recommendations by Freeman and Simonsen (2015) and to determine the extent to which the intervention impacted persistence towards tenth grade, on-track-to-graduation status at the completion of eleventh grade, and academic success. The participants of the study were comprised of three groups: (a) a target group, (b) a comparison group, and (c) an historical control group.

The research employed both qualitative and quantitative methodologies. The purpose of this study was achieved through the use of both qualitative and quantitative methodologies. The qualitative methodology of document analysis was used to answer research question one (Bowen, 2009). A nonparametric Chi-Square test was calculated for research questions two, three, four, and five. A one-way multivariate analysis of variance (MANOVA) was calculated to answer research questions six and seven. Additional analyses compared those students who enrolled in Freshman Experience to those students who did not at Target School during the 20122013 school year.

Research question one was answered through the qualitative methodology of document analysis (Bowen, 2009). The retrieved documents relevant to this study were Target School's curriculum guide, course syllabus, an instructional focus calendar, program flyer, collaborative planning agenda, phone call log, and a weekly curriculum agenda. The seven documents collected yielded 38 words or phrases relevant to the cognitive domain, 20 words or phrases relevant to the affective domain, and 21 words and phrases relevant to the behavioral domain when measured using the qualitative approach of document analysis.

Research questions two and three results indicated that those students who participated in the Freshman Experience course persisted to the tenth grade significantly more frequently than those students at a demographically and socioeconomically similar central Florida urban high school and students who enrolled as freshmen at Target School prior to the implementation of Freshman Experience. Additional analyses compared students at Target School who enrolled in Freshman Experience during their freshman year of high school to those at Target School who did not enroll in Freshman Experience during their freshman year of high school. No statistical significance was found between those students on persistence to the tenth grade.

Research questions four and five indicated that those students who participated in the Freshman Experience course were on-track to graduate at the conclusion of the eleventh grade year more frequently than those students at a demographically and socioeconomically similar central Florida urban high school and students who enrolled as freshmen at Target School prior to the implementation of Freshman Experience. Additional analyses compared students at Target School who enrolled in Freshman Experience during their freshman year of high school to those at Target School who did not enroll in Freshman Experience during their freshman year of high
school. Students who did not enroll in Freshman Experience at Target School were significantly more likely to be on-track to graduate at the conclusion of the eleventh grade year than those students who did enroll in Freshman Experience.

Research questions six and seven indicated that those students who participated in the Freshman Experience course were more successful academically than those students at a demographically and socioeconomically similar central Florida urban high school and students who enrolled as freshmen at Target School prior to the implementation of Freshman Experience. Univariate analysis of variance (ANOVA) indicated that academic success was more significant on the Algebra 1 End of Course Assessment than FCAT Reading. Additional analyses compared students at Target School who enrolled in Freshman Experience during their freshman year of high school to those at Target School who did not enroll in Freshman Experience during their freshman year of high school. Additional analyses favored those students who did not enroll in Freshman Experience at Target School on the combined dependent variables. Those students who did not enroll in Freshman Experience performed significantly better than those students who did enroll in Freshman Experience at Target School on FCAT Reading but not on the Algebra 1 End of Course Assessment.

Chapter five will summarize the results and link those results to prior research discussed in chapter two's review of literature. A discussion of the findings will introduce implications for policy and practice as well as a number of possible research questions which stem from the findings of this research.

## CHAPTER FIVE: SUMMARY, DISCUSSION, AND IMPLICATIONS <br> Introduction

This chapter presents a restatement of the problem and purpose of the study, a summary and discussion of the findings, implications for practical application, recommendations for future research, and conclusions. The purpose of chapter five was to elaborate and provide meaning to the findings presented in the previous chapter. Where the analysis and presentation of the data was organized by research question, the discussion of the findings will be organized by dependent variable into three sections: a) persistence to the tenth grade (research questions two and three), b) on-track to graduation status (research questions four and five), and c) academic success (research questions six and seven). The results of each research question relevant to the dependent variables will be discussed in tandem with the results of research question one, the document analysis, in order to develop a context for the findings presented in chapter four and to discuss the extent to which Freshman Experience aligned with the elements of successful programs (Freeman and Simonsen, 2015). The findings are also presented with a new perspective from that of chapter four. The holistic impact of Freshman Experience and interpretations of effect size, rather than statistical significance, is presented and discussed for each of the dependent variables with respect to each of the groups relevant to the study.

## Summary of the Study

Researchers with the Everyone Graduates Center at Johns Hopkins University found 1,400 high schools in the United States had a 12th grade enrollment $60 \%$ less than ninth grade enrollment three years prior (Balfanz, et. al., 2013). Additionally, outcomes of a student's ninth grade year serve as significant early warning signs of dropping out of high school (Neild, et. al.,
2008). When demographic and economic variables are held constant, retention during the ninth grade, credit accumulation, and academic achievement have consistently been found to be early warning indicators putting students at an increased risk for dropping out of high school (Neild, et. al., 2008).

Due to the increase in accountability brought on by No Child Left Behind (2001), schools and school districts are taking a closer look at dropout and examining what is causing it and how to prevent it or intervene in the process (Neild, et. al., 2008). Although a variety of models exist within the freshman transition intervention architecture, programs which employ a year-long course focused on an application of skills-based, social, and behavioral learning are consistently more effective with encouraging academic achievement, persistence and staying on-track to graduate (Freeman \& Simonsen, 2015). In a meta-analysis of freshman transition interventions, Freeman and Simonsen (2015) noted that the most successful interventions considered multitiered levels of support: academic, socio-emotional (affective), and behavioral, which are organized, well-planned, and involved a variety of stakeholders.

The central purpose of this study was to identify the extent to which a school-designed intervention, Freshman Experience, was aligned with recommendations by Freeman and Simonsen (2015) and to determine the extent to which the intervention impacted persistence to tenth grade, on-track-to-graduation status at the completion of eleventh grade, and academic success. The participants of the study $(N=1499)$ were comprised by three groups: (a) a target group ( $n=644$ ), (b) a comparison group ( $n=250$ ), and (c) an historical control group ( $n=555$ ).

Group One, the target group, was comprised of students labeled at-risk for dropping out of high school who enrolled as freshman at the target high school which employed the designed
intervention at the beginning of the 2012-2013 school year. Group Two, the comparison group, was comprised of students labeled at-risk for dropping out of high school who enrolled as freshman at a large, socioeconomically similar urban high school which did not employ a freshman transition intervention during the 2012-2013 school year. Group Three, the historical control group, was comprised of students labeled at-risk for dropping out of high school who enrolled as freshman at the target high school at the beginning of the 2010-2011 school year, prior to the implementation of the Freshman Experience course.

The study was concerned with seven research questions:

1. To what extent does the Freshman Experience course align with elements of successful programs (Freeman and Simonsen, 2015): cognitive, affective, and behavioral that is well-planned, supported, systematic, and involve a variety of stakeholders?
2. To what extent do students labeled at-risk for dropping out of high school who enroll as freshman at the beginning of the 2012-2013 school year at the target school compare with students labeled at-risk for dropping out of high school who enroll as freshman at the beginning of the 2012-2013 school year at the comparison school on persistence to the 10th grade?
3. To what extent do students labeled at-risk for dropping out of high school who enroll as freshman at the beginning of the 2012-2013 school year at the target school compare with students labeled at-risk for dropping out of high school who enroll as freshman at the beginning of the 2010-2011 school year at the target school on persistence to the 10th grade?
4. To what extent do students labeled at-risk for dropping out of high school who enroll as freshman at the beginning of the 2012-2013 school year at the target school compare with students labeled at-risk for dropping out of high school who enroll as freshman at the beginning of the 2012-2013 school year at the comparison school on on-track to graduation status at the end of the 11th grade year?
5. To what extent do students labeled at-risk for dropping out of high school who enroll as freshman at the beginning of the 2012-2013 school year at the target school compare with students labeled at-risk for dropping out of high school who enroll as freshman at the beginning of the 2010-2011 school year at the target school on persistence to on-track to graduation status at the end of the 11th grade year?
6. To what extent do students labeled at-risk for dropping out of high school who enroll as freshman at the beginning of the 2012-2013 school year at the target school compare with students labeled at-risk for dropping out of high school who enroll as freshman at the beginning of the 2012-2013 school year at the comparison school on state standardized assessments such as FCAT Reading 10th grade and Algebra 1 EOC?
7. To what extent do students labeled at-risk for dropping out of high school who enroll as freshman at the beginning of the 2012-2013 school year at the target school compare with students labeled at-risk for dropping out of high school who enroll as freshman at the beginning of the 2010-2011 school year at the target
school on state standardized assessments such as FCAT Reading 10th grade and

## Algebra 1 EOC?

The research employed both qualitative and quantitative methodologies. Documents relevant to the program such as course syllabi, teacher meeting minutes, and phone-call logs were collected and analyzed for research based themes: Cognitive, Affective, and Behavioral (Freeman \& Simonsen, 2015). Students in the target group were compared to students in the comparison group and historical control group on four dependent variables: Persistence to the 10th grade, on-track to graduation status at the end of 11th grade, and academic success on 10th grade FCAT Reading and Algebra 1 End of Course Assessment. Persistence to the 10th grade and on-track to graduation status were operationalized dichotomously. Developmental scale scores were used to measure academic success on state accountability assessments.

## Discussion of Findings

The following three sections discuss the findings presented in chapter four as they relate to the conceptual framework developed in chapter one and the literature reviewed in chapter two. Recurring themes identified by Freeman and Simonsen (2015) in a synthesis of related literature on ninth-grade orientation and transition interventions were used to develop a conceptual framework for research based elements of effective transition programs. Freeman and Simonsen (2015) noted that the most successful interventions considered multi-tiered levels of support focused in three domains, academic, socio-emotional (affective), and behavioral, and are organized, well-planned, and involve a variety of stakeholders. These domains were used in a qualitative analysis of documents relevant to Freshman Experience and are discussed in tandem with the quantitative findings in order to provide context to the impact of Freshman Experience
on each of the dependent variables: persistence to the tenth grade, on-track to graduation status, and academic success.

## Persistence to the Tenth Grade

The purpose of research questions two and three was to determine the impact participation in Freshman Experience had on persistence to the tenth grade when compared to students who enrolled at a demographically and socioeconomically similar high school and a cohort of students who enrolled at Target School prior to the implementation of Freshman Experience. The independent variable for research questions two and three was whether or not the student was enrolled in and satisfactorily completed (as defined by a "C" grade or higher) the Freshman Experience course at Target School during the 2012-2013 school year. The dependent variable relevant to research questions two and three was measured dichotomously by whether or not the student persisted to the tenth grade.

Teenagers who dropout often indicate trouble during the ninth grade year (Neild, et al., 2008). In the cities with the highest rates of high school dropout, $40 \%$ of students repeat the ninth grade (Orfield, 2004). Of those students who repeat the ninth grade, only $15 \%$ continue on to graduate (Orfield, 2004; Neild, et. al., 2008; Balfanz, et al., 2003). Students in the ninth grade represent the largest percentage of the high school population due largely to additive factors of incoming ninth grade students, repeating of ninth grade courses, and ninth-grade retention, creating what is known as the ninth-grade bulge (Zvoch, 2006). In a synthesis of seven metaanalyses of studies on retention, Hattie (2009) attributes an effect size of -0.16 and acknowledges that few studies exist regarding retention with a positive $(d>0.0)$ effect.

Of the students who enrolled at Target School as freshmen during the 2012-2013 school year and participated in Freshman Experience intervention, $97.3 \%$ persisted to the tenth grade. ( $n$ $=319)$ while $2.7 \%$ did not $(n=9)$. Of the students who enrolled as freshmen at a demographically and socioeconomically similar high school during that same year, $89.1 \%$ persisted to the tenth grade $(n=205)$ while $10.9 \%$ did not $(n=25)$. Of the students who enrolled at Target School as freshmen during the 2010-2011 school, prior to the implementation of the Freshman Experience intervention, $87.2 \%$ persisted to the tenth grade $(n=424)$ while $12.8 \%$ did not $(n=62)$. Students who enrolled at Target School as freshmen during the 2012-2013 school year and completed the Freshman Experience course persisted to the tenth grade statistically significantly more than students at a demographically and socioeconomically similar high school during that same year. This was also found when those students who enrolled at Target School as freshmen during the 2012-2013 school year and completed the Freshman Experience course were compared to students who enrolled at Target School as freshmen during the 2010-2011 school, prior to the implementation of the Freshman Experience intervention.

The findings revealed that Freshman Experience positively impacted student persistence to the tenth grade. These findings were consistent with existing program evaluations of freshman transition interventions including Talent Development High School's Ninth Grade Success Academy (Kemple, Herlihy, \& Smith, 2005). Kemple, Herlihy, and Smith (2005) found significant reductions in retention and increases in tenth grade enrollment when they compared the program to non-Talent Development High Schools. Those students who did repeat ninthgrade in the Talent Development High Schools were still found to have an increased likelihood
of dropout (Kemple, Herlihy, \& Smith, 2005). This finding invites further study on the academic success of those students who were retained.

Persistence to the tenth grade encourages future academic success and destigmatizes perceptions of unintelligence and academic failure (De Witte, et al., 2013, Weiss, 2001). An encouraging result which corroborated Freshman Experience's impact on self-perception and academic persistence was the frequency of words and phrases related to the cognitive and affective domains disaggregated from the analysis of documents immediately accessible to students enrolled in Freshman Experience: Course Syllabus and Program Flyer.

Seven words or phrases relevant to the cognitive domain were observed in the course syllabus. Five words or phrases relevant to the affective domain were observed in the program flyer. Phrases such as "Set measurable academic and personal goals," (Orange County Public Schools, 2012a, p. 1) "Apply effective problem solving \& collaborative decision making," (Orange County Public Schools, 2012a, p. 1) "A personal portfolio... is a visual representation of their achievements, goals, skills, qualities, progress and experiences," (Orange County Public Schools, 2012a, p. 2) "Students will learn to build relationships with their instructors for future endeavors," (Orange County Public Schools, 2012c, p. 1) and "The program is slated to equip our newest scholars with academic awareness" (Orange County Public Schools, 2012c, p. 1) illustrated the program's focus on metacognitive skills which promote academic persistence. Cognitive as well as metacognitive skills do not come naturally to most adults, let alone freshman students. Transition learning environments should be designed in such ways that allow students to read for purpose, synthesize across sources of information, and create multifaceted solutions to problems (Neild, et al., 2008).

Of concern was the relatively small magnitude, as measured by effect size, participation in Freshman Experience had on persistence to the tenth grade. Though the null hypothesis, that there was no difference in persistence to the tenth grade among each of the groups, was rejected, the low effect size suggests a small practical significance with respect to Freshman Experiences impact on persistence to the tenth grade. This is especially significant when considering the resources allocated to the development and implementation of school-based interventions. The implications of this finding are discussed in the following section, Implications for Practice.

Additional analyses revealed that there was no measurable difference in persistence to the tenth grade for students who enrolled as freshmen at Target School during the 2012-2013 school year and did not participate in Freshman Experience and those who did. An explanatory covariate which may provide meaning to this discrepancy is that students who were not enrolled in Freshman Experience, were magnet program students. Students targeted for enrollment in magnet programs were typically high achieving students prior to enrolling in the ninth grade. The difference in the two group's academic success before ninth grade is a variable not controlled for in additional analyses, but one that can contribute to the explanation of the findings.

## On-Track to Graduation Status

Academically, students who do not complete high school typically failed more than a quarter of their freshmen classes whereas only $8 \%$ of those students who do graduate high school indicated that same difficulty (Weiss, 2001). Allensworth and Easton (2007) found that "inadequate credit accumulation" during a students’ freshman year is significantly predictive with respect to that student's ability to graduate high school four years later (p. 1).

The freshman on-track indicator was developed by the University of Chicago's Consortium on Chicago School Research in the 1990s (Allensworth \& Easton, 2007). The indicator classifies freshman as on-track to graduate at the completion of the first year of high school if a student has "accumulated five full credits... and has no more than one semester F in a core subject (English, math [sic], or social science) by the end of the first year in high school" (Allensworth \& Easton, 2007, p. 4). The Consortium on Chicago School Research later found that of those students identified as being on-track to graduate at the conclusion of the freshman year, $81 \%$ graduated within four years compared to $22 \%$ of students who were classified as off track (Allensworth \& Easton, 2007). National and localized studies in Chicago and New York confirmed the finding that nearly all students who drop out of high school do so far behind in course credits (Allensworth \& Easton, 2007; Cahill, Hamilton, \& Lynch, 2006; NCES, 2011).

For purposes of this study, on-track to graduation status was defined by Target School District's pupil progression plan. Target School District's Pupil Progression Plan defines on track to graduate status as having successfully earned a minimum of six Carnegie credits at the completion of each school year. At the end of the $11^{\text {th }}$ grade year, students must have 18 credits in order to be promoted to the $12^{\text {th }}$ grade and be considered on-track to graduate. The accumulation of six credits each school year is critical as students traditionally spend four years in high school, netting the student the total number of credits, 24 , required for graduation by the State of Florida.

The purpose of the fourth and fifth research questions was to determine the impact participation in Freshman Experience had on on-track to graduation status as defined by Target School District's Pupil Progression Plan when compared to students who enrolled at a
demographically and socioeconomically similar large urban high school and a cohort of students who enrolled at Target School prior to the implementation of Freshman Experience. The independent variable for research question four was whether or not the student was enrolled in and satisfactorily completed (as defined by a "C" grade or higher) the Freshman Experience course at Target School during the 2012-2013 school year. The dependent variable relevant to research question four was measured dichotomously by whether or not the student was on-track to graduate as defined by Target School District's Pupil Progression Plan as the completion of the eleventh grade year.

A preponderance of the students who drop out of high school do so during their third or fourth year of high school; however many of those students were still listed as ninth or tenth graders at the time of withdrawal (Neild, et al., 2008). Data revealed that on average, students at Target School had earned an average of 27.4 credits at the conclusion of the junior year. Data also revealed that students at Comparison School had earned an average of 24.4 credits at the conclusion of the junior year. Students in the Historical Comparison Group had earned an average 14.7 credits at the conclusion of the junior year of high school.

Of the students who enrolled at Target School as freshmen during the 2012-2013 school year and participated in Freshman Experience intervention, $83.7 \%$ were on-track to graduate at the completion of the eleventh grade year $(n=308)$ while $16.3 \%$ were not $(n=60)$. Of the students who enrolled as freshmen at a demographically and socioeconomically similar high school during that same year, $69.9 \%$ were on-track to graduate at the completion of the eleventh grade year $(n=102)$ while $30.1 \%$ were not $(n=44)$. Of the students who enrolled at Target School as freshmen during the 2012-2013 school year and participated in Freshman Experience
intervention, $52 \%$ were on-track to graduate at the completion of the eleventh grade year ( $n=$ 273) while $48 \%$ were not $(n=252)$.

The findings revealed that participation in Freshman Experience positively impacted credit accumulation. These findings were consistent with existing program evaluations of freshman transition interventions including Check and Connect, an intervention designed specifically for at-risk and highly mobile high school students. Check and Connect is structured to maximize meaningful relationships among at-risk students and adults (Sinclair, Christenson, \& Thurlow, 2005). The Check and Connect program encourages timely check-ups throughout a student's high school career which support "educational perseverance [and] credit accumulation" (Scheel, et al., 2009, p. 1151). Check and Connect was found to have a significant impact on educational persistence to graduation due to it's built in monitoring systems.

Like those students who participated in Check and Connect, students who enrolled in Freshman Experience at Target School were significantly more likely to be on-track to graduate than those students who did not participate in the intervention. Unlike Check and Connect, the continued partnership between student and mentor is not a required component of the Freshman Experience intervention. Once students persist to the tenth grade, they are no longer required to participate in a transition intervention. Scheel, Christenson, and Thurlow (2005) attributed much of the success of the Check and Connect transition program to its built in longitudinal monitoring component over the course of a student's high school career.

An encouraging result which corroborated Freshman Experience's focus on educational attainment and credit accumulation was the frequency of words and phrases related to the cognitive, affective, and behavioral domains disaggregated from the analysis of documents
which organized the curriculum for the Freshman Experience intervention. The Phone Call Log and the Departmental Collaborative Plan documents all yielded results which indicated a strong emphasis on academic success and a focus on credit accumulation.

Similar to the mentor-monitoring components of the Check and Connect program, the Phone Call Log established the Freshman Experience instructor as a liaison between the education process and the student's parent. Teacher entries into the Phone Call Log documented the teachers' efforts to inform parents of tutoring opportunities ("Spoke with students [sic] mother, mentioned his grade in Chemistry and Algebra. I let her know about tutoring afterschool on Tues \& Thurs she wants him to take advantage of that."), attendance issues ("I informed her that [Student Name] is missing too many days of her classes and is falling behind"), and grade checkups ("Spoke with [Student Name] mother, shared with her that [Student Name] grades are slipping...") (Orange County Public Schools, 2012e, p. 1). Though not a conversation had directly with a student, each of these conversations created a partnership between the teacher, parent, school, and student with the goal of encouraging educational persistence, academic success, and ultimately, on-track to graduation status. A presumed effect of these weekly conversations is an increase in connection to the school for both the student and the parent.

Weiss (2001), citing research by the Consortium on Chicago School Research, found that students who possess fewer than five credits at the completion of the freshman year will not be on track to graduate. Words and phrases disaggregated from the Departmental Collaborative Plan indicated that a large component of Freshman Experience was to motivate students toward credit accumulation. Expectations, as described in the Departmental Collaborative Plan, emphasized the accumulation of at least seven credits by the end of the ninth grade year,
maintenance of a grade-point-average of 2.0 or more, and a consistent monitoring of student data with feedback.

Of concern was the relatively small magnitude, as measured by effect size, participation in Freshman Experience had on the number of students who accumulated the credits required to be considered on-track to graduate. When compared to students in a demographically and socioeconomically similar high school who enrolled as freshmen during the same year, Freshman Experience had a small practical impact on credit accumulation and on-track to graduation status. Students in both groups had accumulated the requisite number of credits required for a standard high school diploma in the State of Florida by the completion of their eleventh grade year.

Students in the Target and Comparison Groups were accumulating credits at a higher rate than students who enrolled as freshmen at Target School during the 2010-2011 school year. When compared against the Historical Control Group, Freshman Experience indicated a moderate practical impact on credit accumulation and on-track to graduation status. However, additional analyses revealed that students in the Comparison Group were also significantly more likely to be on-track to graduate than students in the Historical Control Group, suggesting that participation in Freshman Experience was not the explanatory factor in the statistical significance which was found to exist between the Target Group and the Historical Comparison Group. These findings warrant further research into the longitudinal academic impact of Freshman Experience. The implications of this finding are discussed in the following section, Implications for Practice.

Further analyses favored those students who enrolled in Target School during the 20122013 school year and did not participate in Freshman Experience on on-track to graduation
status. An explanatory covariate which may provide meaning to this discrepancy is that students who were not enrolled in Freshman Experience, were magnet program students. Students targeted for enrollment in magnet programs were typically high achieving students prior to enrolling in the ninth grade. The difference in the two group's academic success before ninth grade is a variable not controlled for in additional analyses, but one that can contribute to the explanation of the findings.

## Academic Success

Neild and Balfanz (2006) found that many of the struggles predictive of dropping out could be traced back to the first marking period of high school, noting that $20 \%$ of first-time freshmen in Philadelphia schools recorded straight F's in core classes during the first marking period. Over two-thirds of those students who failed all of their courses during the first marking period recorded the same grades at the conclusion of the school year (Neild \& Balfanz, 2006).

Academic success is commonly triangulated through operationalization of standardized test scores in reading and mathematics, grade point average, and local summative assessments (De Witte, et al., 2013; Dustmann \& Soest, 2007; Entwisle, et al., 2009). For purposes of this study, academic success was operationalized by the developmental scale scores on two State Accountability Assessments: FCAT Reading and Algebra 1 End of Course Assessment. Students in all research groups were required to pass both assessments in order to earn a standard high school diploma in the state of Florida. Underlying the development and implementation of Freshman Experience was historically low performance on state accountability assessments. Performance on standardized state accountability assessments for reading and mathematics and
the graduation rate are integral components to the adequate yearly progress standard of proficiency for high schools (National High School Center, 2007).

The purpose of the sixth and seventh research questions was to determine the impact participation in Freshman Experience had on performance on the Florida Comprehensive Assessment Test (FCAT) Reading and Algebra 1 End of Course Assessment when compared to students who enrolled at a demographically and socioeconomically similar large urban high school and a cohort of students who enrolled at Target School prior to the implementation of Freshman Experience. The independent variable for research question four was whether or not the student was enrolled in and satisfactorily completed (as defined by a "C" grade or higher) the Freshman Experience course at Target School during the 2012-2013 school year. Two dependent interval variables were tested for research question six: Developmental scale scores on FCAT Reading and the higher of two developmental scale scores on the Algebra I End of Course Assessment.

Transitions into high school are already made difficult for at-risk students due to poverty, family structure, and geographic location (Hernandez, 2011; Amato \& Sobolewski, 2001; Azzam, 2007). These challenges are often compounded by pre-ninth grade below grade level reading and mathematics test scores (Zvoch, 2006). The academic impact of transition programs is often relegated to significant increases in proficiency on mathematics assessments whereas reading performance stagnates or improves marginally. In their program evaluation of Transition High School's Ninth Grade Success Academy, Kemple, Herlihy, and Smith (2005) found that the transition improved average scale scores on reading and mathematics accountability assessments
administered during the student's eleventh grade year by effect sizes of .38 for reading and .65 for mathematics. These findings were corroborated by the current study.

Prior to the implementation of Freshman Experience, Target School's average developmental scale score on FCAT Reading was 229.87 ( $\sigma=16.39$ ), 15.13 points below the threshold required for grade level proficiency. Of those students who enrolled at Target School prior to the implementation of Freshman Experience, $78.5 \%$ did not pass FCAT Reading during their tenth grade year. After the implementation of Freshman Experience, Target School's average developmental scale score on FCAT reading was $230.64(\sigma=17.03), 14.36$ points below the threshold required for grade level proficiency. Of those students who enrolled at Target School as freshmen and completed Freshman Experience, $77.1 \%$ did not pass FCAT Reading during their tenth grade year, a $1.4 \%$ decrease from prior to the implementation. In both models, the students at Target School outperformed those students who attended a demographically and socioeconomically similar large urban high school on FCAT Reading. The modest difference in the on-track to graduation status between the target school and the comparison school coupled with the measurable difference in FCAT Reading developmental scale scores begs for an investigation into the covariates, such as curriculum, instruction, and leadership not related to Freshman Experience. Further study is needed to ascertain the variables that need to be controlled in the statistical analyses.

Prior to the implementation of Freshman Experience, Target School's average developmental scale score on Algebra 1 End of Course Assessment was $380.09(\sigma=26.23)$, 18.91 points below the threshold required for grade level proficiency. Of those students who enrolled at Target School prior to the implementation of Freshman Experience, $77.7 \%$ did not
pass the Algebra 1 End of Course Assessment by the end of their tenth grade year. After the implementation of Freshman Experience, Target School's average developmental scale score on Algebra 1 End of Course Assessment was $401.12(\sigma=22.50), 2.12$ points above the threshold required for grade level proficiency. Of concern here is the high standard deviation indicating that while on average students at Target School who enrolled in Freshman Experience passed the Algebra 1 End of Course Assessment, 47.7\% of students reported scores ranging from 356.12 to 401.12, indicating below grade level proficiency. An encouraging finding was the $35.2 \%$ increase in students at Target School passing the Algebra 1 End of Course Assessment after the implementation of Freshman Experience, from $22.3 \%$ to $57.5 \%$. In both models, the students at Target School outperformed those students who attended a demographically and socioeconomically similar large urban high school on the Algebra 1 End of Course Assessment.

While statistical significance found in favor of Freshman Experience's impact on academic success in both models, statistical analyses revealed that that impact was relegated exclusively to improvements in mathematics proficiency. The findings of the current study corroborated the measurable impact effective transition programs have on mathematics proficiency and concurrent negligible impact on reading proficiency (Scheel, et al., 2009; Sinclair, Christenson, \& Thurlow, 2005; Quint, et al., 1999; Kemple, Herlihy, \& Smith, 2005). Interestingly, the analysis of documents revealed a focus on reading proficiency rather than mathematics in the design of the course. The Weekly Curriculum Agenda revealed that one day of each week was focused on practice for FCAT Reading. A literacy program was also discussed in the Weekly Curriculum Agenda, suggesting further emphasis on reading proficiency (Orange County Public Schools, 2012f). Additionally, students read Covey's (1998) Seven

Habits of Highly Effective Teens to practice reading strategies (Orange County Public Schools, 2012a). The Instructional Focus Calendar further revealed that each week, the Freshman Experience instructors focused their reading practice on one of Florida's language arts standards (Orange County Public Schools, 2012b). The introduction of mathematics into the Freshman Experience curriculum was not observed throughout the document analysis. The only observed mention of mathematics performance in any of the documents analyzed was in a phone conversation with a parent concerning a student's grades (Orange County Public Schools, 2012e).

Of concern was the negligible magnitude, as measured by effect size, participation in Freshman Experience had on academic success. When compared to students in a demographically and socioeconomically similar high school who enrolled as freshmen during the same year and the Historical Control Group, Freshman Experience had a small practical impact on the combined dependent variables used to operationalize the construct of academic success. Even though statistical significance favored a positive academic impact on the Algebra 1 End of Course Assessment, effect size statistics indicated a small practical impact on increases in mathematics proficiency for students who participated in Freshman Experience. An explanatory covariate not controlled for by the current study could be a change in leadership at Target School. The hypothesis that Freshman Experience had no measurable impact on reading proficiency among students who participated in the program could not be rejected. An explanatory covariate not controlled for by the study could be the percentage of English Language Learners who attend Target School. This limitation warrants further investigation into the academic impact of ninth-grade transition interventions on students who are not proficient in
the English language prior to enrolling in ninth grade when compared to those students who are not English language learners.

The most represented of Freeman and Simonsen's (2015) three research based themes found among effective transition programs in the document analysis relevant to the current study was the cognitive domain. This finding suggests an academic emphasis in the design and implementation of Freshman Experience. While this finding corroborated the positive impact on persistence to the tenth grade and the accumulation of credits required for on-track to graduation status, it contradicted the findings relevant to academic success. There is a disconnect in the design and implementation of Freshman Experience and the academic gains, specifically in reading proficiency, one would expect to find. The implications of this finding are discussed in the following section, Implications for Practice.

Further analyses favored those students who enrolled in Target School during the 20122013 school year and did not participate in Freshman Experience on the combined dependent variables used to operationalize academic success. An explanatory covariate which may provide meaning to this discrepancy is that students who were not enrolled in Freshman Experience, were magnet program students. Students targeted for enrollment in magnet programs were typically high achieving students prior to enrolling in the ninth grade. The difference in the two group's academic success before ninth grade is a variable not controlled for in additional analyses, but one that can contribute to the explanation of the findings.

## Implications for Practice

The following implications and recommendations are made in consideration of the findings of the current study and the professional knowledge of the researcher. A Nation at Risk
(1983) and No Child Left Behind (2001) renewed generations old conversations on school reform and accountability. States have responded, legislating the onus of academic achievement on schools and school districts. Underlying the development and implementation of Freshman Experience at Target School was an unacceptable high school completion rate and performance on state accountability assessments.

While focused on a program in one school, the findings of this study are of particular concern to classroom teachers, school counselors, and school and school district administrators considering the implementation of freshmen transition initiatives and interventions. With an increase in national, state, and local conversations on school accountability comes the necessity to properly evaluate the allocation of resources allocated to educational initiatives aimed at improving overall school performance. School resources are limited and must be purposefully leveraged so as to yield desirable outcomes. The current study corroborated the findings of other studies like it while simultaneously exposing academic shortcomings which the program under investigation purported to assuage.

All of the research questions yielded statistically significant results; however the overall practical impact of the program as measured by effect size statistics was small. Freshman Experience led to positive, albeit small, impacts on persistence to the tenth grade and on-track to graduation status. Conversely, the program had little to no impact on academic success. The overall implication herein is concerning: While students are being promoted to the tenth grade and accumulating the number of credits necessary for on-track to graduation status, grade level proficiency or academic growth in reading was not evidenced by performance on state accountability assessments.

In no way is it suggested that academic persistence and credit accumulation be ignored in the development of transition initiatives. Rather, school based administrators should focus efforts on encouraging academic persistence and credit accumulation for ninth-grade students regardless of the presence of an intervention initiative. Course failure during the ninth grade year leads to course repetition, retention, academic disengagement, and behavioral issues, ultimately leading to drop out (Orfield, 2004; Neild, et. al., 2008; Allensworth \& Easton, 2007; De Witte, et al., 2013; Neild \& Balfanz, 2006). However, positive course grades and credits should not be awarded purely for the purposes of encouraging academic outcomes. It is imperative that school administrators understand that a focus on outcomes neglects the process and contextual covariates, such as academic motivation and familial and social support structures, which are often latent in the process of academic disengagement and ultimately, dropout.

## Purposeful Allocation of Available Resources

The resources available to school administrators are often scarce and investments in educational initiatives warrant examination into their perceived return. The Florida Department of Education (2012) allocated \$3,583 per student during the 2012-2013 school year. The typical freshman student is enrolled in seven Carnegie credit earning courses, breaking down the base student allocation to $\$ 511$ per class per year per student. Section One of Article Nine of Florida's Constitution set the maximum number of students allowed to be enrolled in core classes in grades nine through twelve to 25 . While not considered a core class, if the average class-size of Freshman Experience is 25 students, it can be estimated that it costs $\$ 12,775$ per year per section of Freshman Experience. There were 328 students enrolled in Freshman Experience during the

2012-2013 school year which would require a minimum of 14 sections of Freshman Experience. Fourteen sections, at $\$ 12,775$ per section, cost the school an estimated $\$ 178,000$.

Alternatively, the average pay for a teacher in Target School District during the 20122013 school year was $\$ 44,383$ (Orange County Public Schools, 2012g). Teachers typically instruct six courses each day with one course period relegated to planning and collegial collaboration. It costs an estimated $\$ 7,400$ for a teacher per section per year for any given course. With an enrollment of 328 students in Freshman Experience, it cost Target School an estimated $\$ 100,000$ to implement the intervention. An investment which ranges from $\$ 100,000$ to $\$ 178,000$ requires a return of more than dichotomous outcomes (persistence to the tenth grade and on-track to graduation status); rather, the focus should be on academic tenacity, resiliency, and bonding which considers the contextual covariates prevalent in the academic disengagement process.

## Redefining the Purpose and Objective of Freshman Experience

The findings of this study warrant a purposeful redefinition of the purpose and objective of Freshman Experience. Administrators at Target School should consider the development of long-term mentoring models similar to those in Check and Connect (Sinclair, Christenson, \& Thurlow, 2005). The scheduled academic check-ins embedded within the aforementioned program incentivize academic achievement and school attendance while concurrently developing academic appreciation for metacognitive skills. Researchers Thapa, Cohen, Guffey, and HigginsD'Alessandro (2013) state that one of the most important factors of relationships within a school is how connected students and teachers feel to each other and the school as a whole. A limitation to this recommendation, however, is the often lopsided ratio of school counselors available to students. Therefore, it is critical that district administrators allocate resources to the neediest
schools in order to increase the availability of counselor and mentor services to at-risk students. Considering this limitation, it is recommended that Target School and schools like it utilize upperclassmen student-leaders as mentors to newly enrolled freshmen.

## Elements of Successful Transition Programs

In order to best prepare incoming freshman students, especially those identified as high risk for not completing high school, it is imperative that the academic skills, such as purposeful note taking, studying, and organization, of those students be cultivated, bolstered, and supported. It is necessary that students be taught ways to commit learning to long-term memory. When students are provided with meaningful strategies for processing new information, the learner begins to own and internalize new information and subsequently commit it for long-term retention and application (Bransford, et al., 2000). These strategies will help improve the overall academic impact of Freshman Experience.

Transition programs must also cultivate the relationships and learning environments within schools in a way that invites students to participate and engage in the learning rather than simply be a recipient thereof. The lack of effect on academic success, especially for reading proficiency, when a large focus of Freshman Experience was on reading instruction, indicates an overall academic disengagement among students enrolled at Target School. The Freshman Experience program should be focused on learning activities which connect students to career and college goals. These goals should then be used to differentiate the resources used to help students improve academic literacy. This should be a continuous process rather than one relegated to a one year course. It is imperative that administrators and teachers alike design freshman transition initiatives which help at-risk students find meaning for school.

## Considerations for Teachers

Teachers of Freshman Experience and freshmen transition interventions should be cognizant of the impact relationship building has on academic persistence. Teachers of Freshman Experience should be exposed to specific, targeted professional development which emphasizes key areas of relationship building: Student experiences, student learning, and empathy. In a meta-analysis of 229 teacher-student relationship studies, Hattie (2009) found a high ( $d=.72$ ) effect. Hattie (2009) also takes into consideration the effect sizes of teacher student relationship variables such as teacher empathy ( $d=.68$ ), encouragement of higher order thinking $(d=.61)$, and encouraging learning ( $d=.48$ ).

## Shift the Focus: Quality and Quantity

The findings of the current study suggest that outcomes are a main focus in the design and implementation of academic initiatives, specifically Freshman Experience. This is due largely to national, state, and district pressures fueled by accountability expectations which require a quantitative representation of adequate progress. What is missed by these quantitative measures are the qualitative covariates prevalent among all populations of students, especially those considered at-risk for not completing high school. The contextual covariates must not be neglected and outcomes cannot continue to be the focus of the program under investigation. In his book Dropping Out: Why Students Drop Out of High School and What Can be Done About It, Russel Rumberger (2011) revisits earlier categorization and causation frameworks, stating that it is hopeless to assign a single causal factor to dropout, widely considered to be the last phase of a process of disengagement. If dropout is the last phase in a process of disengagement, then
deductive logic dictates that encouragement of academic success through mentoring, relationship building, and culture is a phase of engagement.

## A Summary of Implications

1. Focus efforts on encouraging meaningful academic persistence and credit accumulation for ninth-grade students
2. Transition curriculums should be focused on academic tenacity, resiliency, and bonding which considers the contextual covariates prevalent in the academic disengagement process.
3. School districts must allocate resources to the neediest schools purposed with developing effective transition and ninth-grade mentoring initiatives.
4. Consider the development of teacher led counseling programs and student led mentoring programs in order to alleviate the lopsided ratio of counselors available to students.
5. Develop a concerted effort in cultivating and maintaining relationships among students, teachers, and the school itself including professional staff development.
6. Mentoring and intervention programs must not cease upon promotion to the tenth grade for the neediest students.
7. Design purposeful curriculums differentiated for individual student needs and interests that focus on instruction of purposeful note taking, studying, and organization
8. Create learning environments which encourage student's engagement in the learning process rather than recipients thereof.
9. Design freshman transition initiatives which help at-risk students find meaning for school.
10. Use student career goals to develop academic literacy skills. Follow through with these career goals throughout the student's high school years.
11. If dropout is the last phase in a process of disengagement, then deductive logic dictates that encouragement of academic success through mentoring, relationship building, and culture is a phase of engagement.

## Recommendations for Further Research

There is a lack of research on the efficacy of comprehensive transition programs, especially the long-term effects that participation in one may have. The purpose of the intervention under investigation, Freshman Experience, was to encourage academic growth and persistence toward graduation; however the lasting effects of Freshman Experience postgraduation remain unexplored. Longitudinal studies of Freshman Experience and interventions like it, must be developed to measure what is and is not promoting academic persistence and resilience for students, especially at-risk students.

Accordingly, the following are offered as recommended topics for future research:

1. Graduation rates for students in the target and comparison groups were not available at the time data were collected. The impact of Freshman Experience on graduation warrants investigation.
2. A longitudinal study investigating the academic outcomes for students in the Target Group who dropped out of high school.
3. A longitudinal study investigating the economic outcomes for students in the Target Group who dropped out of high school.
4. A longitudinal study comparing the academic success of students in the Target Group to the Comparison Group at the post-secondary level.
5. An investigation into the social mobility of students who are low socioeconomic status after participation in Freshman Experience and high school graduation.
6. A historical narrative study comparing academic changes over time at Target School to socioeconomically and demographically similar schools in the region.

Of interest to the current study were the school level factors associated with dropout which can be controlled by school administration, curriculum design, and teaching. However, research has consistently indicated that there are a myriad covariate factors which students carry with them into high school that can be used to predict and understand the dropout process: Living at or below the poverty line, not reading proficiently by the third grade, family structure, divorce, race, geographic location, and educational attainment by the student's parents, state accountability assessment performance, language proficiency, gender, race, exceptional education status, and socio-economic status (Hernandez, 2011; Amato \& Sobolewski, 2001; Azzam, 2007; Anguiano, 2004; Mackey \& Mackey, 2012; Zvoch, 2006; Orihuela, 2006).

Accordingly, the following are offered as recommended topics for future research:

1. The impact of Freshman Experience on school culture, school connectedness, and character development should be considered.
2. The impact of Freshman Experience on discipline infractions (as measured by days suspended) should be investigated.
3. The academic impact of Freshman Experience with gender, race, and socio-economic status as an additional independent variable.
4. The academic impact of Freshman Experience on English Language Learners on the dependent variables of academic persistence, credit accumulation, and academic success.
5. An analysis of variance in grade earned in the Freshman Experience course and the dependent variables of academic persistence, credit accumulation, and academic success.

## Conclusions

The findings of this study corroborated the work of existing transition program evaluations (Scheel, et al., 2009; Quint, et al., 1999; \& Kemple, Herlihy, \& Smith, 2005). However, due to the myriad of transition intervention designs and the variables involved, more research into transition is needed. The transition program investigated by this study exists in one urban Central Florida high school and this limitation should be noted when considering the generalization of the results. Additionally, the transition program investigated by this study has undergone numerous leadership and curriculum changes since the initial collection of data. The findings have added to this research of effective transition programs; however the findings contained herein have introduced a great number of questions warranting further research into the short- and long-term impacts of freshman transition initiatives.

It is unacceptable to sustain 7,000 high school dropouts each day (Alliance for Excellent Education, 2010). The Alliance for Excellent Education noted that the Central Florida area recorded a graduation rate of $72 \%$ in 2012 (Alliance for Excellent Education, 2013e). An increase of that graduation rate to $90 \%$ would translate to an additional 5,100 students with high
school diplomas, a $\$ 48$ million dollar increase in annual earnings, a $\$ 37$ million dollar increase in annual spending, and 350 new jobs in the area (Alliance for Excellent Education, 2013e).

The purpose of this research was to identify the extent to which the intervention aligned with recommendations by Freeman and Simonsen (2015) and to determine the extent to which the intervention impacted persistence to the tenth grade, on-track-to-graduation status, and academic success. This purpose was accomplished through an analysis of seven research questions. Freshman Experience was found to have had little practical effect on the dependent variables of concern to this study. Thus, the academic impact of the program should continue to be investigated annually.

Overall, research indicated that transition programs are viable interventions when their impact on persistence and credit accumulation is considered. The current study yielded similar results. However, Target School's transition initiative, Freshman Experience, has room for growth. Freshman Experience was effective when dichotomous outcome variables were concerned. These findings did not translate to positive findings for academic success. Implications and recommendations for practice were presented with the intention of improving the academic impact of Freshman Experience.

It is vital that school and district administrators understand that the simple existence of a ninth-grade transition intervention is not the answer. Ninth-grade intervention programs must be developed based on the needs of students attending the school in question (Herzog \& Morgan, 1999). It is imperative that the contextual covariates latent in the dropout process be considered in all transition interventions. Transition programs must cultivate the relationships and learning environments within schools in a way that invites students to participate and engage in the
learning rather than simply be a recipient thereof. Perhaps most importantly, successful transition programs must develop a failure is not an option culture and expectation for students, parents, and teachers alike.

APPENDIX: UCF INSTITUTIONAL REVIEW BOARD APPROVAL

University of Central Florida Institutional Review Board
Office of Research \& Commercialization
12201 Research Parkway, Suite 501
Orlando, Florida 32826-3246
Telephone: 407-823-2901 or 407-882-2276
wwwresearch.ucfedu/compliance/irbhtml

## Approval of Exempt Human Research

| From: | UCF Institutional Review Board \#1 <br> FWA00000351, IRB00001138 |
| :--- | :--- |
| To: | Timothy Flynn |
| Date: | June 22, 2015 |

Dear Researcher
On 06/22/2015, the IRB approved the following activity as human participant research that is exempt from regulation:

| Type of Review: <br> Project Title: | Exempt Determination <br> An Investigation of the Academic Impact of the Freshman <br> Transition Course at one Urban Central Florida High School |
| ---: | :--- |
|  | Investigator: | | Timothy Flynn |
| :--- |
| IRB Number: | SBE-15-11356

This determination applies only to the activities described in the IRB submission and does not apply should any changes be made. If changes are made and there are questions about whether these changes affect the exempt status of the human research, please contact the IRB. When you have completed your research please submit a Study Closure request in iRIS so that IR B records will be accurate.
In the conduct of this research, you are responsible to follow the requirements of the Investigator Manual
On behalf of Sophia Dziegielewski, Ph.D., L.C.S.W., UCF IRB Chair, this letter is signed by:


IRB Coordinator

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