Intervention Strategies Utilized in a Virginia Public High School with Improved Graduation Completion Index Values

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Dissertation submitted to the faculty of the Virginia Polytechnic Institute and State University in partial fulfillment of the requirements for the degree of

Doctor of Education

In

Educational Leadership and Policy Studies

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July 24, 2015
Blacksburg, Virginia

Keywords: Graduation Completion Index, intervention strategies, retention, attendance, discipline
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Abstract

With the recent implementation of the Graduation and Completion Index (GCI), schools in the Commonwealth of Virginia are charged with graduating students within a four year time frame. The purpose of this study was to investigate the intervention strategies implemented by a school receiving the status of “warned” for falling below the GCI benchmark in the school year 2011-2012 and subsequently receiving “meets benchmark” status for the next two school years, 2012-2013 and 2013-2014. This study sought to determine what support and interventions this school provided for students who successfully graduated from high school within the designated four year time frame. A review of previous research and findings demonstrated the need for further research in this area. The intervention strategies implemented at a school that received “warning” status yet currently maintains “meets benchmark” status could benefit other schools and students.

Some of the identified intervention strategies were: a) in-school detention was used as an intervention strategy; b) calling home and home visits were used as intervention strategies; c) the four by four block schedule was used as an intervention strategy; d) attendance, retention, and discipline influenced a student’s decision to stay in school; e) intervention strategies for students must be supported at the elementary, middle, and high school levels; and f) additional academic support (Saturday school) was an effective strategy for meeting the GCI benchmark.

Implications were that school leaders should: a) consider creating a team that meets frequently to address the needs of at-risk students; b) identify ways to engage parents and the community in meeting the needs of students who are at risk of dropping out; c) consider alternatives to out of school suspension; and d) consider the four by four block scheduling model to support on time graduation rates for students.
Acknowledgements

Many thanks to the members of my dissertation committee, Dr. Carol Cash, Chair, Dr. Kevin Hughes, Dr. Ted Price, and Dr. Travis Twiford. I appreciate the time and expertise offered to support my study.
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Chapter 1
Introduction

Introduction and Context

Gasper, DeLuca, and Estacion (2012) found the rate at which students in the United States leave school without a high school diploma to be alarming. This high rate of students not completing high school is a major concern when considering the prosperity of our country (Gasper, et al. 2012). The Organization for Economic Cooperation and Development (2012) recognized that at one time the United States had one of the highest graduation rates of any developed country. The United States now ranks 22nd out of 27 developed countries (Organization for Economic Cooperation and Development, 2012). “Graduating from high school is an important developmental task that marks the transition out of adolescence and into adulthood” (Gasper, et al. 2012, p.487). According to Gasper et al. (2012), when a student decides to drop out of high school, it is a decision made from a culmination of experiences, often including a history of retention, poor school attendance, and discipline issues.

In agreement with Gasper et. al, Jimerson, Woehr, Kaufman, and Anderson (2004) point to key factors that influence a student’s decision to drop out of high school. These factors are retention, poor attendance, and discipline. If the patterns that influence a student’s decision to drop out of high school can be determined, educational leaders can provide support to assist the student in their decision to stay in school. If strategies are designed to support a student’s struggle to stay in school, the dropout rate may be reduced (Bowers, Sprott & Taff, 2013). Finn, Gerber, and Boyd-Zaharias agreed that academic struggles in the early grades can predict success or failure in high school (2005). McCluskey, Bynum, and Patchin (2004) concluded that poor attendance is a factor in a student’s decision to drop out of high school. When a student is consistently absent from school McCluskey et al. (2004) determined, behavior patterns may develop that negatively influence school performance, including the decision to drop out of high school. Fowler (2011) resolved that discipline is a third factor that influences a student’s decision to drop out of high school. Bowers, Sprott, and Taff, (2013) contended that knowing the factors that lead a student to drop out of school could assist in the development of preventative measures that could be implemented to protect the student from dropping out and assist in lowering the dropout rate.
Gasper, et al., (2012) explained that the implications in knowing the causes of school dropouts would produce social and economic benefits to the school system and society and would also ensure a positive learning experience for the student. In 2009, the Virginia Board of Education (VBE) and the Virginia Department of Education (VDOE) made attempts to address the concern of high school dropouts by enhancing their accountability measures. As a component of the 2009 accreditation standards, high schools were required to meet a new annual benchmark for graduation. This enhancement resulted in the creation of a Graduation Completion Index (GCI) for high schools. The (GCI) awards full credit to schools with students who earn a diploma. Students are considered to be on-time graduates when they graduate within the four year time period of being a first-time ninth grade student. For example, a school receives 100 points for every student who earns a board recognized diploma. The school earns 75 points for every student who earns a General Education Diploma (GED). 70 points are awarded to the school for each carry-over student remaining in school but not graduating within four years. 25 points are awarded to the school for each student who earns a Certificate of Program Completion. In order to determine the GCI for a school, the total number of points earned by each student is added together and divided by the total number of students. The quotient is the school’s Graduation Completion Index (GCI). An explanation of the calculation process for determining the Graduation Completion Index is summarized in Table 1. In the example below, the GCI score earned is 89, which is four points above the standard score set by the Virginia Department of Education of 85 (Virginia Department of Education, 2013).
Table 1
Sample Calculation of the Graduation and Completion Index (Virginia Department of Education, 2013).

<table>
<thead>
<tr>
<th></th>
<th># of students</th>
<th>Point value</th>
<th># of students x Point value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Diplomas</td>
<td>66</td>
<td>100</td>
<td>66 x 100 = 6,600</td>
</tr>
<tr>
<td>GEDs</td>
<td>3</td>
<td>75</td>
<td>3 x 75 = 225</td>
</tr>
<tr>
<td>Certificates of Completion</td>
<td>2</td>
<td>25</td>
<td>2 x 25 = 50</td>
</tr>
<tr>
<td>Students still in school</td>
<td>4</td>
<td>70</td>
<td>4 x 70 = 280</td>
</tr>
<tr>
<td>Dropouts</td>
<td>5</td>
<td>0</td>
<td>5 x 0 = 0</td>
</tr>
<tr>
<td>Total Students</td>
<td>80</td>
<td></td>
<td>7,155</td>
</tr>
</tbody>
</table>

GCI Calculation: 7,155 ÷ 80 = 89

In order to meet the benchmark status, schools must earn a minimum score of 85 for full accreditation. A school earning a rating of Provisionally Accredited-Graduation Rate must undergo an academic review. After 2015-2016, high schools with a GCI of less than 85 will be Accredited with Warning (Virginia Department of Education 2013). Beginning in 2011-2012 school year, every high school in the Commonwealth of Virginia was charged with examining the patterns of students at risk of dropping out of high school. Beginning in 2011, the Virginia Department of Education (2013) directed school divisions to analyze high school statistics particularly at the ninth grade level. School divisions were asked to analyze attendance rates, course failures, and discipline referrals. Divisions were also asked to create school level teams to analyze intervention strategies to assist off-track students to on-track status. The Virginia Department of Education (2013) encouraged high schools to pursue students who had left school the previous year and support them in credit recovery and present them an opportunity to return to school.

The Virginia Department of Education (2013) concluded when a high school receives a “warning” or “provisionally accredited” status, the school must employ a series of intervention strategies which include:
1. Staff will form a division and a school team. Principal and one division team member must be on both the division and school team.

2. The division and school team will review materials provided by VDOE on the implementation of the Virginia Early Warning System.

3. The division and school team will load and review data. The school team will initiate the 7-step Virginia Early Warning System implementation process.

4. The division and school team will meet with the Office of School Improvement (OSI) to determine specific assistance needed and will develop the comprehensive plan. The division and school team will agree to develop, implement, and monitor this plan for three years.

5. Develop and monitor a school- and division-level electronic comprehensive improvement plan for three years.

6. If the school is denied Accreditation, the division will enter into a Memorandum of Understanding with the Virginia Board of Education. (“Schools Rated Accredited with Warning or Provisionally Accredited – Graduation Rate,” 2013).

Schools that receive “warning” or “provisionally accredited” status must initiate the 7-step Early Warning System. In 2009 Virginia Department of Education released the Virginia Early Warning System (VEWS) as an electronic data query system designed to assist school leaders in identifying students at risk of dropping out of high school. The system targets resources to support those students who are not on track to graduate and examines the school issues that may contribute to a student’s decision to drop out of high school. VEWS stores information on student attendance, discipline, and course performance and students are identified at risk of dropping out based on these markers. The VEWS 7-step implementation process includes:

1. Establish the school EWS team, assign roles, and communicate responsibilities of the team in improving the graduation rate at the school.

2. Import data into the EWS tool (at a minimum, prior to the beginning of the ninth-grade year and at the end of each marking period).

3. Frequently review and monitor data to identify students at risk for failing or dropping out and to understand patterns in student engagement and academic performance.
4. Look beyond the indicators to identify root causes for student disengagement with school and academic failure.

5. Assign and provide interventions to address students’ identified needs.

6. Use data to monitor student progress within interventions to make midcourse corrections, add new interventions, or discontinue interventions as needed.

7. Develop, implement, and monitor the school improvement plan (Smith, 2013, p.15.).

The Virginia Department of Education expects schools in “warning” or “provisional” status to define in the School Improvement Plan measures for achieving and documenting student academic gains, instructional practices to remediate students unsuccessful on Standards of Learning tests, and intervention strategies designed to prevent further declines in student performance and graduation rates (Smith, 2013).

**Overview of the Study**

This study identified the intervention strategies implemented by a school receiving the status of “warned” for the benchmark of Graduation Completer Index (GCI). The researcher investigated the intervention strategies implemented by a Virginia school placed on “warning” in the 2011-2012 school year yet made gains in the school years 2012-2013 and 2013-2014 to earn “meets benchmark” status. The examined school was placed on “warning” for low GCI scores in the 2011-2012 school year. The school however, made sufficient progress to receive “meets benchmark” status in both the 2012-2013 and 2013-2014 school years, each year receiving a score a cumulative score of 85. Schools meet provisional status when they earn a score of 80-84. Schools that scored below 80 receive warning status. Beginning in the 2015-2016 school year, schools with a GCI of less than 85 will receive “accredited with warning” status (Virginia Department of Education, 2013). The purpose of this study is to investigate the intervention strategies implemented at this school.

**Historical perspective**

Oakland wrote (1992) that high school graduates in 1992 would remain in the workforce until 2040. Schools at that time were charged with providing intervention strategies to support students and the decision to remain in school. Oakland described (1992) an approach to lower the dropout rate that included systems that enabled adequate achievement motivation, created
feelings of affiliation with school and peers, and stable support systems from peers, family, and the community; and created learning environments free of hurdles that diminished educational outcomes. The disparity of earning potential between high school graduates and high school dropouts twenty-two years ago has continued today. Bridgeland, DiIulio, and Morison (2006) ascertained that dropouts have an increased chance of being unemployed, having health problems, living in poverty, receiving government assistance, and becoming single parents with children who also drop out of high school. The economy thus can be influenced by students who complete high school and enter either college or the work-force.

Statement of the Problem

School divisions must provide intervention strategies to prevent students from dropping out of high school. According to Zhang, Willson, Katsiyannis, Barrett, Ju, and Wu, “The impact of school dropouts is significant to the individual and society. School dropouts are less likely to be employed than high school graduates and more likely to receive government support through social services” (2010, p.230). Additionally, if students enter college or the work-force highly qualified and prepared, resources do not have to be spent in corrective or remedial programming. “The United States population and its lifestyle are changing rapidly. As a result, today’s children are growing up in a world that differs substantially from the world in which school administrators—even young ones—grew up” (Fowler, 2013. p.61). Beginning at the local school level and progressing to the national level, schools have an economic responsibility to prepare their students in school for the world they will enter upon graduation. Schools have a vested interest in the success of high school graduates because of the economic ramifications in graduating successful, prepared, and competitive students. Fowler (2013) explained that long-term demographic trends in graduation rates reflected in the United States will continue to worsen and not improve. Fowler (2013) concluded that the economy is directly influenced by the students who complete high school. Students must enter the workforce with a high school diploma; otherwise they will lack the competitive skills necessary to be successful.

Significance of the Study

Dropping out of high school is a problem that influences economic growth from a national level to the local level. A report by the National Center for Education Statistics
concluded the average income of people ages 18 through 67 who have not completed high school was roughly $25,000 in 2009. (Rouse, 2007). In contrast, the average income of people ages 18 through 67 who completed their education with at least a high school credential, including a General Educational Development (GED) certificate, was approximately $43,000. The lifetime earning potential of a high school graduate versus a non-graduate approximates a loss for the non-graduate of approximately $630,000 (Rouse, 2007). Due to the economic ramifications in graduating successful, prepared and competitive students the nation has a vested interest in maintaining high numbers of graduates. Companies wishing to expand operations tend to move into competitive cities and states where workers are well-educated. Student achievement and graduation requirement policies must therefore be aggressively rigorous in order to prepare students with the skills necessary to influence the local, state, and national economies. This study is significant because students need a high school diploma in order to be competitive in the workforce. School divisions need to provide intervention strategies to prevent students from dropping out of high school.

**National perspective**

According the Bureau of Labor Statistics, in 2014, the unemployment rate in the United States for individuals 25 years and older climbed to 9.4% for those without a high school diploma. In comparison, the rate for individuals with a high school diploma at that time was 5.6% and 3.4% for those with a bachelor’s degree (Bureau of Labor Statistics, 2014). “Dropouts are much more likely than their peers who graduate to be unemployed, living in poverty, receiving public assistance, in prison, on death row, unhealthy, divorced, and single parents with children who drop out from high school themselves” (Bridgeland, Dilulio, & Morison 2006, p.1). The high school diploma - or lack thereof- has a significant impact on earning potential, employment opportunities, and quality of life.

**State and local perspective**

The state has an interest in graduating high school students, because of the economic ramifications in graduating successful, prepared, and competitive citizens. As mentioned earlier, Fowler (2013) summarized that companies wishing to expand operations tend to move into competitive cities and states where workers are well-educated. Student achievement and
graduation requirement policies must be aggressively rigorous in order to prepare students with the skills necessary to influence the local, state, and national economies (Fowler, 2013).

The Graduation Completion Index policy has created in Virginia awareness of graduation measures and accountability for all school divisions; and the number of students graduating in four years from a Virginia public school has increased (Virginia Department of Education, 2013). The GCI facilitates the identification of at-risk students and forces school divisions to be accountable for implementing strategies to ensure they graduate. The Commonwealth of Virginia’s GCI requirement for accreditation provides a framework that creates practices that supports schools as they strive to lower the dropout rate thus providing students the opportunity to graduate on-time with their cohort. The policy has supported progress in identifying at-risk students, and forcing school divisions to be accountable for implementing strategies to ensure they graduate. Not only does the policy support the identification of at-risk students in jeopardy of graduating, the policy also instructs school divisions to intervene and provide support to these students.

**Purpose of the Study and Research Questions**

The purpose of this study was to identify the intervention strategies implemented by a school receiving the status of “warned” for the benchmark of Graduation Completion Index (GCI) in the school year 2011-2012 and subsequently maintaining “meets benchmark” status for the next two school years 2012-2013 and 2013-2014. The results of examining the intervention strategies implemented may establish effective strategies that could be replicated at other schools in order to support academic success in meeting the GCI. If the school provided interventions for students who were retained, had attendance or discipline issues and yet successfully graduated from high school within their designated four year time frame, the implications could benefit other schools and students. The study could also discover unanticipated efforts that support students at risk of dropping out of high school. These unanticipated efforts could benefit school leaders in their quest to promote the graduation rate.
Research Questions

1. According to school personnel, what intervention strategies between 2011 and 2014 were used after the school received the status of “warned” for the benchmark of the GCI in the school year 2011-2012?

2. According to school personnel, how did attendance, retention, and discipline influence intervention strategies? What other elements and data sources were considered?

3. According to school personnel, what other factors influenced the GCI value of the school from 2011-2012 to 2013-2014?

Theoretical and Conceptual Framework

Researchers have stressed these factors as influencing a student’s decision to drop out of high school: (a) attendance, (b) retention and promotion, and (c) discipline (Finn, Gerber, Boyd-Zaharias 2005, Irby 2012, Woo, and Sakamoto 2010). The decision to drop out of high school can begin as early as elementary school (Allensworth, 2005; Cannon & Lipscomb, 2011; Finn, Gerber & Boyd-Zaharias 2005; Gasper, DeLuca, & Estacion, 2011; Hanover Research, 2010; Jimerson, Woehr, Kaufman, & Anderson, 2004; Public Policy Institute of California, 2011; Roderick, 1994) when a student is retained in the early grades. Students that are retained are more likely to exhibit a weak attachment to school, developed through years of poor school performance and feelings of failure (Allensworth, 2005). Retention can also compound feelings of failure, thus fostering a negative outlook on school. Poor school attendance (Flaherty, Sutphen, & Ely, 2012, McCluskey, Bynum, & Patchin, 2004) can also compromise the likelihood a student will graduate on time. McCluskey, Bynum, and Patchin (2004) determined several causes for poor attendance, including a lack of familial support, drug abuse, emotional disorders, learning disabilities, and student perceptions of school. Poor discipline is also a recurring factor (Irby, 2012; US Department of Justice, 2013; Woo & Sakamoto, 2010; Zhang, Willson, Katsiyannis, Barrett, Ju & Wu 2010), as poor behavior threatens the learning process and leads to at-risk behaviors, such as drug abuse and truancy. Woo and Sakamoto (2010) contended that behaviors can also be explained by limited resources and environmental conditions, such as poverty, disadvantaged school systems, and female headed households. These factors have been linked to a student’s decision to drop out of high school. As
illustrated in Figure 1, addressing risk factors with intervention strategies could result in increased graduation rates.

Figure 1. Conceptual framework.

Definition of Terms

For the sake of clarity and understanding, the following terms are defined for use throughout the study.

Graduation and Completion Index. The GCI value is calculated based on students in the cohort of expected on-time graduates (students who were first-time ninth graders four years ago, plus transfers in and minus transfers out) and students carried over from previous cohorts. A student earning a diploma who entered ninth grade for the first time five years ago is an example of a carryover student (Virginia Department of Education, 2013). Carryover students are included in annual GCI calculations until they graduate or otherwise leave school. Students with disabilities and limited-English proficient students are included in the GCI calculation when they earn a diploma, GED or certificate of completion; dropout or otherwise exit high school; or are no longer eligible for free public education services. A school receives 100 points for every
student who earns a board recognized diploma. The school earns 75 points for every student who earns a General Education Diploma (GED). 70 points are awarded to the school for each carry-over student remaining in school but not graduating within four years. 25 points are awarded to the school for each student who earns a Certificate of Program Completion. In order to determine the GCI for a school, the total number of points earned by each student is added together and divided by the total number of students. The quotient is the school’s Graduation Completion Index (2013).

**High School Dropout.** Any student who has not graduated from high school or completed a state- or district-approved educational program and does not meet any of the following exclusionary conditions: transfer to another public school district, private school, or state- or district-approved education program; temporary school-recognized absence due to suspension or illness; death (Virginia Department of Education, 2013).

**On-time Graduation Rate.** A cohort “on-time” graduation rate is the percentage of students in a cohort who earn a diploma within four years of entering the ninth grade. (Virginia Department of Education, 2013)

**Overage for the Grade.** A student who beyond the traditional school age for his or her grade level having been retained in at least one grade some point in the past (Hanover Research, 2010).

**Limitations**

Limitations are those factors or conditions that are unintended and beyond the control of the researcher (Creswell, 2007). The possible limitations of this study include

1. The researcher, who was a high school administrator and is currently an elementary school principal, has an interest in the topic that could be a source of bias.
2. The participants being interviewed might present limited or biased experiences regarding the interventions and school climate, based on what they hope instead of what is real.
3. The participants may not choose to respond accurately to the interview questions.
Delimitations

Delimitations refer to those conditions or parameters in the study controlled by the researcher (Creswell, 2007). The delimitations of this study include

1. The researcher selected a qualitative study methodology, therefore limiting the generalizability of the results. The study was confined within the scope of inquiry and is not generalizable.

2. The researcher limited the interviews to five school personnel thus limiting the population.

3. This study is limited to a school in Virginia that received the “warning” status in the 2011-2012 school year and made gains in the school years 2012-2013 and 2013-2014 to earn “meets benchmark” status. Those divisions whose demographics are similar could find value in the findings from the study.

Organization of the Study

The research is organized into five chapters. Chapter 1 introduces the subject matter and provides an overview of the problem. It also lists the research questions and the purpose of this study. Chapter 2 provides a current review of literature for the topic. Chapter 3 outlines the methodological procedures for sampling, data collection, and analysis. Chapter 4 will report the data collected, and Chapter 5 will synthesize the data, and provide findings and recommendations based on the synthesis.
Search Procedures

Searches for this review of literature focused on research associated with “high school dropout” and “intervention strategies”. All studies focused on United States high schools. Searches included scholarly and peer-reviewed articles and dissertations. These articles were obtained through the Virginia Tech library online journal database. Articles were chosen based on their relevance and date, the most recent being the most important. The literature search was conducted utilizing scholarly reviewed articles and dissertations using various databases through Virginia Tech Libraries. These included

- Virginia Tech’s Summon, Addison, and Databases
- ProQuest’s Dissertations and Theses

In addition to using Virginia Tech Databases, searches were conducted through the following websites:

- Google.com
- Doe.virginia.gov

Key search terms were: Graduation Completion Index, intervention strategies, attendance, retention, and discipline. Over forty scholarly articles and dissertations were reviewed for this study. The age range of research inquiry did not exceed twenty-five years. Most research articles and dissertations did not exceed ten years, however many of these works referenced older works that contained significant findings related to the course of this study, thus were included. From the review of literature, certain themes emerged that were relevant to the topic of high school drop-outs and intervention strategies. One emerging theme was that literature should address alternative strategies for correcting attendance, retention, and discipline. Another theme was to consider was utilizing a variety of intervention strategies for more than one area of need. Lastly, theoretical articles and studies should focus mainly on schools in the United States.
Decision to Drop Out and Related Risk Factors

In their 2008 report through the California Dropout Research project, “Why Students Drop out of School: A Review of 25 Years of Research,” Rumberger and Lim identified two types of factors that influence student performance in high school - individual and institutional (Rumberger & Lim, 2008). Individual factors are those directly connected with the student, and are categorized into the domains of background, attitudes, behaviors, and performance. These domains constitute multiple cases, such as student expectations, values, goals, behaviors, and past school experiences. Institutional factors are within the domains of families, schools, and communities that include family structure, transiency, resources, income, teacher quality, and school environment (Rumberger & Lim, 2008). Rumberger and Lim asserted that when these domains overlap the risk of student retention or dropping out is significantly increased, again asserting that, “Dropping out is more of a process than an event, and for many students that process begins in elementary school” (p.15).

Dropping out of high school is not a decision made in isolation, but rather often a culmination of a history of school experiences. “These experiences date back to the earliest grades in school or before” (Finn, Gerber, & Boyd-Zaharias, 2005, p.215). Leaving school early, or dropping out is often precipitated by factors that originate as early as kindergarten (Jimerson, Woehr, Kaufman, & Anderson, 2004). Various models have been developed to describe and operationalize the decision students make to drop out of high school, containing “factors that influence student graduation or dropout such as academic performance, deviant behavior, family expectations, institutional factors of school and community, or the time when the factors are relevant (elementary, middle, or high school)” (Hanover Research, 2010, p.7). Hanover Research (2010) credits Rumberger and Lim as creating one of the most helpful and comprehensive pictures of the graduation and dropout process that takes into account the insights of a variety of models.

In their 2001 study of early risk factors at home and at school, Alexander, Entwisle, and Kabbani connected the path of a student from elementary to high school. The study connected the resources and risk factors at four benchmarks in a pathway from elementary to high school. The intervals in the path included 1st grade, the elementary school years (2-5), the middle school years (6-8), and year 9 (the first year of high school) (Alexander, Entwisle, & Kabbani, 2001). The objective of the study was to “determine if there were critical periods or turning points in the
developmental course of a dropout” (Alexander, Entwisle, & Kabbani, 2001, p.766). At the four benchmarks in the elementary to high school pathway, academic, parental, and personal resources were analyzed to chart the timeline of early social and personal influences that conditioned the prospect of dropping out. Alexander, Entwisle, and Kabbani (2001) questioned the possibility for potential turning points in the developmental course of a dropout. Applying data acquired from Baltimore City Public Schools and the Beginning School Study, Alexander, Entwisle, & Kabbani ascertained, “there is a pressing need to understand what distinguishes youth who leave school before graduating from those who stay in school” (p.762). In their study, they described how a 16 year-old suspended three times for fighting, held back twice, reading at a fifth grade level, and coming to school two days out of five is no different from an eight year-old who is unruly in class, reading one year behind grade level and absent four to five days a month (Alexander, Entwisle, & Kabbani, 2001). The reason for this Alexander, Entwisle, and Kabbani described, is due to the risk factors exhibited in the behaviors of the student, as these behaviors form a pattern and shape student performance. “Once children have fallen behind, to catch up requires that they make greater than average strides” (p. 805).

**Poor attendance, transiency, and truancy.** Due to the cumulative impact of individual and institutional factors, there is a perception in policy and research that educators know who will drop out (Bowers, Sprott, & Taff, 2013). However, examining the research literature permits empirical inquiry to supplement or challenge anecdotal experiences. Risk factors often overlap, as this review of literature demonstrates. Absenteeism can be a predictor of a high school completion. A 2004 study conducted by McCluskey, Bynum, and Patchin identified chronic school absenteeism as a precursor to academic failure, school dropout, and juvenile delinquency. The study identified elementary school students who were absent a substantial number of school days and attempted to alter their attendance habits by producing direct student and parent contact. Consequently, the attendance habits of these elementary students improved. While the McCluskey, Bynum, and Patchin study (2004) specifically addressed elementary absenteeism, a connection was made to attendance related concerns in high school. “Although high school attendance has been examined by criminologists, the link between early school attendance and delinquency has not been fully explored. Elementary attendance problems are explained as illness related or parent dictated and are not examined as risk factors” (McCluskey, Bynum, & Patchin, 2004, p.219). Based on their findings, McCluskey, Bynum, and Patchin
(2004) concluded that elementary absenteeism and poor attendance habits can predict problems over the course of a student’s school career.

Performance and attendance in ninth grade are the most influential when predicting high school completion. In their 2001 study Alexander, Entwisle, and Kabbani described the significance of the ninth grade year in connection to a student’s decision to drop out of high school. When a student who has been retained prior to the ninth grade year enters high school, Alexander, Entwisle, and Kabbani (2001) concluded the pressure of being overage for a grade creates additional stress when combined with poor academic performance and marginal school engagement. “It is important to note that performance and behavior in ninth grade (as measured by grades, credit accumulation, and attendance) are emphasized as important predictors of graduation across multiple studies” (Hanover Research, 2010, p.5). Regarding attendance, students present at school more than 80 percent of the time were more likely to graduate than other students (Hanover Research, 2010).

Student mobility and poor attendance negatively affect academic achievement. A study conducted by Gasper, DeLuca, and Estacion (2011) indicated the drop out risk factor of student mobility develops as early as first grade. “Youth who switch high schools are likely to be very different from youth who stay in the same high school in terms of socioeconomic background, school performance and behavior long before entering the ninth grade” (Gasper, DeLuca, & Estacion, 2011, p.489). Transiency therefore is a risk factor that influences student achievement. Transiency also influences attendance habits largely because transiency subjects a student to multiple moves to different educational environments and school cultures.

Poor behavior and disciplinary actions. Truancy shares risk factors with drug abuse, both of which can influence a student’s decision to drop out of high school (Flaherty, Sutphen, & Ely, 2012). The connection between truant students and students who have substance abuse issues is that both dislike school considerably, have discipline issues, have poor academic achievement, and demonstrate lack of engagement with students and teachers (Flaherty, Sutphen, & Ely 2012). In their 2010 study, Zhang, Willson, Katsiyannis, Barrett, Ju and Wu (2010), determined that students who were truancy offenders ultimately had more incarcerations and more probations than other offenders and incarcerations and probations have potential to impact students academically.
Engaging in deviant and criminal behaviors influences the likelihood of staying in school (Rumberger & Lim, 2008). A 2005 study conducted by Carmichael Whitten, and Voloudakis determined student discipline was a risk factor that precluded a student from graduating on time, explaining that for each day a juvenile was suspended from school, the probability of dropping out was elevated by up to 0.1% (Carmichael, Whitten, & Voloudakis, 2005). Additionally, disciplinary referrals at school also served as “the single greatest predictor of future involvement in the juvenile system” (p.29). While schools must provide and enforce discipline policies to ensure a safe learning environment, these policies often have unintended consequences for students.

**Academic struggles.** One predictor that determines a student’s risk of dropping out of high school is his or her academic performance. Research speaks to the ninth grade year as a critical moment in students’ academic careers, as performance can predict high school completion (Hanover Research, 2010). But, as previously noted, dropping out of high school is often a culmination of forces over time. Academic struggles in elementary school, particularly in grades K-3, are linked to a student’s decision to drop out of high school (Public Policy Institute of California, 2011). Oakland (1992) determined, “Early school leavers often perceive themselves as being low academically. Often this accurate self-perception is developed by attitudes that they are academic failures, school is boring, and few teachers are willing to meet their needs” (p.202). Poor student success in the elementary grades will often lead to grade retention. Jackson (2012) explored the relationship between academic struggles in grades K-8 and the number of students who graduated from high school on time. “According to Jackson, “Students are typically retained for two reasons: lack of academic progress or social immaturity. Retention decisions are based on multiple factors including teacher or parent initiation, student assessment data, administrator recommendation or intervention team input” (p. 24). Jackson’s (2012) findings indicated that students who were retained in kindergarten through eighth grade were less likely to graduate on time.

**Grade retention and being overage.** Grade retention serves as a warning of dropping out of high school (Jimerson, et al, 2004). “There are two kinds of grade retention decisions—those made by an individual teacher, and those resulting from district policies on who should be retained” (Allensworth, 2005, p.342). Certain student characteristics make students more likely to be retained. Roderick contended that, “One of the most consistent findings in research on
school dropouts is that high school students who drop out are more likely than graduates to be overage for grade or to have repeated grades previous to high school” (Roderick, 1994, p.733).

The National Association for School Psychologists acknowledges these student groups with the highest risk factors for retention: male students, African American/Hispanic students, students with a late birthday, students with delayed development or attention problems, students living in poverty, students with behavior problems, students with reading problems, and English Language Learners (Jimerson, Woehr, Kaufman, & Anderson, 2004). A report from Hanover Research (2010) reports additional risk factors for retention, which includes poor attendance, being over age in a grade, having academic deficits, low self-esteem, transiency, and lack of parental involvement. (Hanover Research, 2010). Alexander, Entwisle, & Kabbani (2001) point to extensive absences, lack of parental support, lack of school engagement, and low family socioeconomic status as factors that impact student retention. The Public Policy Institute of California (2011) reported that boys were much more likely than girls to be retained.

“Retention policies are less about learning and more about maintaining the structure of schooling as it exists today. Some policies come with interventions that are meant to support education and not necessarily a high level of student learning” (Lynch, 2013, pg. 294). Retention also serves as future academic difficulty because of social issues created by being over age in a grade (Stearns, Moller, Blau, & Potochick, 2007). Jimerson, et al, (2004), concluded that being over age for a grade was directly linked to dropping out due to continual academic struggles and transition difficulties. Stearns, Moller, Blau, and Potochick (2007) agreed that these difficulties precipitate early school leaving. Roderick explained, “Students who experience retention may face an increased risk of school leaving because they do more poorly in school, or have lower self-esteem as a result of that retention.” (Roderick, 1994, p.730). Although the intervention strategy of retention can benefit the elementary school student, the strategy can reduce the same student’s chance of graduating from high school. Roderick (1994) noted that retention can also compound feelings of failure, thus fostering a negative outlook of school.

In a study conducted in 2013, Lynch described the alternatives to retention. “Alternatives to social promotion and retention include accountability, clear standards, early intervention, extended learning time, mentoring, parental involvement, and competent teachers” (Lynch, 2013, p.292). When collaboration occurs between school and home, the outcomes for student can produce positive results (2013). Lynch (2013) noted that as teachers observe performance
concerns, they can notify parents and related school personnel such as school counselors and develop strategies together to support student progress. School personnel have insight to strategies to support academic success and should position themselves to problem-solve with students and parents (2013). When considering alternatives to retention, Lynch (2013) suggested the student be included in the decision making process. “Factors for choosing an alternative strategy to retention must include the student and the nature of his or her academic struggles, social factors impacting the student, any emotional challenges, family stability, and the level of the student’s motivation towards academic success” (p. 298).

**Poverty.** According to Alexander, Entwisle, and Kabbani (2001), poverty impacted the likelihood of dropping out of high school. “How children come to think of themselves in the student role and how they enact that role are key mechanisms through which the context of school gets routed” (p.4). They noted that socioeconomic status influenced retention in the early grades, which relates to subsequent dropping out in high school. Factors such as intensive work commitments, community conditions, the duration, and depth of poverty and parental attitudes about school interfered with school continuation. The implication of these factors placed students in adult-like roles before they were ready to assume adult responsibilities, thus these students were accelerated into adulthood prematurely (Alexander, Entwisle, & Kabbani, 2001). The result for students in living in poverty was a fragile attachment to school and a taste for adulthood more often intriguing than life in school (Alexander, Entwisle, & Kabbani, 2001).

**Attitudes, self-perceptions, and school engagement and attachment.** Jimerson et al. (2004), identified lack of self-esteem as a risk factor for poor academic performance and dropping out of high school. The significance of peer perceptions is underscored by Roderick (1994), who explained, “Youths who are older than their classmates-either because they were retained or entered school late - may feel different than their peers and may feel discouraged” (p.730). According to Alexander, Entwisle, and Horsey (1997), “when a student’s experience fails to foster a sense of attachment or commitment to the school’s agenda, psychological barriers to dropout are weak” (p.88). Alexander, Entwisle, and Horsey (1997) noted the social and academic experiences of a student are crucial to student engagement, thus can influence retention and early school leaving. These students also have poor academic achievement and lack of engagement with students and teachers. All these behaviors can influence each other as a student makes the decision to drop out of school (Alexander, Entwisle, & Horsey, 1997).
“Engagement behaviors in school rival test scores and report card marks in forecasting eventual dropouts, beginning in first grade” (Alexander, Entwisle, & Kabbani, 2001, p.802). Peer and parental values influence academic achievement. Ford, Grantham, and Whiting (2008) found these attributes to be quite significant when studying the connection between student perceptions of school and what it means to do well in school. They argued that attitude is paramount to achieving academic success. “The achievement gap is not only social and behavioral, it is attitudinal. Educators and families must help change and improve achievement attitudes” (p.234). When deciding to retain a student as an option for poor academic performance, the attitude and social perceptions must be considered (Ford, Grantham, & Whiting 2008).

Christle, Jolivette, and Nelson (2007) determined schools could provide features to in the learning environment that could influence a student’s decision to drop out of high school. The 2007 study concluded that although school personnel cannot control factors and influences outside the school environment, the school could enact precautions designed to reduce the risks that occur outside the school. “Although school personnel cannot change factors that put youth at risk for dropping out, they may reduce risks by providing a safe learning environment; by setting social expectations; and by facilitating academic success, thus keeping students in school” (p.10). Christle, Jolivette, and Nelson (2007) described the significance of successful transitions from one learning environment to another. The authors determined that the type of learning environment a student transitions to can influence whether the student will transition successfully. “Students who are attached to supportive schools in which personnel recognize their individuality and care about and promote their successes are prone to complete high school and make successful transitions to adult life” (p.10).

**School environment and transitions between school levels.** The long-term effects of marginal learning environments directly influence student engagement and motivation, thus influencing the student perception of school (Ford, Grantham, & Whiting, 2008). When a student has a diminished view of school, student achievement suffers as a result. The school environment and school resources—or lack thereof—must be considered when analyzing student achievement and retention. “It can be argued that every high school reform initiative should include a focus on the middle to high school transition and successfully moving students through ninth grade” (Cohen & Smerdon, 2009, p.177). Studies also indicate that unsuccessful transitions
from elementary school to middle school and from middle school to high school are responsible for academic failure and early school leaving (Cohen & Smerdon, 2009).

**Other factors.** Teacher perceptions and behaviors are also significant when determining gender inequities and retention concerns. “Even small differences in the way boys and girls are treated can have lasting repercussions” (Entwisle, Alexander, & Olson, 2007, pg. 115). Entwisle, Alexander, and Olson (2007) determined in their study that teachers interact differently with boys than with girls. For example, boys are allowed to move around the room and call out more frequently than girls (Entwisle, Alexander, & Olson, 2007). Teacher perceptions of gender roles and abilities influence student achievement (Allensworth, 2005). In most cases, Allensworth (2005) noted, it is the teacher who recommends retention. When the retention is teacher initiated, the student is more likely to drop out of school (Allensworth, 2005). If the teacher demonstrates a bias toward a specific gender, such as grading girls higher academically than boys, the rate of academic performance will be distorted (Allensworth, 2005). Teacher perceptions influence student learning (Entwisle, Alexander, & Olson, 2007), and as a result (Allensworth, 2005), dominate student perceptions of learning, the academic environment, and the ability to be successful.

Parental attitudes can influence greatly student perspectives and experiences toward schooling (Jimerson, et al, 2004). Experiences at home and at school influenced not simply student attitudes, but student behaviors as well (Alexander, Entwisle, & Kabbani, 2001). Elementary school students are impacted greatly by the lack of familial support, because of their age and inability to care for themselves directly. Risk factors that influence a student’s decision to drop out of high school are well established such as lack of self-esteem (Jimerson, et al, 2004). Dropping out of high school influences a student in multiple ways. One key aspect is the individual’s income potential over their lifetime (Rouse, 2007). Additional concerns for students who drop out of high school are that they have poorer health rates than individuals who graduate and are more likely to engage in criminal activity (Rumberger, 2011).

**Interventions to Reduce Dropping Out**

If school leaders knew with certainty what causes a student to drop out of school, preventative measures could be implemented that would redirect the student from dropping out and assist in lowering the dropout rate. The implications in knowing with certainty the causes of
school dropouts would produce social and economic benefits to the school system and society, and the student (Fowler, 2013). Intervention programs and policies are documented and are enacted as early as kindergarten, yet students continue to choose to leave high school prior to completion (Stearns, Moller, Blau, & Potochick, 2007). Rumberger and Lim (2008) concluded that intervention begins in the early grades. The most significant intervention strategies are those that change the learning environment, such as program development, the learning experience, and the timing in which the intervention begins (Finn, Gerber, & Boyd-Zaharias 2005). Findings from Woo and Sakamoto’s (2010) study suggest that intervention strategies should support multiple groups of racial and ethnic minority students, as “Mexicans, other Hispanic whites, Native Americans, Laotians, and Cambodians, have similar or higher levels of at-risk conditions compared to African Americans” (p.123).

**Grade retention and social promotion as strategies.** According to a 2011 report from the Public Policy Institute of California examining the perceptions of elementary principals on retention patterns prior to third grade, “when retention does occur, students can make sizable gains in grade-level skills in the repeated year, and evidence suggests that these gains will benefit students in the next grade as well” (Public Policy Institute of California, 2011, p.16). These gains come with a price, as authors note retention required one additional year of state education spending for each retained student, and caused a student to graduate from high school one year later, thus delaying labor force entry (Public Policy Institute of California, 2011). Despite the gains made by the decision to retain the student, the student is ultimately overage for the current grade.

Retention was described as an intervention that educators and parents wanted to avoid but one that became necessary and more desirable than continued promotion and failure in subsequent grades (Public Policy Institute of California, 2011). Grade retention is a last-resort option and proponents argue that the extra time provided in repeating a grade can assist students in acquiring the skills needed to advance, either socially or academically. Opponents stress that negative impact retention amplifies issues of low self-esteem and impedes social development (Cannon & Lipscomb, 2011). The intervention strategy of retention has one considerable disadvantage; the student inevitably becomes overage for the grade, which is a risk factor that can determine the likelihood a student will drop out of high school (Roderick, 1994). Other studies underscore this potential risk. Youths who repeated grades were much more likely to
drop out than those who were never retained (Roderick, 1994). “Perhaps the most important difference in the dropout behavior of retained and promoted youths is that retained students were much more likely to make the decision to leave school at age 16” (p.734).

According to Roderick (1994), promoted students perform better than retained students. Utilizing the transcript and enrollment records from the seventh grade class of Fall River Public Schools in Fall River, Massachusetts, students were coded as dropouts, transfers, or graduates based on their date of graduation or withdrawal. The intention was to determine whether grade retention in the grades from kindergarten through sixth grade influenced school dropout by making students overage for grade (Roderick, 1994). Roderick concluded that, “35% of the initial cohort dropped out of school before receiving a high school diploma, 38% graduated, and 22% transferred to another school system” (p.734).

Hanover Research (2011) implemented a case study approach and examined two retention policies in Florida and Chicago. The state of Florida instituted a mandatory social promotion ban in 2002. The policy stated that third grade students must pass the reading FCAT, a statewide standardized test to be promoted to the next grade (Hanover Research, 2011). Results of this retention policy were favorable and reading scores improved, as the effects of being retained were beneficial when compared to students who were socially promoted.

The city of Chicago instituted a policy in 1996 to end social promotion by requiring math and reading testing at the end of third, sixth, and eighth grades. Chicago Public Schools chose the Iowa Test of Basic Skills to determine third grade reading and math skills. The result of these tests determined that retained students struggled again in their repeated year. Over 85% of third grade students in summer school were attending summer school for reading, as opposed to math. These findings indicated that the Chicago retention policy was not as successful as the Florida retention policy because gains from retention in elementary school tended to be temporary, and the benefits lost within the secondary issues that developed as a result of the retention, such as transition difficulty, low self-esteem, and overage for a grade. As educational reform shifts back and forth, the dilemma of grade retention and early school leaving remains a constant debate, as retention does not benefit all students.

**Examining disciplinary procedures.** School disciplinary practices clearly can have unintended consequences. Many states, such as Texas, are experiencing a paradigm shift toward criminalizing student misbehavior and outsourcing the consequences for student misconduct
from the principal's office to the courts (Fowler, 2011). School districts are faced with a shift from zero tolerance policies to more situational based initiatives. It is this variation that influences student discipline because as students move from school to school, and even from classroom to classroom, the inconsistency of disciplinary practices shape the outcome of the consequence for the behavior. Often the student finishes up in the judicial system and a juvenile offender. The pattern of poor behavior begins in elementary school, and as referral rates between school districts in Texas suggest, where a student attends school and not the nature of the offense, determines the likelihood of disciplinary action (2011).

In a 2013 study, Irby explored the “net-widening approach” to school discipline. “Net-widening of school discipline results when schools expand rules, control measures, and regulation mechanisms to create the likelihood that a student will be found in violation of some aspect of the established rules even if her or his behaviors do not change” (Irby, 2013, p. 202). An example of these expanded rules are those intended to punish students less severely by redirecting nominal behaviors such as teasing, gum-chewing, and dress code violations. The object is to redirect positively these low-level behaviors before they escalate into more severe behaviors. Irby contended that “school discipline researchers must embrace innovative research methodologies to answer the complicated question of how to make sure schools are safe places without unfairly punishing and excluding youth in the process (p. 216). By creating safe learning environments that employ innovative discipline policies, student perceptions of school can strengthen and those who are struggling with the decision to drop out may in fact choose to remain in school.

In a study conducted by Pane, Rocco, Miller, and Salmon (2014), it was determined that discipline goals developed by the teacher influenced the culture and relationships in the classroom. Pane, et al. (2014) surmised that teachers could determine the occurrence of discipline issues in the classroom based on the types of expectations present in the classroom and the student input and agreement of the expectations. “Teachers who rarely wrote referrals did not expect passivity from students. The teacher who always wrote referrals always expected passivity from students. Teachers who frequently wrote referrals encouraged competition and passivity, which gave students mixed messages about classroom expectations” (p.322). In addition, teachers who wrote numerous referrals tended to believe that students were bad and not able to change (2014). Pane, et al. (2014) concluded that when teachers were provided
professional development opportunities to rethink discipline goals before interacting with students, the teachers did not need to rely on exclusionary discipline practices.

**Reduce truancy.** Research points to the connection between chronic absences from school and dropping out of school. Zhang, et al. suggest, “Given the serious consequences of truancy offenses, there is a critical need for effective intervention programs to prevent or reduce truancy cases” (p. 237). Zhang, et al. contended that programs needed to be proactive in nature and target factors that contribute to truancy so that such behavior can be prevented (Zhang, et al. 2010). When a student is chronically absent from school or truant, quite often other behaviors are involved. In their 2010 study, Zhang, et al. determined that students who were truancy offenders ultimately had more incarcerations and more probations than other offenders (Zhang, et al.2010). They argued, “Given the serious consequences of truancy offenses, there is a critical need for effective intervention programs to prevent or reduce truancy cases” (p.237). The connections between students who are truant and students who have substance abuse issues are that they both dislike school considerably (Flaherty, Sutphen, & Ely 2012).

**Student engagement.** Lack of student engagement can cause academic disengagement, which can lead to dropping out of school. For example, “When a student’s experience fails to foster a sense of attachment or commitment to the school’s agenda, psychological barriers to dropout are weak” (Alexander, Entwisle, & Horsey, 1997, p.88). The social and academic experiences of a student are crucial to student engagement, thus can influence retention and early school leaving. These students also have poor academic achievement and lack of engagement with students and teachers. All these behaviors can influence each other as a student makes the decision to drop out of school. The authors contended, “Engagement behaviors in school rival test scores and report card marks in forecasting eventual dropouts, beginning in first grade” (Alexander, Entwisle, & Kabbani, 2001, p.802).

**Scheduling methods.** Small class size is one of many scheduling practices used in the early grades that has influenced student achievement. A 2005 study conducted by Finn, Gerber, and Boyd-Zaharias concluded that small class size in the early grades influences the likelihood of graduating from or dropping out of high school. The results demonstrated that achievement test data for students in grades four, six, and eight were strongest for those who entered kindergarten or first grade in small classes and remained in small classes for at least three years (Finn, Gerber, & Boyd-Zaharias, 2005). The authors contended that future research should explore the
connections between early interventions, such as smaller class size in other populations and demographics (Finn, Gerber, & Boyd-Zaharias, 2005). There is also a need to explore small class size in connection with other programs, such as intensive remedial math and reading programs (Finn, Gerber, & Boyd-Zaharias, 2005). When students spent four years in a small class in kindergarten through third grade, a direct association was made to their success and likelihood of graduating from high school (Finn, Gerber, & Boyd-Zaharias, 2005).

“Block scheduling has non-academic advantages, including a calmer school atmosphere, better discipline, and improved student attitudes (Gullatt, 2006, p.4). Gullatt (2006) described block scheduling as “a form of scheduling in which classes meet for a longer than the traditional period of time daily. Some classes may meet on fewer than the traditional number of days during the school year depending on the length of the class day” (p.13). In addition, Childers and Ireland (2005), described some the goals of block scheduling as to reduce the number of early release periods, balance the number of academic and elective courses in a semester, and to reduce class size. One advantage of block scheduling is that due to the four classes taken each semester instead of the seven to eight taken in non-block scheduled formats, students have less homework (Childers & Ireland, 2005). Block scheduling can also support at-risk students, allowing them to focus more on academics because they have fewer courses. For example, “If students know that they can just concentrate on English in one semester, they will get to do something different in the next semester” (p.48).

Predictive tools. Early warning systems (EWS) are predictive tools that rely on data housed at the school to support and determine patterns in student achievement (Smith, 2013). Early warning systems tools utilize school based data, such as attendance and discipline referrals to predict which students are at risk for dropping out or failing (Smith, 2013). In addition, early warning systems examine school climate issues that may influence a student’s decision to drop out (2013). One of the most telling predictors evaluated in early warning systems is student progress in ninth grade, beginning in the first semester (2013). In 2009, the Virginia Department of Education implemented the Virginia Early Warning System (VEWS), in order to track students who have a high probability of not graduating from high school with a Standard or Advanced Studies diploma (Virginia Department of Education, 2013). The VEWS tool utilizes data key indicators, such as attendance, course performance, and credits earned (Smith 2013). The Virginia Department of Education applies the results of the indicators found in VEWS to
support the Graduation and Completion Index (GCI) for each school. These efforts assist schools as they provide intervention strategies for student in danger of dropping out of high school (Virginia Department of Education, 2013).

**Summary of Research**

This literature review examined student dropouts and the risk factors related to the decision to drop out of high school. These factors originate as early as kindergarten and include poor attendance, retention, discipline and behavior problems, as well as other factors that influence the decision to drop out, such as attitudes, engagement and poverty. Beginning with retention as early as kindergarten, a student’s school experience is altered (Roderick, 1994). There are numerous factors such as race, poverty, and discipline that can influence the rate of retention and dropping out. The National Association for School Psychologists acknowledges male students, African American/Hispanic students, students living in poverty or a single-parent household, students who have parents who are less involved with their education, students who have changed schools frequently, students with behavior problems, and English Language Learners as those with the highest risk factors for retention (Jimerson, Woehr, Kaufman, & Anderson, 2004).

Absenteeism is a behavior that signifies school performance and is a predictor of high school completion. Students are absent from school for a variety of reasons, such as illness, lack of parental support, poor peer relationships, lack of engagement, and a dislike of school. Chronic absenteeism leads to truancy, which has substantial implications for not only the student, but also society as well. “The failure of students who attend school is a systemic problem that costs our society greatly, both directly and indirectly” (Flaherty, Sutphen, & Ely, 2012, p.201). Research indicates that students who drop out of high school have less earning potential than students who graduate from high school (Flaherty, Sutphen, & Ely, 2012). When a student is chronically absent from school or truant, other behaviors such as drug abuse are involved.

Poor behavior and discipline problems not only exacerbate a negative school experience for students, these problems can also involve the juvenile justice system and ultimately prison. “School discipline practices can have unintended consequences. Dropout and academic failure put youth on a path to future criminal activity and justice system involvement where whole communities pay the price” (Fowler, 2011, p.19). Discipline issues that originate in elementary
school influence school performance and engagement through high school. These issues are regularly impacted by peer and parental relationships, as relationships and attitudes toward school normalize student achievement. Student perceptions of school and what it means to do well in school are directly linked to behavior, either positive or negative. While there may be short-term gains for students- regardless of race or gender- in academic ability and cognitive skills, one long-term concern is the consequence that the student is overage for the grade (Roderick 1994). Being overage for a grade can influence peer relationships and the perception of the school experience. The short-term gain of retention in elementary school while meaningful at inception can have a long lasting negative connotation to the student thus; the decision to drop out of high school.

The literature review also discussed various intervention strategies in place to reduce the drop-out rate. Rumberger and Lim (2008) concluded that intervention begins in the early grades, and the most significant intervention strategies are those that change the learning environment, such as program development, the learning experience, and the timing in which the intervention begins (Finn, Gerber, & Boyd-Zaharias, 2005). The Virginia Early Warning System is a system designed to target those students who are in jeopardy of dropping out by supporting schools in the analysis of those targeted areas that trigger drop out potential (Virginia Department of Education, 2013). These targeted areas include attendance, course performance, and credits earned (Smith, 2013). Smith concluded (2013) if the targeted areas that trigger drop out potential are countered with intervention strategies designed to prevent further declines in student performance and graduation rates, the possibilities for students to graduate on time can be dramatically improved.
Chapter 3
Methodology

Purpose of the Study

As outlined by the Virginia Board of Education in 2009, high schools must meet the Graduation Composite Index (GCI). In order for schools to meet the benchmark status, schools must earn a minimum score of 85 for full accreditation. Schools that do not meet this benchmark will be placed under academic review by the state. During the 2015-2016 school year, high schools will receive “accredited with warning” status if the GCI drops below 85. The (GCI) awards full credit to schools with students who earn a diploma, considering students to be on-time graduates when they graduate within the four year time period of being a first-time ninth grade student. For example, a school receives 100 points for every student who earns a board recognized diploma. The school earns 75 points for every student who earns a General Education Diploma (GED). 70 points are awarded to the school for each carry-over student remaining in school but not graduating within four years. 25 points are awarded to the school for each student who earns a Certificate of Program Completion. In order to determine the GCI for a school, the total number of points earned by each student is added together and divided by the total number of students. The quotient is the school’s Graduation Completion Index (GCI). Virginia high schools are expected to meet the GCI benchmark status, thus greater accountability for academic success. As a result, there is a need to investigate the type of strategies used by school leaders that have met the benchmark. One solution to meeting the demands of the Graduation Composite Index is improving or changing how schools implement intervention strategies that address student needs (Virginia Department of Education, 2013).

The purpose of this study was to investigate the intervention strategies implemented by a school receiving the status of “warned” for the benchmark of the Graduation Completer Index (GCI) in the school year 2011-2012 and subsequently maintaining “meets benchmark” status for the next two school years 2012-2013 and 2013-2014. The study investigated how one school implemented strategies that influenced a student’s decision to drop out of high school.
Research Design and Justification

This qualitative case study of one school’s journey investigated intervention strategies that influenced a student’s decision to drop out of high school. The study explored how the school demonstrated improvement from “warning” status in the GCI by conducting interviews of the school principal, school counselor, school transition coordinator, and two teachers. Merriam (2009) wrote that stories told by people are often a popular source of data in qualitative research. The narrative stories told by school leaders who played a significant role in improving GCI status will serve to explain the phenomenological events that occurred as the school dutifully met the benchmark, thereby transforming the school as one with accreditation. Interviews of school personnel related to the improvement of the school’s GCI reconciled the events that occurred at one Virginia school that received “warning” status of the GCI in the 2011-2012 school year yet made sufficient progress and received “meets benchmark” status in the 2012-2013 school year and the 2013-2014 school year.

Research Questions

The following research questions were investigated:

1. According to school personnel, what intervention strategies between 2011 and 2014 were used after the school received the status of “warned” for the benchmark of the GCI in the school year 2011-2012?
2. According to school personnel, how did attendance, retention, and discipline influence intervention strategies? What other elements and data sources were considered?
3. According to school personnel, what other factors influenced the GCI value of the school from 2011-2012 to 2013-2014?

Site/Sample Selection

The study occurred in one Virginia high school. The school was selected due to the GCI status. The school was designated based on the GCI performance standard for the 2011-2014 school years. The school was placed on “warning” for failing GCI scores in the 2011-2012 school year, yet made sufficient progress to receive “meets benchmark” status in the 2012-2013 school year and the 2013-2014 school year. Of the Commonwealth of Virginia’s 326 high
schools, this school is one of four high schools that have made this type of progress during these school years. The other three high school divisions either declined to participate in this study or did not respond. Fourteen of the 326 high schools did not meet the requirements to receive “meets benchmark” status thus remained at “warning” status. As such, the interventions and practices implemented in this school are worthy of examination, given that the school demonstrated measurable, positive progress in recent years. Participants were asked identical questions to investigate the intervention strategies used to address the Graduation Composite Index.

**Data Collection and Gathering Procedures**

Using the qualitative method of research, the researcher investigated through the use of interviews the intervention strategies implemented by a school receiving the status of “warned” for the benchmark of the Graduation Completer Index (GCI) in the school year 2011-2012 and subsequently maintained “meets benchmark” status for the next two school years 2012-2013 and 2013-2014. The researcher interviewed the school principal in addition to interviewing key personnel deemed by the principal to be instrumental in the process.

Upon successful completion of prospectus, the researcher requested approval from Virginia Tech’s Institutional Review Board (IRB) to conduct the study to ensure compliance with high standards of ethics. The researcher’s IRB certificate is found in Appendix A. Once approval was received from the IRB (see Appendix B), the researcher began the study. The researcher requested permission from the superintendent of the selected school district to conduct the study. Permission was granted to conduct the study, and the researcher sought consent of the participants of the school to participate in the study. Upon obtaining informed consent, the researcher contacted the school principal and set a time for the interviews. Once the participant interview dates were set, the researcher went to the school site and conducted interviews in person. A time span of six months was needed to seek approval from the school division, receive acceptance of participation from the school, and schedule a date for interviews. Two dates had to be scheduled, as the first one was cancelled due to an incident at the school.
Instrument Design

A detailed interview protocol served as the data collection instrument for the participant interviews. According to Merriam, “Having fewer broader questions unhooks you from the interview guide and enables you to really listen to what your participant has to share, which in turn enables you to better follow avenues of inquiry that will yield potentially rich contributions” (2009, p.104). Thus, participant interview questions were open-ended and built upon the participant’s answers. The goal was to have the participant reconstruct the intervention initiatives that occurred at the high school in attempts to improve the GCI at inception. The interview was organized around the following questions:

1. During the 2011-2012 school year, how did your school examine the patterns of students at risk of dropping out of high school?
2. After you examined these patterns, what were your next steps or actions?
3. What intervention strategies were used to support students at-risk of dropping out?
4. Tell me about the people involved in executing the intervention strategies.
5. Tell me how student attendance influenced your intervention strategies.
6. Tell me how student retention influenced your intervention strategies.
7. Tell me how student discipline influenced your intervention strategies.
8. Tell me how the school community and parents support intervention strategies.
9. Describe how you kept track of students at risk of dropping out of high school.
10. How do you define the current status of your school’s graduation rate?
11. What types of challenges do you foresee in maintaining the Graduation Composite Index benchmark status?
12. What else would you like to share about your school’s progress in maintaining the Graduation Composite Index benchmark status?

Instrument Validation

Five school personnel were interviewed: the principal, transition coordinator, school counseling coordinator, and two teachers. Interviews were member checked, transcriptions were coded, and a reflexive journal was maintained in efforts to record decisions made along the process of the study as well as reflections regarding the decisions. The results from interviews were compared to determine results.
Data Treatment

In efforts to maintain confidentiality and limit bias, participants were be coded by letter and number. For example the principal was coded as PA, for participant administrator. Two teachers were interviewed, thus receiving the code PT 1 and PT2. The school transition coordinator was coded as PTC and the school counselor was coded PC.

Data Management

The researcher upheld confidentiality and all information was stored in a secure location. All digitally recorded interviews were stored as a password protected file on the researcher’s computer. Typed transcription files and coding workups were stored in a password protected file on the researcher’s computer. All research was destroyed after the researcher’s successful defense examination.

Data Analysis Techniques

Grounded theory was applied to compare interviews and the reflexive journal was maintained by the researcher. All interviews were transcribed by the researcher. Prior to transcribing the interviews, the researcher listened to each interview while following along in the reflexive journal. Coding was used to organize ideas as common themes emerged. The researcher read all transcripts twice before coding began. During the third reading, the researcher began hand coding the transcriptions. Merriam (2009) described open coding as being open to anything possible in transcriptions. The researcher noted within the transcript significant points that were repeated and subsequently coded and grouped these points into like concepts. The concepts became the basis for the categories that created the theory, thus supporting the study.

Timeline

Upon successful defense of prospectus in the fall of 2014, the researcher submitted an application to IRB within two weeks. Within one week of obtaining permission to conduct research from IRB, the researcher contacted the designated school districts for permission to communicate with each school. By the end of October 2014, the researcher received confirmation of one school district to participate in the study. The other three divisions either
declined or did not respond. The interviews were held in April 2015, and data analysis and summary occurred from April to June, in preparation for a July 2015 final defense.

**Methodology Summary**

The researcher conducted a qualitative study by gathering data from a high school in the Commonwealth of Virginia that demonstrated improvement from “warning” status in the GCI. The data was gathered through interviews of members of school personnel instrumental to the intervention process. The data will be reported in Chapter Four, and the findings, implications, and recommendations for future research will be shared in Chapter Five.
Chapter 4
Research and Data Analysis

The purpose of this study was to investigate the intervention strategies implemented by a school receiving the status of “warned” for the benchmark of the Graduation Completer Index (GCI) in the school year 2011-2012 and subsequently maintaining “meets benchmark” status for the next two school years 2012-2013 and 2013-2014. Five school personnel were interviewed: the principal, transition coordinator, school counseling coordinator, and two teachers. Interviews were member checked, transcriptions were coded, and a reflexive journal was maintained. A detailed interview protocol of open-ended interview questions provided participants the opportunity to expand their answers into a dialogue. This urban school of approximately 750 students is located in a metropolitan area of Virginia. The school was selected for this phenomenological qualitative case study based on its GCI scores for the 2011-2014 school years.

Research Questions

The study was based on three research questions, with various sub associated interview questions asked of participants.

Research Question One. According to school personnel, what intervention strategies between 2011 and 2014 were used after the school received the status of “warned” for the benchmark of the GCI in the school year 2011-2012?

a) During the 2011-2012 school year, how did your school examine the patterns of students at risk of dropping out of high school?

b) After you examined these patterns, what were your next steps or actions?

c) What intervention strategies were used to support students at-risk of dropping out?

Research Question Two. According to school personnel, how did attendance, retention, and discipline influence intervention strategies? What other elements and data sources were considered?

d) Tell me about the people involved in executing the intervention strategies.

e) Tell me how student attendance influenced your intervention strategies.

f) Tell me how student retention influenced your intervention strategies.

g) Tell me how student discipline influenced your intervention strategies.
h) Tell me how the school community and parents support intervention strategies.

i) Describe how you kept track of students at risk of dropping out of high school.

Research Question Three. According to school personnel, what other factors influenced the GCI value of the school from 2011-2012 to 2013-2014?

j) How do you define the current status of your school’s graduation rate?

k) What types of challenges do foresee in maintaining the graduation rate?

l) What else would you like to share about your school’s progress in maintaining the Graduation Composite Index benchmark status?

Coding

Participants were assigned the following codes:

- “PA” designates the principal of the school.
- “PC” designates the School Counseling Coordinator of the school.
- “PTC” designates the Transition Coordinator of the school.
- “PT1” and “PT2” designate teachers working with students in the school.

Analysis

Research Question One. According to school personnel, what intervention strategies between 2011 and 2014 were used after the school received the status of “warned” for the benchmark of the GCI in the school year 2011-2012? In response to research question one, three interview questions were asked.

The participants were first asked to indicate, during the 2011-2012 school year, how their school examined the patterns of students at risk of dropping out of high school. In response, participants indicated that they monitored attendance and grades in efforts to assist students stay on track for graduating. Participants spoke of constant attention to student performance as an intervention strategy to supporting graduation status. Teacher participants spoke of providing constant opportunities for students to make-up work. For example, participant PA stated, “We looked at attendance, academics, and discipline because we knew those entities are tied together. If students are not on grade level, continue to make the wrong decisions, and don’t perform in class, they are at risk of dropping out (PA, lines 15-20). Testing information, such as Standards of Learning (SOL’s) results, class grades, and course credits were evaluated. PTC stated,
“Taking age into consideration, we also looked at where students were in terms of SOL’s, course credit, and diploma type (PTC, lines 16-20).

In response to the second interview question regarding what were their next steps or actions, the participants indicated that the next steps included conversations about progress with students and parents, credit recovery options, and interventions with student attendance. The intervention strategies used to support students at-risk of dropping out discussed by participants included working with individuals with attendance issues on a case by case basis, providing credit recovery restart opportunities, and providing flexible discipline for student infractions.

When the patterns for dropping out were established with students, PT1 referenced numerous conversations with students about the fate of students who drop out of high school. Those conversations included research studies regarding students who dropped out of high school. “At the start of every year, my students read articles about the dropout rate and what happens to students who do not have a high school diploma” (PT1 lines 21-24). PT1 also spoke of home visits for students who were not attending school, as an intervention strategy. Parents are also part of the conversation. Teacher and administrative participants spoke of positive results of home visits to students in danger of dropping out. Saturday school is also used as an opportunity for students to complete assignments and receive tutoring from teachers. This is an example of opportunities within Project Graduation which each participant referred to when discussing strategies for supporting potential dropouts. During Saturday school, students are also fed breakfast and lunch, which one participant stated was one of the most important reasons students come to Saturday school. “I can understand why some of them come to school so angry. They are hungry. It impacts their behavior. I have gotten to the point that I don’t even ask them if they are hungry, I just offer them food” (PT2, lines 124-130). Once parents, students, and school personnel met to discuss performance status, intervention strategies were put in place on an individual basis.

Intervention strategies were provided to students that addressed individual learning needs. For example, students who were not college bound were offered the opportunity to change their diploma status, thus altering the requirements for graduation. “Graduation requirements need to be realistic. If a student wants to be doctor but is working on a modified or standard diploma, we suggest jobs in the medical field that do not require the academic work for becoming a doctor” (PTC, lines 42-47). The shared goal for school personnel was for students to
graduate from high school with the ability to either attend college or maintain an entry-level job. This goal was shared by business partners who work with the school to impart to students certain job expectations for entry level work. Other intervention strategies included close monitoring of academic progress, the use of in-school suspension for non-threatening offenses, and allowing students to repeat courses failed in the first semester in the second semester. The behavior patterns, actions, and strategies are shown in table two.

Table 2

*Patterns of Students at Risk of Dropping out and Intervention Strategies*

<table>
<thead>
<tr>
<th>Participant</th>
<th>Patterns of Students at Risk of Dropping Out</th>
<th>Actions Taken After Examining Patterns</th>
<th>Intervention Strategies</th>
</tr>
</thead>
<tbody>
<tr>
<td>PA</td>
<td>Attendance, retention, and discipline</td>
<td>Continuous planning meetings that included school counseling, parents, administration, truancy officer, teachers, and students</td>
<td>Monitor interim grades and report cards, monitor behavior, utilize in-school suspension as often as possible in lieu of out of school suspension, use of Project Graduation and tutoring, repeat failed courses in the second semester</td>
</tr>
<tr>
<td>PC</td>
<td>Attendance, students at risk of being retained, and discipline</td>
<td>Goal setting meetings with students and parents</td>
<td>Monitor grades and discipline, provide tutoring for SOL testing</td>
</tr>
</tbody>
</table>

(continued)
<table>
<thead>
<tr>
<th>Participant</th>
<th>Patterns of Students at Risk of Dropping Out</th>
<th>Actions Taken After Examining Patterns</th>
<th>Intervention Strategies</th>
</tr>
</thead>
<tbody>
<tr>
<td>PTC</td>
<td>Age, current student progress, and diploma status</td>
<td>Meetings with parents and students to discuss career goals</td>
<td>Provide career and vocational based program offerings, change diploma status when applicable</td>
</tr>
<tr>
<td>PT1</td>
<td>Attendance and grades</td>
<td>Meetings with parents, school counseling, and the truancy officer</td>
<td>Home visits to students with attendance and retention concerns, allow students to make up work after school and on Saturday, teach students in second semester courses failed in the first semester</td>
</tr>
<tr>
<td>PT2</td>
<td>Attendance, hunger, and circumstances at home</td>
<td>Meetings with students and parents, inform administration and school counseling with students are not performing</td>
<td>Provide continuous opportunities for students to make up work during planning period, after school, and on Saturday</td>
</tr>
</tbody>
</table>

In Table 2, the recognized patterns examined by school personnel that were considered to be at-risk were attendance, retention, discipline, diploma status, hunger, and circumstances at home. As administration and school counseling organized the current list of students in danger of dropping out, meetings with parents, teachers, and students were arranged in order to explore strategies to assist students in graduating. The intervention strategies included providing students the opportunity through Project Graduation to make up work during school, after school, and on Saturday. In addition, diploma status was evaluated, vocational opportunities were explored, and
home visits were made. Table 3 demonstrates the frequency of participant responses regarding the patterns of students at risk of dropping out.

Table 3

Participant Responses: Patterns of Students at Risk of Dropping Out

<table>
<thead>
<tr>
<th>Patterns of Students at Risk of Dropping Out</th>
<th>PA</th>
<th>PC</th>
<th>PTC</th>
<th>PT1</th>
<th>PT2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Attendance (5)</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Retention (4)</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Discipline (5)</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Diploma Status (1)</td>
<td>✓</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hunger (2)</td>
<td></td>
<td>✓</td>
<td>✓</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Circumstances at home (1)</td>
<td></td>
<td></td>
<td></td>
<td>✓</td>
<td></td>
</tr>
</tbody>
</table>

Table 3 reveals that participants agreed that attendance, retention, and discipline were indicators of patterns for students at risk of dropping out of high school. The transition coordinator stated that diploma status was a concern for students at risk of dropping out, as diploma status could act as a barrier for certain students in danger of not graduating. Teacher participants stated that hunger was a pattern for students at risk of dropping out, as hunger during the school day prevented students from being able to focus, thus being able to achieve. Circumstances at home were considered a pattern, such as a teen pregnancy, work schedules, economic hardships, and even domestic abuse. Table 4 demonstrates the actions taken after examining the patterns of students at risk of dropping out.
Once participants determined students as risk of dropping out of school, meetings occurred to address the concerns, as indicated in Table 4. The meetings began with the teacher and counselor, then included administration and parents. Participants stated that goal setting meetings were crucial to forming a plan for students to support graduation efforts. During these meetings student centered goals were created for each student at risk of dropping out. In addition to goal setting meetings, the school counselor and school transition coordinator described how student grades and academic standing were monitored on a weekly basis. Table 5 demonstrates the intervention strategies implemented to support the patterns of students at risk of dropping out.

Table 5 demonstrates how Project Graduation and grade monitoring were described as consistent strategies used to support students catch up on work missed and complete assignments. In addition the four by four scheduling model provided students the opportunity to repeat courses failed in the first semester in the second semester. This scheduling method was described as the intervention strategy that lowered retention rates, as students were able to repeat the failed course within the same school year. While home visits were not discussed as an action by the principal, school counselor, or transition coordinator, the teachers felt strongly that home visits strengthened communication between parents and the school, thus supporting student academic progress. In school suspension was discussed by participants as a strategy that supported student progress because students kept in school for minor infractions instead of being suspended.

### Table 4

**Actions Taken After Examining the Patterns of Students at Risk of Dropping Out**

<table>
<thead>
<tr>
<th>Actions taken by school personnel after examining the patterns of students at risk of dropping out</th>
<th>PA</th>
<th>PC</th>
<th>PTC</th>
<th>PT1</th>
<th>PT2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Goal setting meetings with school personnel, students, and parents (5)</td>
<td>√</td>
<td>√</td>
<td>√</td>
<td>√</td>
<td>√</td>
</tr>
<tr>
<td>Analysis of student grades and academic progress (2)</td>
<td>√</td>
<td>√</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Table 5

*Intervention Strategies Implemented to Support Students at Risk of Dropping Out*

<table>
<thead>
<tr>
<th>Intervention Strategies Implemented to Support Students at Risk of Dropping Out</th>
<th>PA</th>
<th>PC</th>
<th>PTC</th>
<th>PT1</th>
<th>PT2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Monitor grades (5)</td>
<td>√</td>
<td>√</td>
<td>√</td>
<td>√</td>
<td>√</td>
</tr>
<tr>
<td>Project Graduation- after school or Saturday school (5)</td>
<td>√</td>
<td>√</td>
<td>√</td>
<td>√</td>
<td>√</td>
</tr>
<tr>
<td>Provide vocational or career based opportunities (1)</td>
<td>√</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Conduct home visits (2)</td>
<td>√</td>
<td>√</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Four by four schedule to allow students to repeat a course failed in the first semester in the second (5)</td>
<td>√</td>
<td>√</td>
<td>√</td>
<td>√</td>
<td>√</td>
</tr>
<tr>
<td>Utilize in-school suspension (3)</td>
<td>√</td>
<td>√</td>
<td>√</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Research Question Two. According to school personnel, how did attendance, retention, and discipline influence intervention strategies? What other factors and data sources were considered?** In response to research question two, five interview questions were asked. Participants were first asked to determine the people that were involved in executing the intervention strategies. In response to interview question one associated with research question two, participants indicated multiple individuals, such as teachers, parents, school counseling, administration, and the truancy officer, were involved in executing intervention strategies. PA stated, “It’s the whole school staff really. If you want to have something put in place to support students, you must include everyone in the process” (PA, lines 136-139). Community members, business leaders, and rehabilitation service providers were also mentioned as entities that
supported intervention strategies. As students left high school and joined the work force or entered college, these stakeholders would be impacted by the graduation success rate and the choices made by students.

Consistent communication regarding daily attendance was described by each participant. Teacher participants stated they were considered the first individuals expected to document attendance concerns. They described a set protocol by school administration of taking consistent attendance and making daily phone calls home to students who were absent from school. Teacher participants referenced the consistent support of administration, school counseling, and the truancy officer. PT1 stated, “Teachers are supposed to note the pattern of absences and contact the parent. We contact the parent or attendance clerk to see if there was a field trip, and then the truancy officer if we see a pattern of absences” (PT1, lines 83-89). The individuals tasked with monitoring attendance worked together to create a fluid list of students with chronic attendance issues, and worked as a team to address ways to support the students.

The third interview question asked of participants under research question two was to tell how student retention influenced intervention strategies. Teacher participants described classroom strategies dedicated to reducing retention, such as expecting students to complete all assignments for credit without the use of zero’s for work not submitted. If students completed the work, they received credit, regardless of when the work was submitted. Other strategies described by teacher participants that influenced retention included Saturday school, after school tutoring, and tutoring during a student’s elective classes. If a student was failing a course required for graduation, such as English or Math, the student would be pulled from their elective class to receive academic support in the course required for graduation. Participants described a team emphasis on reviewing grades and programmatic offerings available to students. PT2 stated, “Students have the opportunity to take a second semester class they failed in the first semester. Since we are the four by four model, students can get eight credits in a school year, and that helps them graduate” (PT2, lines 98-102). The four by four scheduling method was consistently shared by participants as an intervention strategy used to prevent student retention. Each participant described this model as means for keeping students on track for graduating on time. Students are not only allowed to repeat courses failed in the first semester; they can also take courses that will allow them to catch up to the grade in which they are expected to graduate. One example provided by participant PA was allowing a student the opportunity to take English
in the first semester, and take English 12 in the second semester, thereby being considered a certified senior in time for graduation.

The fourth interview question asked participants to tell how student discipline influenced intervention strategies. Participants shared a variety of strategies, from behavior contracts, home visits, the use of mentors, and in-school detention in place of out of school suspension. Each consequence for an infraction was evaluated on a case by case basis. PC stated, “We begin with student contracts to help keep them focused. Some have outside counselors that check on them daily. Others have faculty mentors assigned to them” (PC, lines 69-72). Participants consistently spoke of discipline in terms of intervention strategies. “We do what we need to do to keep student discipline on track so they can be academically successful and not put out of school. Teachers talk to students, and then the student is referred to the counselor or the administrator” (PTC, lines 159-162). The central goal described by all participants was that all staff come together to support students, beginning one student at a time. While it is imperative to maintain school safety, participants discussed the importance of teaching students how to make better choices. “Our students have anger issues. We help those students establish coping skills so they can make the right decision. The absolutes are fighting and drugs, but with skipping and disrespect, we try to use in-school detention instead of suspension”. (PA, lines 214-219). In most all circumstances however, participants overwhelmingly stated that the school environment was a safe one, and discipline issues that began in the classroom were best addressed by the teacher.

The fifth interview question asked of participants was to describe how the school community and parents support intervention strategies. The responses from teachers consistently described communication with parents as difficult with infrequent positive outcomes. “Parents come to school when they don’t agree with discipline their child has received, or when their cell phone has been confiscated. I have never had a parent contact me because they were upset about their child’s grades” (PT2, lines, 140-144). Teachers shared conversations held with students in which they described little to no supervision at home, and little to no parental interest in academic progress. PT1 stated, “I make home visits, and when I do, I most often speak with grandparents, because the parents are not around. The grandparents tend to be a lot stricter on the kids” (PT1, lines 221-224). Community members and business leaders tended to be very involved in supporting student progress. Class sponsored meetings are held regularly where business leaders and community members are invited to speak with students about life after high
school and career expectations. Participants agreed that preparation for life after high school was a crucial element in supporting students graduate on time. In order to prepare students for entry level jobs after high school, community members and business leaders frequently mentored students throughout their high school career.

The sixth interview question was to describe how the school tracked students at risk of dropping out of high school. The graduating cohort is monitored weekly, beginning in September. Students who transfer to other schools are monitored closely, to make sure they enrolled in a new school. For current students, matriculation status and graduation status are monitored weekly by school counseling and administration. PC stated, “Counselors keep track and target those students who are in danger of not graduating. We share the information with administration on a weekly basis” (PC, lines 90-93). In order to maintain accurate information about student progress, teachers submit daily attendance to the attendance clerk and inform counselors and administration when there is a concern regarding grades or attendance. Table 6 reflects how retention, attendance, and discipline influenced intervention strategies, and the people involved in the process.

Table 6

<table>
<thead>
<tr>
<th>Participant</th>
<th>People involved in executing intervention strategies</th>
<th>How attendance influenced intervention strategies</th>
<th>How retention influenced intervention strategies</th>
<th>How discipline influenced intervention strategies</th>
</tr>
</thead>
<tbody>
<tr>
<td>PA</td>
<td>The whole school staff</td>
<td>Students cannot pass if they are not in school. Monitored daily. Parents notified of concerns, truancy officer notified</td>
<td>The four by four schedule allows students to repeat a class failed in the first semester in the second semester</td>
<td>Coping skills are provided, in-school suspension in lieu of out of school suspension whenever possible</td>
</tr>
</tbody>
</table>

(continued)
<table>
<thead>
<tr>
<th>Participant</th>
<th>People involved in executing intervention strategies</th>
<th>How attendance influenced intervention strategies</th>
<th>How retention influenced intervention strategies</th>
<th>How discipline influenced intervention strategies</th>
</tr>
</thead>
<tbody>
<tr>
<td>PC</td>
<td>Counselors, teachers, administrators, parents, and students</td>
<td>Student attendance is monitored on a daily basis. Students with attendance issues are placed on contracts and referred to the truancy officer</td>
<td>The four by four schedule helps students stay on track for graduation and helps them repeat failed courses in the same school year</td>
<td>Students with behavior concerns must sign a behavior contract. Counselors from outside agencies are involved when necessary, and students are assigned mentors, such as teachers</td>
</tr>
<tr>
<td>PTC</td>
<td>Outside agencies, such as the Department of Aging and Rehabilitation Services, college counselors, school counselors, administrators, teachers, parents, and students</td>
<td>Students must be present to receive services</td>
<td>Determine if student services and accommodations are accurate. Determine if diploma status meets student ability</td>
<td>Student discipline meets the needs of students and is specific to each student. Positive behavior incentives are used when applicable to redirect behavior</td>
</tr>
</tbody>
</table>

(continued)
In Table 6 attendance, retention, and discipline were attended to by multiple intervention strategies. The people involved in executing the strategies included all stakeholders, such as administration, teachers, parents, students, and school counselors. Students with multiple absences were addressed first by teachers, with follow-up communication to administration, school counselors, and other stakeholders. Participants shared a consistent message; parent and student communication is a constant occurrence for students with attendance concerns. The intervention strategies used to support students at risk of retention focused on the four by four scheduling model. Students were offered the opportunity to repeat the failed course, thus keeping them on track for graduation. Strategies to support discipline concerns focused first on classroom management, followed by situational consequences that support individual students. Figure 2

<table>
<thead>
<tr>
<th>Participant</th>
<th>People involved in executing intervention strategies</th>
<th>How attendance influenced intervention strategies</th>
<th>How retention influenced intervention strategies</th>
<th>How discipline influenced intervention strategies</th>
</tr>
</thead>
<tbody>
<tr>
<td>PT1</td>
<td>Teachers, attendance clerk, truancy officer, school counselors, administration</td>
<td>Teacher calls home daily for every absent student. Students are always allowed to make up work</td>
<td>Students repeat courses failed in the first semester in the second semester. Project Graduation provides after school and Saturday tutoring</td>
<td>Individual student contracts are signed. Class created rules are agreed upon at the beginning of the year that include incentives for good behavior</td>
</tr>
<tr>
<td>PT2</td>
<td>Project Graduation members, which includes teachers, administrators, and school counselors</td>
<td>All students are allowed to complete missed assignments</td>
<td>The four by four schedule allows students to repeat failed courses</td>
<td>Classroom management prevents potential behavior problems. Relationship building helps students make better choices</td>
</tr>
</tbody>
</table>
shows a Wordle, which reflects the frequency and prevalence of the influence of attendance in intervention strategies.

Figure 2. Wordle: The influence of attendance on intervention strategies.

Another way to express data in Table 6 is a Wordle. Participants described attendance as a significant influence when defining intervention strategies for students in danger of dropping out of high school. Figure 2 describes in the form of a Wordle, a word web that demonstrates how often participants used certain words or phrases when responding to questions. For example, the words student, daily, truancy officer, allowed, notified, and attendance were repeated often. The size of the word in the Wordle is determined by how often it was used by participants. A large word signifies it was used regularly by participants in their responses and smaller words were spoken a few times. The Wordle depicts that regardless of the circumstance or reason for absences, student attendance was monitored daily by school personnel. The truancy officer was contacted for extreme cases. Teachers made home visits in order to engage parents in the process of getting the student to come to school. Figure 3 demonstrates the influence of retention on intervention strategies.
Figure 3. The influence of retention on intervention strategies.

The four by four scheduling model was described by participants as the primary strategy that prevented retention. Within a given school year, a student could repeat a course failed in the first semester in the second semester. In addition, a student could take courses within a given year that would allow them to return to their appropriate grade level. For example, a student could take eleventh grade English in the first semester and twelfth grade English in the second semester, thus meeting the appropriate diploma requirements in order to graduate. Project Graduation provided students the opportunity to receive tutoring support from teachers after school or on Saturdays. School personnel monitored diploma status and when feasible, altered the status so that the student could graduate on time. Students receiving Special Education services who were struggling to graduate were supported by continuous review of services and accommodations were changed when necessary. Figure 4 demonstrates the influence of discipline on intervention strategies.
Figure 4. The influence of discipline on intervention strategies.

Figure 4 demonstrates the various intervention strategies used by school personnel to support positive discipline practices for students at risk of dropping out of school. Participants described the importance of building relationships with students. Beginning in the classroom, teachers worked with students to provide a learning environment that was supportive and created a school to home connection. School counselors, administration, and teachers worked with students to develop coping skills. These skills assisted students to make better choices in responding to situations that ultimately could have disciplinary consequences. In school detention was described by all participants as being the significant strategy that supported students at risk of dropping out, as out of school suspensions created absences that influenced academic performance. Table 7 reflects community members involved in executing intervention strategies.
Table 7

Community Involvement and Other Sources Considered

<table>
<thead>
<tr>
<th>Participant</th>
<th>Community members involved</th>
<th>Other sources considered</th>
</tr>
</thead>
<tbody>
<tr>
<td>PA</td>
<td>Business leaders, faith groups</td>
<td>Transfer students, matriculation status</td>
</tr>
<tr>
<td>PC</td>
<td>Community Partners</td>
<td>Anecdotal counselor notes</td>
</tr>
<tr>
<td>PTC</td>
<td>Agencies that provide vocational support</td>
<td>The age of the student</td>
</tr>
<tr>
<td>PT1</td>
<td>Grandparents and other relatives</td>
<td>Other student interests that may determine career or college interests</td>
</tr>
<tr>
<td>PT2</td>
<td>Grandparents and other relatives</td>
<td>Extra-curricular interests such as the arts or sports</td>
</tr>
</tbody>
</table>

Table 7 describes how community members were involved and other factors and data sources that were considered. While participants described challenges when gaining parental involvement, numerous community members and business leaders provided support to the school by mentoring students and providing opportunities for students to explain expectations for entry level jobs in the community. In addition, participants described various methods of tracking students in danger of not graduating. Examples included weekly collection of classroom grades, daily attendance, and discipline incidents. Participants discussed how tracking student attendance, retention, and discipline created a warning list for each student in danger of not graduating. These students were placed in Project Graduation, a program that assisted students in making up work and repeating classes when necessary.

Research Question Three. What other factors influenced the GCI value of the school from 2011-2012 to 2013-2014? In response to research question three, three interview questions were asked. The first question asked of participants was to explain how they defined the current status of their school’s graduation rate. Participants all took pride in the school’s accomplishments, as their graduation composite index rests at 85. “Our graduation status has
risen to 85, and we are working hard with some seniors to make sure they do what they need to do to graduate” (PC, lines 98-101). The Transition Coordinator discussed the connection to the graduation rate and course offerings for students. Working within budgetary restrictions, the school works to offer courses that students are interested in taking, such as business related classes. The goal is provide opportunities for students to leave high school with job related skills. “There is a shortage of funding to provide new courses, but we are making sure our students see beyond today. Until they buy into the fact that there is something out there for them, they will not concentrate on tomorrow” (PTC, lines 217-221). Teaching students to prepare for the future is a strategy that all participants agreed would support goal oriented planning for students and help them as they made the decision to remain in school.

The second question asked of participants what to share the types of future challenges in maintaining the graduation rate. One challenge discussed by all participants was the transiency rate among students. New enrollments are continuous at the school, in addition to student withdrawals. The School Counseling Coordinator spoke of occurrences where counselors made home visits to students who had withdrawn from school and encouraged them to consider returning in order to earn the credits needed for graduation. “When students leave school without finishing, we encourage them to return in order to graduate. We’ve knocked on a few doors, because once they are out there they realize they need that diploma and then they want to come back” (PC, lines 111-114). Teacher participants shared a concern for the future of the graduation rate because of changes in SOL testing. The concern was based on the struggle students have with the rigor and format of the Reading and Math SOL’s. While Project Graduation supported students with testing retake opportunities, the tests are often a barrier for students when attempting to graduate.

Another concern described by participants was the challenge of overage students. Overage students were considered by participants to be more likely to drop out, as they are regularly behind in coursework and are not in the same grade with their peers. The principal shared concerns for the future of the graduation rate from a K-12 perspective. “You have to make sure kids are coming up from lower grades with strong reading and math skills. The challenge is making sure the lower levels see the importance of the graduation rate as not just a high school problem” (PA, lines 302-307). The principal believes the sense of urgency felt at the high school level should be shared at the middle and elementary school levels. “If they have the
same urgency that we do and can prepare students while at the elementary and middle school levels, we can increase the graduation rate” (PA, lines 314-317). As participants shared their concerns for future challenges of the graduation rate, a common theme emerged that centered around focusing on the whole child when organizing intervention strategies. Attendance, retention, and discipline were consistent causes for students to drop out of school.

The third question asked of participants was to share additional thoughts about the school’s progress in maintaining the Graduation Composite Index benchmark status. Participants shared a common dedication to the school and to students. Team work was described by everyone as ongoing and school wide. “Teachers want to help. We go the extra mile to put things in place and we do see success” (PTC, lines 268-271). Participants wanted to provide the best education for students in spite of their circumstances or abilities. The approach described by participants was to work with one student at a time, and provide services to meet their individual needs. “There are some areas we need to improve on, but the overall success of our students speaks volumes about our passion for students succeeding “(PA, lines 327-300).

Graduation is the common goal and participants agreed that focusing on attendance, retention, and discipline provide the desired results. Project Graduation helps seniors earn verified credits necessary for graduation. Students who struggle with attendance, retention, or discipline are provided the opportunity to seek assistance in Project Graduation, where they are allowed to repeat a course in the second semester that was failed in the first semester and receive tutoring afterschool and on Saturdays. Participants agreed that the variety of intervention strategies provided through Project Graduation addressed these at-risk behaviors, thus supporting students in their efforts to graduate on time. Figure 5’s Wordle reflects how participants defined the current status of the school’s graduation rate, the foreseen challenges in maintaining the graduation rate, and other comments about progress in maintaining the Graduation Composite Index benchmark status. For example, the size of the words graduation, status, rates, provide, project, and shared reflect how often they were spoken during interviews, thus demonstrating the consistency between participants the significance of the words.
Summary of Chapter Four

Participants spoke of constant attention to student performance as an intervention strategy to supporting graduation status. Project Graduation incorporated continuous meetings with stakeholders, to include parents, students, administration, teachers, school counselors, and the transition coordinator to discuss student performance. This included monitoring attendance, grades, and discipline. According to participants, teachers were the first stakeholders to bring forward concerns regarding student attendance. Once a concern was brought forward student attendance was closely monitored and meetings were held on a weekly basis to discuss progress. Students with attendance issues were provided multiple opportunities to make up work missed by attending school on Saturday and working with a core content teacher during an elective class. In addition to attendance meetings other strategies were evident to support retention and discipline. The four by four block schedule assisted students stay on track for graduating on time, as students were allowed to repeat a course in the second semester that was failed in the first semester. In school detention was used frequently as an alternative to out of school suspension. In Chapter Five, the findings are summarized, implications are presented, suggestions for future studies are made, and reflections are presented.
Chapter 5
Summary of Findings

The purpose of this study was to investigate the intervention strategies implemented by a school receiving the status of “warned” for the benchmark of the Graduation Completer Index (GCI) in the school year 2011-2012 and subsequently maintaining “provisional” or “meets benchmark” status for the next two school years 2012-2013 and 2013-2014. This qualitative case study of one school’s journey investigated intervention strategies that influenced a student’s decision to drop out of high school. Five school personnel were interviewed: the principal, transition coordinator, school counseling coordinator, and two teachers. Interviews were member checked, transcriptions were coded, and a reflexive journal was maintained. This urban school of approximately 750 students located in a metropolitan area of Virginia was selected for this phenomenological qualitative study based on its GCI score for the 2011-2014 school years. In this chapter the research questions will be reviewed, a brief summary of findings will be presented, and implications and recommendations for further research will be explored.

Research Questions

The following research questions were investigated:

1. According to school personnel, what intervention strategies between 2011 and 2014 were used after the school received the status of “warned” for the benchmark of the GCI in the school year 2011-2012?

2. According to school personnel, how did attendance, retention, and discipline influence intervention strategies? What other elements and data sources were considered?

3. According to school personnel, what other factors influenced the GCI value of the school from 2011-2012 to 2013-2014?

Findings

Finding One: Participants agreed that in-school detention was an effective strategy used between 2011 and 2014, when the school received the status of “warned” for the benchmark of the GCI in the school year 2011-2012. During the interviews, participants unanimously agreed that in-school detention was a strategy that supported student academic
progress. Incidents such as fighting or drug use or possession resulted in an out of school suspension. Students with other infractions were given in-school detention. In-school detention was offered during the school day and on Saturday when applicable. During in-school suspension, students received academic support from a teacher, in addition to being able to make up missed or late assignments. Teacher participants described this strategy as an opportunity for students to complete assignments with the support of a teacher without continuous disruption in the classroom.

Alexander, Entwisle, and Kabbani determined in their study on patterns of student behavior (2001), that risk factors such as unruly behavior shape student performance. When students are suspended from school Alexander, Entwisle, and Kabbani suggested (2001), they fall behind academically and catching up becomes very difficult. Creating safe learning environments that employ innovative discipline policies can improve student perceptions of school. Fowler (2011) described the shift within school districts from zero tolerance policies to more situational based initiatives. As students move from class to class (2011), the inconsistency or consistency of disciplinary practice shapes the outcome of the consequence for the behavior, thus influencing academic performance.

Finding Two: Participants agreed that calling home and home visits were effective strategies used between 2011 and 2014, when the school received the status of “warned” for the benchmark of the GCI in the school year 2011-2012. During the interview, participant PA described the dedicated approach made by teachers to call home every single day for students who were absent in class. As determined by the principal, this was a school wide expectation. Teachers were expected to call the home each time a student was absent from their class. Since a student took four classes a day, they could receive up to four phone calls home in one day. Teacher participants described the necessity of calling additional relatives such as aunts and grandparents when necessary. When a student was absent continuously, some teachers, school counselors, and administrators would visit the home of the student. Participants described this approach as an unintended strategy and not a school wide method. It was determined however, that teachers and school personnel who visited the homes of students with attendance issues created relationships with family members in the home. Participants purported continuous contact with families at home created a better learning environment for students and supported academic progress.
Ford, Grantham and Whiting (2008) discussed the significance of the learning environment and the connection to student engagement, motivation, and student perception of school. When a student has a diminished view of school, student achievement suffers (2008). Ford, Grantham and Whiting (2008) determined that school resources—or lack thereof—must be considered when analyzing student achievement. Entwisle, Alexander, and Olson (2007) determined that teacher perceptions influence student learning. The unintended consequence of a teacher’s perception is that it may (Allensworth, 2005) dominate student perceptions of learning, the academic environment, and the ability for a student to be successful.

Finding Three: Participants agreed that the four by four block schedule was an effective strategy used between 2011 and 2014, when the school received the status of “warned” for the benchmark of the GCI in the school year 2011-2012.

During the interview the four by four scheduling method was described by participants as an intervention strategy used to prevent student retention. Students are allowed to repeat courses failed in the first semester. Courses can also be taken that will allow students to catch up to the grade in which they are expected to graduate. The four by four model scheduling model provides students the opportunity to earn eight credits in a school year, thus supporting the graduation rate. School counselors assist students in creating an academic program that addresses individual student needs, and the four by four block scheduling model serves as the framework for graduating students on time.

Alexander, Entwisle, and Kabbani (2001) determined that students are often placed in adult-like roles before they were ready to assume adult responsibilities, thus were accelerated into adulthood prematurely. The adult responsibilities faced by students can force a decision for the student to drop out of high school in order to support the family and other circumstances (2001). Gullatt (2006) determined that block scheduling can support at-risk students considering dropping out of school. Gullatt (2006) described a calmer school environment and improved student attitudes as some of the advantages of the block scheduling method. Childers and Ireland (2005) described the amount of homework as an advantage of the block schedule for at-risk students. Since there are fewer courses taken in a semester, students have a lighter work load, thus can dedicate time to supporting their families if necessary.

Finding Four: Participants agreed that intervention strategies must address attendance as attendance influences a student’s decision to stay in school or drop out.
During the interviews, all interviewees mentioned attendance as a concern. Participants described various reasons for student poor student attendance, such as teenage pregnancy and motherhood, poor living circumstances, truancy, problems with law enforcement, and lack of parental support. Ensuring that students were provided every opportunity to make up work missed during absences was discussed by participant PTC as instrumental to supporting student graduation rates. Participants unanimously agreed that every student must be provided the opportunity to make up work missed, and that every situation must be treated on an individual basis. In order to provide students the opportunity to make up missed work, participants PT1 and PT2 discussed how teachers provided tutoring and make-up sessions during elective classes, after school, and on Saturday’s. Participants referenced the consistent support of administration, school counseling, and the truancy officer, thus creating a team approach in assisting students with attendance concerns.

Hanover Research reported, “Poor school attendance is a risk factor that can determine the likelihood a student will drop out of high school, citing absenteeism as a significant predictor of a high school completion (Hanover Research, 2010, p 5). Students who were present at school more than a specified number of days were more likely to graduate than other students (2010). Considering the 2004 study conducted by McCluskey, Bynum, and Patchin, absenteeism is a significant predictor of a high school completion, predicated by academic failure, school dropout, and juvenile delinquency. “Absenteeism is a behavior that signifies school performance and is a significant predictor of high school completion” (Flaherty, Sutphen, & Ely, 2012, p.201). Flaherty, Sutphen, and Ely (2012) suggest that students are absent from school for a variety of reasons, such as illness, lack of parental support, poor peer relationships, lack of engagement, and a dislike of school.

**Finding Five: Participants agreed that retention intervention strategies must be in place as retention influences a student’s decision to stay in school or drop out.** Retention was mentioned as a concern by all interviewees. Consistent efforts were made by all stakeholders to keep students on grade level, and assist those not on grade level with strategies to catch up in order to graduate on time. These strategies included expecting students to complete all assignments for credit without the use of zero’s for work not submitted. If students completed the work, they received credit, regardless of when the work was submitted. Participants described the significance of Saturday school, after school tutoring, and tutoring during a student’s elective
classes. These opportunities were provided to students as soon as grades began to indicate a need for intervention.

Research indicated that grade retention is a warning sign of dropping out of high school (Jimerson, et al, 2004). Allensworth (2005) determined that teacher-initiated retention resulted in a greater likelihood that the student would drop out. In this instance, participants worked to ensure that students would in fact be promoted to the next course or grade level, and not retained. Multiple opportunities, including repeating the failed course in the next semester, were provided by the school in efforts to assist students. Rodrick (1994) identified that retained youth often made the decision to leave school at age 16, which was different from the behavior of promoted students. Participants in this study described a need for interventions at the elementary and middle school levels, as their experiences indicated that students were considering dropping out as early as fourth grade.

Finding Six: Participants agreed that discipline intervention strategies must be in place as discipline influences a student’s decision to stay in school or drop out. During the interview all interviewees mentioned discipline as a concern. Participants described many strategies implemented to keep student discipline at a minimum. The most utilized strategy was in-school detention, which was used as frequently as possible instead of out of school suspension. Participants addressed student discipline individually and provided consequences that would maintain school safety, but kept the student in school whenever possible. Coping skills were also imbedded into classroom instruction to support positive decision making.

Carmichael, Whitten, and Voloudakis, (2005) indicated that discipline policies in schools have unintended consequences for students. The 2005 study conducted by Carmichael, Whitten, and Voloudakis determined student discipline was a risk factor that precluded a student from graduating on time. The findings indicated that school systems must create disciplinary measures that address the individual needs of students while maintaining school safety. Likewise, Irby (2013) determined that efforts should be made to expand rules and redirect positively low-level behaviors before they escalate into more severe behaviors. Irby (2013) concluded that while learning environments must be safe, schools must creative innovative discipline policies in order to assist students in their decision to stay in school.

Finding Seven: Participants agreed that community members and business leaders who engage students at risk of dropping out with opportunities to learn entry level job
skills is an intervention strategy that supports the graduation rate and was another factor that influenced the GCI value of the school from 2011-2012 to 2013-2014. During the interview participants described the significance of support from community members and business leaders. Business leaders came to school and conducted sessions during class that provided students with expectations for entry level work. In addition, business leaders served as mentors for students during the school year. Often when the student graduated, they were provided employment. Participants described the significance of class sponsored meetings held at the school where community members were invited to speak with students about life after high school.

Research indicates the significance of community support. Gasper, et al., (2012) explained that the implications in knowing the causes of school dropouts produces economic benefits to the school system and society. When students graduate from high school, they contribute to society as a member of the workforce (2012). When the community and business leaders invest in the school system and graduates, all stakeholders benefit (2012). This partnership can be realized through mentoring or providing exposure to job skills.

Finding Eight: Participants agreed that an intervention strategy that influenced the GCI value of the school from 2011-2012 to 2013-2014 was student support at the elementary, middle, and high school levels. During the interviews, participants discussed how drop out intervention strategies should begin at the elementary school level and continue to the middle school level. Participants described how students struggled when they reached high school unprepared for high school expectations. If a student had been retained in elementary or middle school, they entered high school overage for their grade. Participants described circumstances in which overage students were more likely to drop out, as they were frequently behind in coursework and were not in the same grade with their peers. During the interview, participants described the need for students to reach the high school level with the appropriate reading and math skills. Participants expressed an interest in communicating with elementary and middle school levels the importance of the graduation rate as a system wide concern.

Jimerson, et al, (2004) concluded that being over age is directly linked to dropping out and that academic struggles in the early grades could precipitate a student’s decision to drop out. Cohen and Smerdon (2009) contended that reform initiatives should include elementary middle, and high school. Unsuccessful transitions from elementary school to middle school and from
middle school to high school were responsible for academic failure and early school leaving (2009). Alexander, Entwisle, and Kabbani (2001) connected the resources and risk factors from elementary to high school. Alexander, Entwisle, and Kabbani also concluded (2001) there were critical periods in the developmental course of a dropout that occurred in elementary and middle school, and dedicated intervention strategies must be in place to support students at risk of dropping out as early as elementary school.

Finding Nine: Participants agreed that parents and other family member involvement was an intervention strategy in supporting student academic progress that influenced the GCI value of the school from 2011-2012 to 2013-2014. During the interviews participants discussed the importance support from parents and other family members. Teacher participants described the change in student behavior and academics once a home visit was conducted by a teacher. Participants explained that parents were often unaware of the potential for student failure. While some participants voiced frustration in lack of parental support, all participants agreed that parents regularly lacked resources to support students at risk of dropping out. All participants described the significance of extended familial support, such as grandparents, aunts, and uncles due to their relationship with the student. Participants shared how frequently students were more closely engaged with extended family than with their parents.

Research indicates that parental attitudes can influence student perspectives and experiences toward school (Jimerson, et al, 2004). Experiences at home influenced student attitudes about school (Alexander, Entwisle, & Kabbani, 2001). Alexander, Entwisle, and Kabbani (2001) point to extensive absences, lack of parental support, lack of school engagement, and low family socioeconomic status as factors that impact student retention. During the interviews, participants described circumstances at home that directly influenced student progress as school, such as hunger, lack of parental support, poverty, and teen motherhood. Lastly, Woo and Sakamoto (2010) contended that drop out potential can also be explained by limited resources and environmental conditions, such as poverty, female headed households, and a general lack of parental support.

Finding Ten: Participants agreed that intervention strategies in place to support students who were overage in a grade was another factor that influenced the GCI value of the school from 2011-2012 to 2013-2014. During the interviews participants discussed the intervention strategies in place to support students who were overage for a grade and retained.
Students who were retained were given the opportunity to repeat a course failed in the first semester during the second semester due to the four by four block schedule. The transition coordinator discussed how students who were overage for their grade were provided the option of changing their diploma status. These strategies were implemented as a result of early monitoring of individual student academic progress. Student monitoring for academic progress began at the first sign of concern, which began with the teacher in the classroom.

Roderick (1994) determined that students who experience retention may drop out because they do more poorly in school, or have lower self-esteem as a result of that retention. Retention compounds feelings of failure which can foster a negative outlook of school (Roderick, 1994). Retained students are less likely to be engaged in school due to consistent patterns of poor school performance and feelings of failure (Allensworth, 2005). Allensworth (2005) determined that while retention can benefit the elementary school student, the strategy has the potential to reduce the same student’s chance of graduating from high school. In addition, Alexander, Entwisle, and Kabbani determined the pressure of being overage for a grade creates additional stress for a student who struggles academically, thus influencing a student’s decision to drop out.

**Finding Eleven:** Participants indicated that frequent meetings to address the individual needs of at-risk students were important in meeting the GCI benchmark was an intervention strategy. According to participants, teachers were the first stakeholders to bring forward concerns regarding student progress. Once a concern was brought forward student performance was closely monitored and meetings were held on a weekly basis to discuss progress. Participants spoke of constant attention to student performance as an intervention strategy to supporting graduation status. Continuous meetings with stakeholders to include parents, students, administration, teachers, school counselors, and the transition coordinator occurred weekly to discuss student performance. Participants stressed that educational plans were based on the needs of individual students. When a teacher expressed concern about a student to administration, a team was put in place to address the individual student’s educational needs. Once the team met the parents and students were provided options that would allow the student the opportunity to graduate. These options included the opportunity to make up work, change diploma status, repeat a failed course, or receive tutoring assistance after school, during their elective, or on Saturday.
Alexander, Entwisle, and Horsey (1997) deemed social and academic experiences were crucial to student engagement. Lack of engagement with other students and teachers could influence a student’s decision to drop out (Alexander, Entwisle, and Horsey, 1997). Hanover Research (2010) noted that when students were provided options for academic success along with supportive intervention systems, progress was made and the student remained in school. Further, Hanover Research (2010) determined that when intervention strategies were put in place to support the factors that influenced student dropout, students frequently remained in school and graduated. If intervention strategies are individualized and designed to prevent further declines in student performance, Smith determined (2013) the possibilities for students to graduate on time can be dramatically improved.

Finding Twelve: Participants indicated that a successful intervention strategy to meet the GCI benchmark was additional academic support (Saturday school). During the interviews participants discussed the importance of providing students additional academic support. Teachers discussed how traditional class time was not sufficient for many students, and that students often required more time to complete assignments and missed work. One example of additional academic support was Saturday school. During this time students were provided breakfast and were able to work with a core content teacher. Students were allowed to make up missed or late assignments along with receiving tutor services from teachers. Saturday school was also used as a discipline consequence. Instead of suspending a student from school, the student would participate in Saturday school.

Schools should provide features to the learning environment that support a student’s decision to stay in high school (Christle, Jolivette, & Nelson, 2007). While school personnel cannot control factors and influences outside the school environment, the school can enact precautions designed to reduce the risks that occur outside the school (Christle, Jolivette, & Nelson, 2007). Christle, Jolivette, and Nelson (2007) determined that the type of learning environment can influence whether the student will be successful in school. “Students who are attached to supportive schools in which personnel recognize their individuality and care about and promote their successes are prone to complete high school and make successful transitions to adult life” (p. 10). Roderick (1994) concluded student perceptions of school and what it means to do well in school are directly linked to behavior and school experiences, either positive or negative.
Implications for Practice

**Implication One.** School leaders who are interested in increasing their GCI rating should consider creating a team that meets frequently to address the needs of at-risk students. According to data collected from the five participants, communication between stakeholders regarding student progress is crucial and found in research findings two, seven, eight, and nine. Teacher concerns regarding student performance and attendance must be addressed and a plan enacted to support progress. In addition parents must be included in order to strengthen the home to school connection as well as provide parents with clear expectations for students concerning their progress as they work toward graduation. The team should include teachers, parents, students, administration, school counseling, and the transition coordinator. The team should meet weekly to address individual student progress and goals.

**Implication Two.** School leaders should identify ways to engage parents and the community in meeting the needs of students who are at risk of dropping out. According to data collected from the five participants and demonstrated in findings seven and nine, engaging parents and the school community can greatly benefit student performance. Home visits conducted by the school assisted parents in understanding student expectations. In addition, the visits created relationships between school and home that were a direct benefit to the student. Once the parents, caregivers, or guardians were aware of the student’s risk of dropping out, student behavior often improved. Likewise, it is essential for the school to engage community members or business partners in supporting students at risk of dropping out. Business leaders can provide students opportunities for entry level work experiences. Community members can provide the school additional resources, such a volunteering at the school and mentoring students.

**Implication Three.** School leaders should consider alternatives to out of school suspension. Out of school suspensions influence student attendance. When at all possible, school leaders should consider options such as in school detention for behaviors that do not pose a risk to school safety. According to data collected from participants and discussed in findings one, five, six, eleven, and twelve, in school suspension provided students and teachers a reprieve from the classroom experience and the student was not considered absent from school. Students scheduled for in school detention were able to make up missed assignments and receive
additional support from teachers. In school detention can provide students with a consequence for discipline and an opportunity to complete assignments with the support of a teacher.

Implication Four. School leaders should consider the four by four block scheduling model to support on time graduation rates for students. According to data from participants and discussed in finding three, four, and ten, the four by four block scheduling model supported students at risk of dropping out of high school. Classes failed in the first semester are repeated in the second semester, thus providing students the opportunity to stay on track for graduation. In addition, students who are not on grade level can take multiple courses within a school year to catch up on graduation requirements. For example, a student can take English 11 in the first semester and English 12 in the second semester. Students provided this opportunity can remain on grade level and graduate on time. Figure 6 represents the features present in intervention strategies used to support students at risk of dropping out.

Figure 6. Factors present in intervention strategies.
Recommendations for Future Studies

With the implementation of the Graduation and Completion Index (GCI), schools in the Commonwealth of Virginia attempt to address the concern of high school dropouts by enhancing accountability measures. The (GCI) awards full credit to schools with students who earn a diploma, considering students to be on-time graduates when they graduate within the four year time period of being a first-time ninth grade student. While conducting this study of one high school that once earned the status of “warning” yet has subsequently received the status of “meets benchmark” other topics for exploration were uncovered. The purpose of this study was to investigate the intervention strategies implemented at this school. Perhaps additional studies on the topic would influence school division offices to adopt district practices that support students at risk of dropping out. The recommendations for further research are:

1. Investigate the four by four block scheduling method to determine how many students graduate on time based on repeating a course failed in one semester and taken in the next semester.

2. Investigate other schools that have not met GCI requirements and compare the intervention strategies to the findings in this study.

3. Investigate the intervention strategy of home visits and determine its credibility as a strategy. Participants interviewed said they would like to know whether that strategy was used at other schools and if the strategy had positive results.

4. Investigate the influence of in school detention as an intervention strategy for students. Participants said they would like to know how other schools utilized in school detention as a supportive tool for students in danger of dropping out of school.

5. Interview students who had been at risk and then graduated to find out what supported their reason for staying in school.

Conclusion

Finn, Gerber, and Boyd-Zaharias (2005) determined the most significant intervention strategies are those that change the learning environment, the learning experience, and the timing in which the intervention begins. School leaders today are in a position where every minute counts, as a student can begin considering dropping out of high school as early as elementary
school. The intervention strategies described within this study are one school’s account of the efforts taken to redirect that decision and encourage the student to remain in school and graduate. Strategies that are designed to support a student’s struggle to stay in school can reduce the dropout rate. Multiple studies were found indicating that intervention strategies must begin in elementary school. While some research indicated retention was successful in the early grades, other research indicated it made a student overage for a grade thus more likely to drop out. This study demonstrates that students who may have been retained are able to graduate on time with the implementation of various intervention strategies.

Reflections

As a former elementary teacher, high school assistant principal and current elementary school principal, I have supported student social and academic growth from the very beginning of the academic career to the very end. I have witnessed the academic struggles of elementary students and observed high school students either struggle to stay in school or eventually drop out. I have provided remedial instructional support to ninth grade students reading on a third grade level, and I have retained students in the second grade because they were not socially or emotionally prepared to move forward. Regardless of the age or grade level, the struggle is steadily the same. Not all students find success in school. Many consistently struggle due to lack of familial support, lack of resources, poverty, or negative feelings about school. Rarely is the struggle due to the notion that the student just can’t learn.

During my career as an educator, I have worked tirelessly to support the struggling student, the reluctant student, and the at-risk student. The results of this study demonstrated that I am not alone in those efforts. I was disappointed by the lack of response from the three schools that either did not respond to inquiries or declined to participate in the study. This urban high school in Virginia however is an example of a school that has dedicated support systems to assist students to graduate on time. Considering students on an individual basis, this school strives to close learning gaps, provide remedial support, and encourage and prepare students for graduation. In addition, the team meetings conducted at the school to monitor student progress are directly aligned to the Virginia Department of Education’s expectation that schools create teams to analyze intervention strategies to assist students regain on-track status. The findings of this study are simplistic; students need to be considered on an individual basis and all
stakeholders need to be involved in intervention efforts. Due to school division policy, students were not allowed to participate in research studies. Learning the reasons for staying in school or dropping out directly from a student could benefit school leaders by gaining first-hand knowledge from a student’s perspective of those strategies that work and those that do not. While this study indicated certain intervention strategies were successful in supporting the graduation composite index, subsequent research could expose additional intervention strategies that can deliver support to student learning and assist the graduation rate.
References


Appendix A

Institutional Review Board Certificate

Certificate of Completion

This certifies that
Amanda Carole Veelker
Has completed
Training in Human Subjects Protection

On the following topics:
Historical Basis for Regulating Human Subjects Research
The Belmont Report
Federal and Virginia Tech Regulatory Entities, Policies and Procedures

September 8, 2012

David Moore, IRB Chair
Appendix B
Institutional Review Board Approval Letter

MEMORANDUM

DATE: November 19, 2014
TO: Carol S. Cash, Amanda Carole Voelker
FROM: Virginia Tech Institutional Review Board (FWA00000572, expires April 25, 2018)
PROTOCOL TITLE: Intervention Strategies Utilized in Virginia Public High Schools with Improved Graduation Completion Index Values
IRB NUMBER: 14-1145

Effective November 19, 2014, the Virginia Tech Institution Review Board (IRB) Chair, David M. Moore, approved the New Application request for the above-mentioned research protocol.

This approval provides permission to begin the human subject activities outlined in the IRB-approved protocol and supporting documents.

Plans to deviate from the approved protocol and/or supporting documents must be submitted to the IRB as an amendment request and approved by the IRB prior to the implementation of any changes, regardless of how minor, except where necessary to eliminate apparent immediate hazards to the subjects. Report within 5 business days to the IRB any injuries or other unanticipated or adverse events involving risks or harms to human research subjects or others.

All investigators (listed above) are required to comply with the researcher requirements outlined at:

http://www.irb.vt.edu/pages/responsibilities.htm

(Please review responsibilities before the commencement of your research.)

PROTOCOL INFORMATION:
Approved As: Expedited, under 45 CFR 46.110 category(ies) 6, 7
Protocol Approval Date: November 19, 2014
Protocol Expiration Date: November 18, 2015
Continuing Review Due Date*: November 4, 2015

*Date a Continuing Review application is due to the IRB office if human subject activities covered under this protocol, including data analysis, are to continue beyond the Protocol Expiration Date.

FEDERALLY FUNDED RESEARCH REQUIREMENTS:

Per federal regulations, 45 CFR 46.103(f), the IRB is required to compare all federally funded grant proposals/work statements to the IRB protocol(s) which cover the human research activities included in the proposal / work statement before funds are released. Note that this requirement does not apply to Exempt and Interim IRB protocols, or grants for which VT is not the primary awardee.

The table on the following page indicates whether grant proposals are related to this IRB protocol, and which of the listed proposals, if any, have been compared to this IRB protocol, if required.
Appendix C

Informed Consent

VIRGINIA POLYTECHNIC INSTITUTE AND STATE UNIVERSITY
Informed Consent for Participants in Research Projects Involving Human Subjects

Title of Project: Intervention Strategies Utilized In Virginia Public High Schools with Improved Graduation Completion Index Values

Investigator(s): Amanda Voelker Amanda69@vt.edu (804) 337-8530

I. Purpose of this Research Project
The purpose of this study is to investigate the intervention strategies implemented at your school as it received the status of “warned” for falling below the GCI benchmark in the school year 2011-2012 and subsequently receiving “provisional” or “meets benchmark” status for the next two school years, 2012-2013 and 2013-2014. This study seeks to determine what support and interventions these schools provided for students who successfully graduated from high school within the designated four year time frame. Of the Commonwealth of Virginia’s 326 high schools, there are only four high schools that have made this type of progress during these school years. As such, the interventions and practices implemented in these schools are worthy of examination, given that they have demonstrated measurable, positive progress in recent years. The participant of each school will be asked identical questions to investigate the intervention strategies used to address the Graduation Composite Index.

II. Procedures
You are among approximately ten individuals being invited to participate in this study. Should you agree to participate you will take part in an interview with me, which will take between 45 and 60 minutes to complete. During the interview you will be asked several questions about intervention strategies implemented at your school that increased the Graduation Completion Index. For example, you will be asked questions that pertain to attendance, discipline, and retention.

III. Risks
There are no known risks to participating in this study. You will be asked to provide insight to your school’s best practices pertaining to the Graduation Completion Index.

Your health and/or mental well-being will not be in jeopardy as a result of this research project.

IV. Benefits
Your participation in this study will help us better understand how the intervention strategies at your school influenced the Graduation Completion Index. You may leave the interview with an appreciation for how the best practices you implemented influenced student achievement. No promise or guarantee of benefits has been made to encourage you to participate.
V. Extent of Anonymity and Confidentiality
All the information from the interview will be kept strictly confidential. In any written reports you will be identified by a code number. Any names of people or places that you mention will be changed. The interview tapes will be transcribed verbatim and will be kept in a locked computer when they are not being used for transcription or analysis. The information that is provided during the interview process will be kept confidential and used for research purposes only. After all of the interviews are conducted, data is recorded, and my thesis is successfully defended, all the tapes will be destroyed.

At no time will the researchers release identifiable results of the study to anyone other than individuals working on the project without your written consent. The Virginia Tech (VT) Institutional Review Board (IRB) may view the study’s data for auditing purposes. The IRB is responsible for the oversight of the protection of human subjects involved in research.

Note: in some situations, it may be necessary for an investigator to break confidentiality. If a researcher has reason to suspect that a child is abused or neglected, or that a person poses a threat of harm to others or him/herself, the researcher is required by Virginia State law to notify the appropriate authorities. If applicable to this study, the conditions under which the investigator must break confidentiality must be described.

VI. Compensation
You will not be receiving any monetary compensation for participating in this interview.

VII. Freedom to Withdraw
It is important for you to know that you are free to withdraw from this study at any time without penalty. You are free not to answer any questions that you choose or respond to what is being asked of you without penalty.

Please note that there may be circumstances under which the investigator may determine that a subject should not continue as a subject.

Should you withdraw or otherwise discontinue participation, you will be compensated for the portion of the project completed in accordance with the Compensation section of this document.

VIII. Questions or Concerns
Should you have any questions about this study, you may contact one of the research investigators whose contact information is included at the beginning of this document. If you have any questions or concerns about the study’s conduct or your rights as a research subject, or need to report a research-related injury or event, you may contact the VT IRB Chair, Dr. David M. Moore at moored@vt.edu or (540) 231-4991.
IX. Subject's Consent
I have read the Consent Form and conditions of this project. I have had all my questions answered. I hereby acknowledge the above and give my voluntary consent:

_______________________________________________ Date__________
Subject signature

_______________________________________________
Subject printed name

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(Note: each subject must be provided a copy of this form. In addition, the IRB office may stamp its approval on the consent document(s) you submit and return the stamped version to you for use in consenting subjects; therefore, ensure each consent document you submit is ready to be read and signed by subjects.)
Virginia Tech Institutional Review Board Project No. 14-1145
Approved January 27, 2015 to November 18, 2015