

## ABSTRACT

GAINEY, STEPHEN BRUCE. The Effects of the New Wake County Public School System Eighth Grade Promotion Standard During Its First Year of Implementation. (Under the direction of Dr. Paul Bitting and Dr. Anthony Rolle.)

This study focused on the new eighth grade promotion standard initially implemented in the Wake County Public School System during the 2000-2001 school year. The first part of the methodology compared the overall eighth grade promotion results for the 1999-2000 and 2000-2001 school years. This task was completed to determine whether or not a statistically significant difference in the annual promotion results existed in relation to the last year under the old promotion standard and the first academic campaign governed by the new promotion policy. A one sample t-test was used to complete this comparison.

The second part of the study pertained to analyses associated with the following student demographic characteristics: academically gifted, free/reduced lunch, female, male, minority, and special education. As a result of these efforts, conclusions regarding the presence or absence of statistically significant differences between demographic sub-groups' 2000-2001 eighth grade promotion rates were generated. Furthermore, comparisons between the demographic sub-groups' 2000-2001 eighth grade promotion rates and the total 2000-2001 eighth grade promotion rate were conducted. Independent samples t-tests and one sample t-tests were used to complete these analyses.

Analyses to determine the presence of any statistically significant correlational relationships between these demographic characteristics and promotion rates were associated with the final sections of this study. The methodology involved the application of the Pearson Product-Moment Correlation Coefficient and logit regression. Nonetheless, as with

the second part of the study, the data to be analyzed only pertained to the 2000-2001 school year.

Overall, this study generated several important results. For example, a statistically significant difference between the 1999-2000 and 2000-2001 total eighth grade promotion rates was identified. Thus, the Wake County Public School System eight grade promotion standard had an adverse effect on the promotion results during its first year of use.

Achievement gaps between the demographic sub-groups, in relation to this new policy, also were found by this study's methodology. Furthermore, the target sub-group in need of the most attention to promote success with this new promotion policy was determined to be the special education students.

**THE EFFECTS OF THE NEW  
WAKE COUNTY PUBLIC SCHOOL SYSTEM  
EIGHTH GRADE PROMOTION STANDARD  
DURING ITS FIRST YEAR OF IMPLEMENTATION**

by  
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A dissertation submitted to the Graduate Faculty of  
North Carolina State University  
in partial fulfillment of the  
requirements of the Degree of  
Doctor of Education

**EDUCATIONAL LEADERSHIP**

Raleigh

2003

**APPROVED BY:**

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## DEDICATION

This dissertation is the culmination of many hours of hard work. Thus, I am extremely proud of my completion of it as well as my attainment of a doctoral degree. However, this accomplishment would not have been possible without the continual support of my wife, Kelly. She has been beside me throughout my entire journey to complete my doctoral degree over the past five years.

Kelly is a great high school math teacher. Students enjoy attending her class on a daily basis. Furthermore, she has an uncanny ability to get unmotivated students to like math and aspire to do their best. However, none of these efforts outweigh the great support provided for me by her during my doctoral studies at North Carolina State University. To be more specific, Kelly always has provided the encouraging remark or high-spirited congratulations at the right times. In addition, she has recognized appropriate times to insist that I take breaks from my work. All people do not know how to do these things. Nonetheless, no one else is like Kelly.

I am truly a lucky man. This dissertation finalizes the completion of my final personal goal in terms of education. However, without Kelly by my side, I am not sure graduation would have been a reality. Thus, I dedicate my dissertation to the most wonderful person in my life, Kelly Gainey. She definitely has been a firm source of love and support for me over the past five years. Now, with the completion of this degree, I need to reserve my free time for her and be the great husband that she deserves. Any man with a wife like Kelly has no excuse but to achieve great things. Kelly is one of a kind and deserves all of the credit for my ability to complete this degree.

## PERSONAL BIOGRAPHY

The author of this paper, Stephen Bruce Gainey, was born in New Bern, North Carolina on January 30, 1970. During the first 18 years of his life, Stephen's family resided in Havelock, North Carolina. Both of his parents were public school educators. His father was the principal of Havelock High School for 30 years. Furthermore, his mother taught Social Studies at the same school.

Throughout his childhood years, Stephen was very fond of all aspects of life associated with the public school environment. In fact, as a child, he accompanied his father at school events, especially athletic contests, as much as possible. These experiences fostered the development of a high level of respect for education and the public school employees responsible for preparing children for their futures, particularly his teachers and coaches. Nonetheless, his idols always were his parents due to their high standards in terms of raising their own children and helping prepare our country for the future through the provision of a quality education for the youth of Havelock.

Stephen's parents never pressured him to do great things; instead, they only wanted him to reach his potential and work hard. This support from his parents helped build a high level of self-confidence for Stephen. As a result, he was a three-sport athlete in high school and the valedictorian of his graduating class. This parental support fostered additional success at the collegiate level where graduated at the top of his class at East Carolina University in May of 1992 with a Bachelor of Science degree in Mathematics.

After his graduation in May of 1992, Stephen immediately returned as a full-time student to East Carolina University to work on a Master of Education degree in Educational

Leadership. However, after one year in graduate school, he decided to start his career while finishing his final requirement associated with the degree, a year-long internship. This decision involved his acceptance of a position as a mathematics teacher and baseball coach for the 1993-1994 school year at Apex High School in Apex, North Carolina. By July of 1994, Stephen had completed his first year of teaching as well as his graduate degree.

The next two years were spent teaching mathematics and coaching at Apex High School. However, during this time, Stephen assumed a second coaching responsibility, football. These days were great times for Stephen. He worked with outstanding colleagues in the classroom as well as with athletics. Nonetheless, in August of 1996, Stephen was given the opportunity to become an assistant principal at another Wake County school, Leesville Road High School.

Stephen accepted the assistant principal position at Leesville Road High School. Thus, his days as a high school mathematics teacher and coach came to an end. However, the rewards of working for a man named Richard Murphy were far too great to ever second guess this decision. For five years, Stephen worked under Richard Murphy and studied his actions. Furthermore, with each passing day, his desire to be a principal grew as did his high level of respect for his mentor.

The days at Leesville Road High School will always be special to Stephen. At this school, he met his wife who was one of the mathematics teachers. In addition, he was given an opportunity to learn from a “master” in terms of school administration. Nonetheless, one of the greatest parts of this experience was his mentor’s continual efforts to motivate Stephen to earn his doctoral degree. Richard Murphy knew the high value placed on this degree by

Stephen. Thus, he never let his young assistant principal consider anything other than “shooting for the stars” and fulfilling this lifelong goal.

Life was great at Leesville Road High School; however, Stephen’s professional goals continued to grow. Thus, upon the completion of the coursework for his doctorate, Stephen accepted the principalship at Turrentine Middle School in the Alamance-Burlington School System. As a result, Stephen and his new wife, Kelly, moved to Burlington during the summer of 2001. Presently, Stephen is still the principal of Turrentine Middle School while Kelly teaches mathematics at Southern Alamance High School. Nonetheless, they have no children.

In summary, Stephen’s graduation day will mark the end of a long educational journey. Still, in his opinion, no one has had better luck. Stephen has encountered very caring professors during every attempt to earn a degree. Furthermore, the supervisors associated with his three work assignments have continually supported his goals as a professional educator and a student. Nonetheless, Stephen always will attribute the true fire that burns inside him to be the best to his parents, Onslow Kesler and Jane Gainey. No child can ever claim to have been raised in a manner better than the one experienced by Stephen. In addition, the value of the opportunities to spend the majority of his formative years around a public school environment, Stephen’s desired work place, will never be measurable. However, his parents’ continual efforts as a great educators and ambassadors for children had the greatest influence on him.

## ACKNOWLEDGEMENTS

The completion of my doctoral degree has been influenced by many great individuals. Thus, I would like to thank them for all of their support and help. To begin with, Dr. Paul Bitting deserves a great deal of credit. As my program advisor and dissertation co-advisor, he has taken care of me since my enrollment at North Carolina State University in January of 1999. Dr. Paul Bitting always made time for me in terms of questions about coursework and my dissertation. In addition, his continual guidance in terms of my career decisions always will be appreciated. Overall, I can not thank him enough for his efforts to make me a better student, professional educator, and person. I admire and respect Dr. Paul Bitting a great deal. Additionally, I always will be eager to help him in any possible way.

Dr. Anthony Rolle also deserves a great deal of credit for my completion of this degree. I met this individual prior to my initial efforts on my dissertation. From day one, I was very impressed with his genuine concern for me and my efforts to earn a doctoral degree. Furthermore, his efforts to stretch my thought processes in terms of the mathematics associated with my dissertation are greatly appreciated. I always love to learn; thus, my association with Dr. Anthony Rolle has fulfilled that desire. Hopefully, after my graduation, we will keep in touch. Nonetheless, if this experience is my only encounter with Dr. Anthony Rolle, I will truly feel fortunate to have worked with a great mind. As my dissertation co-advisor, I greatly admire and respect this man. Furthermore, I will never forget his special efforts to help me.

I also want to thank Dr. Bill Johnston and Dr. Michael Vasu for their willingness to serve as members of my dissertation committee. As professors, I know their schedules are

hectic. Thus, their efforts to help me are greatly appreciated. Nonetheless, it is my hope that this dissertation will earn their respect for me as a scholar.

Finally, I want to thank Dr. Wayne Foster of the Alamance-Burlington School System for his support. Over the past few months, Dr. Wayne Foster has become a good friend. Furthermore, his efforts and continual words of encouragement were very valuable, especially with the arrival of requests for revisions to different parts of my dissertation.

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## **Chapter 1-Introduction**

### **I. Preface**

The graded school concept became a part of the K-12 public educational system in this country upon the conclusion of the Civil War (Colby 7). As a result of this occurrence, social promotion and retention have played major roles in the grade level placement of children in public schools during the past 150 years. However, based on research accounts, the practice used by educators charged with assigning children to grade levels appears to depend on the specific time period. Thus, a long-standing debate regarding the merits of social promotion and retention has existed among school leaders for many years.

This “social promotion vs. retention dilemma” has been revived during the past 10-12 years by the attempts of many public school leaders in this country to implement new, tougher promotion standards (Foster 38). An example of this movement can be found in the Wake County Public School System located in the region surrounding Raleigh, North Carolina. More specifically, this school system, consisting of 122 schools and approximately 100,000 students, implemented a new eighth grade promotion standard during the 2000-2001 academic campaign (WCPSS *Overview*). This action and its effect on eighth grade promotion rates in the Wake County Public School System serves as the focal point of this study. The remaining pages of this chapter will set the stage for this investigation.

### **II. Research Problem**

During the 2000-2001 school year, the Wake County Board of Education implemented a new eighth grade promotion standard, called Gateway 3, in all of its middle schools. This action followed the North Carolina State Board of Education’s April 1999

decision to implement Gateway 3 in all middle schools throughout the state no later than the 2001-2002 academic campaign. However, the Wake County Public School System's version of Gateway 3 had a few local stipulations in addition to the state-mandated ones.

Nonetheless, in spite of the policy's newness to the Wake County Public School System, this movement was consistent with other occurrences in K-12 public education around the country over the past 10-12 years with regard to implementing higher promotion standards and ending the use of social promotion, despite the possibility of increased retention rates (Foster 38).

As noted, the Wake County Public School System's implementation of a new eighth grade promotion standard did not stand out as a lone feat nationwide. In fact, since the late 1990's, numerous school systems throughout the country have developed new promotion standards. Like the Wake County school leaders, these educators took this action in an attempt to raise the quality of public education and remove the use of social promotion. For example, the actions of public school leaders in Virginia and the New York City School System during this time period revealed their strong support for this type of movement (Harrington-Lueker 7-8). In addition, public support for higher promotion standards, and efforts to end the use of social promotion, is not lacking. More specifically, through the use of a poll in 1995, the public opinion research group, Public Agenda, found 90% of the American citizens to be in favor of the development of higher standards for students in the core subject areas. Furthermore, 68% of the people involved in the poll agreed with the idea of basing promotion decisions on students' standardized test results. According to these people, poor performances by children on these examinations should prevent their promotion

to the next grade level. Hence, the participants in the poll did not support the use of social promotion as a factor in decisions regarding a child's grade level placement in school (Fager and Richen 9).

Examples of similarities between the Wake County Public School System's action during the 2000-2001 school year and research accounts pertaining to other school systems around the country have been revealed. Nonetheless, inquiries regarding the reasons for a school system's emphasis on implementing higher promotion standards, in the face of potential increases in retention rates, may arise. These questions or concerns often are met with an abundance of support for this type of movement. For example, many educators support the shift to tougher standards by labeling it as a means for improving the quality of education in public schools (Fager and Richen 6). Other individuals credit more strenuous promotion standards with fostering increases in students' levels of performance and seriousness towards school (Fager and Richen 30). Furthermore, one school of thought promotes the use of higher promotion standards as a key ingredient to a "back to the basics" movement in public schools. According to these individuals, a movement of this type will raise national test scores and reduce dropout rates (Pierson and Connell 300).

Despite the support for the implementation of higher promotion standards as in the Wake County Public School System, general concerns with regard to this topic also develop among some circles of educators on a regular basis. For example, some educational leaders fear the common reliance of this type of movement on standardized test results in making promotion decisions. In fact, they refer to this manner of making promotion decisions as being a "cruel and ignorant act towards a student" (Olson 48). Additionally, many school

leaders are apprehensive about raising promotion standards due to the potential for resulting litigation involving students' parents. More specifically, these educators genuinely are concerned about the possible pursuit of court action by students' parents as a result of promotion/retention decisions based on new, tougher policies such as the one implemented during the 2000-2001 school year in Wake County (Pipho 7).

In summary, the Wake County Public School System's movement towards higher promotion standards involved its leaders' initial implementation of the new eighth grade policy during the 2000-2001 school year. This action resulted from the combination of local promotion requirements with stipulations designated by the State Board of Education to develop a version of Gateway 3 relating specifically to eighth grade students enrolled in the Raleigh-area middle schools. Furthermore, it revived the "social promotion vs. retention dilemma" that started as far back as the middle 1800s (James and Powell 4).

Advocates of social promotion and retention should be interested in the results of this new policy in terms of its effect on eighth grade promotion rates. Thus, this study will provide evidence to support an answer the following main research question: *Does the new Wake County Public School System eighth grade promotion standard affect the resultant promotion rate?* The Wake County Public School System's 2000-2001 eighth grade promotion rates associated with a group of students from twelve middle schools and specific demographic characteristics primarily will be used to accomplish this task. However, the students' eighth grade promotion rates for the 1999-2000 academic campaign, the year before the implementation of this new policy, will be needed to complete one part of the investigation. Nonetheless, prior to describing the study in more detail, background

information pertaining to its analytic framework and the origin of the new eighth grade promotion policy will be presented.

### **III. Background**

#### *A Brief Overview of the Study's Analytic Framework*

Educational leaders have alternated between the use of social promotion and the implementation of tougher promotion standards to determine grade level placements for children throughout the history of K-12 public schools in America. Nonetheless, the most recent course of action among these school leaders has focused on the use of new, higher promotion standards, despite the possibility of increased retention rates (Foster 38). This implementation of tougher promotion standards, along with the use of retention/promotion labels, forms part of the foundation of this study's analytic framework. However, the analytic framework also will involve a theoretical perspective based on Howard Becker's Labeling Theory developed during 1963 in his book entitled *Outsiders: Studies in the Sociology of Deviance* (*Howard Becker's Labeling Theory*).

Overall, the analytic framework of this study depends on two major concepts: the current nationwide trend towards the use of tougher promotion standards and the Wake County Public School System's implementation of its new eighth grade promotion policy. In both of these cases, the deviant behavior associated with Becker's Labeling Theory will be represented by the retention of a student in his or her current grade level. Furthermore, promotion will be aligned with the behavior labeled by Becker as non-deviant.

The next chapter will provide a more detailed description of this study's analytic framework. Nonetheless, a conceptual framework also will be involved with this

examination pertaining to the Wake County Public School System's new eighth grade promotion standard. Thus, the next section will briefly describe this conceptual framework.

*A Brief Overview of the Study's Conceptual Framework*

This study's conceptual framework originated during the 1890-1920 period commonly referred to as the Progressive Education era (Gutek 200-202). During this time period, the ideas of two main leaders, John Dewey and Charles Eliot, dominated the K-12 public education arena (Tozer et al. 107). Furthermore, both individuals' beliefs have a connection to the modern-day "social promotion vs. retention" dilemma involved with this study. In fact, Dewey's ideas have been found to have a relationship with social promotion (Gutek 219). On the other hand, Eliot's beliefs and the retention concept have been aligned with each other in numerous research accounts (Tozer et al. 113-114).

Overall, the "social promotion vs. retention" dilemma's connection with the ideas of Dewey and Eliot formed the foundation of the study's conceptual framework. Furthermore, literary works, such as Michael Apple's Educating the "Right" Way, provided a bridge for the ideas from the Progressive Education era to reach the K-12 public school arena of the present day. Nonetheless, the nationwide movements to increase promotion requirements during the past 10-15 years and the Wake County Public School System's implementation of its new eighth grade promotion standard provided the support needed for Eliot's ideas to exceed Dewey's philosophies in terms of life span. Hence, Eliot's ideas can be identified as the true origin of this study's conceptual framework.

A more formal, detailed description of this conceptual framework will be provided in Chapter Two. However, at this point, some information regarding the policies involved in

this study need to be presented. Thus, the remainder of this section will focus on a general description of the old and new promotion policies governing the movement of eighth graders to grade nine in the Wake County Public School System and the state of North Carolina as a whole. Nonetheless, as with the analytic framework, these policies will be described more thoroughly in Chapter Two.

*An Overview of The Old and New Eighth Grade Promotion Policies Used In the Wake County Public School System and the State of North Carolina as a Whole*

Prior to 1999, a great deal of variability could be identified when comparing the eighth grade promotion standards used by the public school systems in North Carolina. In other words, locally-generated criteria were used by school leaders throughout the state to determine a child's fate, in terms of promotion or retention upon the completion of his or her eighth grade year. Thus, the Wake County Public School System, like its counterparts in the state's K-12 public educational program, had its own, unique local eighth grade promotion standard for many years.

The old eighth grade promotion policy of the Wake County Public School System, established by its Board of Education in May of 1992, was broad in terms of its inclusion of several levels of students. More specifically, the old guideline also applied its parameters to grades six and seven. Furthermore, in order to achieve grade promotion, a child had to pass at least three out of four classes from the following group: Mathematics, English/Language Arts, Science, and Social Studies. The student also had to attain a passing grade in at least half of his or her other classes (*WCPSS Retention: Criteria And Procedures*).

Wake County's old eighth grade promotion policy also included two other main features. To begin with, performance data from classroom activities was used to make promotion decisions. In addition, the use of non-academic, primarily social, factors in the promotion decision-making process was encouraged (*WCPSS Retention: Criteria And Procedures*). Revisions to this old policy occurred in December of 1995 giving principals the responsibility of placing all students in appropriate grade levels based on academic and non-academic factors. Thus, an avenue for the use of social promotion was available for all Wake County eighth grade students (*WCPSS Promotion And Retention Of Students*).

Based on this information, under the old Wake County policy, the movement of eighth grade students to high school was not solely dependent on their levels of academic achievement. In other words, additional factors, such as physical or social maturity and age, could lead to a low-performing eighth grader's promotion to grade nine, despite his or her failure to master material needed for academic success at the high school level. Thus, a large opportunity for social promotion to be used appeared to be present during Wake County's application of its old promotion practice to eighth grade students. Nonetheless, an April 1999 decision by the North Carolina State Board of Education added more structure in this area of the school system's policies.

On April 1, 1999, North Carolina's State Board of Education approved unanimously a statewide promotion standard for eighth grade students. This action was proposed by the board chairman and seconded by one of its members (*NCDPI Minutes*). Overall, the policy's attempt to govern student promotion from the eighth grade was the first of its type, with regard to being statewide, in the history of public schools in North Carolina. Nonetheless,

despite its newness to the state's K-12 public education system, the policy's primary goal was to prevent students from being promoted to grade nine without the preparation needed to be successful at that level of school (*Student Accountability Standards*).

The starting date for the implementation of the new promotion standard for eighth grade students in North Carolina, also referred to as Gateway 3, originally was defined as the 2001-2002 school year (*North Carolina Statewide*). However, the leaders of the Wake County Public School System decided to implement the new guideline, accompanied by some additional local options permitted by the state, at a date prior to the North Carolina State Board of Education's mandated time. Thus, during the 2000-2001 academic campaign, all middle schools in the school system based their promotion decisions for children in the eighth grade on the parameters of Gateway 3. Furthermore, the eighth grades of three Wake County middle schools were included in a pilot project during the 1999-2000 academic year involving the use of Gateway 3's new promotion requirements (Banks 1).

Gateway 3 requires eighth grade students to perform at level III or above on an end of grade test in both Reading and Mathematics to be promoted. In addition, they have to score 2.5 or higher on the Seventh Grade Writing Test. This new state policy also has a provision allowing individual school systems to add their own local eighth grade promotion requirements to the state-mandated ones. Thus, in addition to the state requirements, the Wake County Public School System included several local stipulations in its version of Gateway 3 (*NCDPI Draft 10*).

The Wake County Board of Education's new eighth grade promotion standard was developed soon after the 1999 action at the state level, with the latest revision of its policy

coming in October of 2000. Nonetheless, this new policy was written within the parameters of the statewide requirements delineated by the State Board of Education in April of 1999. Thus, the requirements of the state policy were meshed with several criteria determined by Wake County school officials (*WCPSS Promotion & Intervention Policy*).

This new eighth grade promotion standard requires Wake County students to pass Language Arts and Mathematics to be promoted to grade nine. Furthermore, the children have to pass Science or Social Studies while also achieving a passing grade in half of their other classes. Nonetheless, these accomplishments will not lead to grade promotion without the students' satisfaction of the basic state requirements in the areas of Reading, Mathematics, and Writing (*WCPSS Promotion & Intervention Policy*).

Overall, a few noticeable differences exist between the eighth grade promotion policy established by the North Carolina State Board of Education in April of 1999 and the Wake County Public School System's version of it developed in response to that action. This situation should be expected due to the provision of freedom to local school systems to add their own additional requirements to the State Board of Education's basic ones. Still, many common aspects such as protection for "Students with Disabilities" and "Students of Limited English Proficiency," as well as performance cutoffs on end of grade tests, can be identified in both forms of Gateway 3 (*WCPSS Promotion And Intervention*).

In summary, this section provided a brief, general description of the old and new eighth grade promotion policies used by the Wake County Public School System and the state of North Carolina as a whole prior to and after the State Board of Education's 1999 action. Nonetheless, these promotion guidelines will be presented in greater detail in a later

chapter. However, without an understanding of the study's key terms, the reader will have difficulty comprehending its components and findings. Thus, the next section will present the definitions of key terms included in this investigation.

#### **IV. Definition of Key Terms**

Academically Gifted (AG) Student - A student capable of performing academically at levels much higher than his or her classmates in the same grade level. This label is assigned to students after extensive evaluations of them through testing and examining their past academic records. Children with this classification have one of the following labels in the Wake County Public School System database: AG/Temporary, AG/Language Arts & Math, AG/Math, AG/Language Arts, AG/Home, or AG/Unserved.

EOG (End of Grade Test) - A standardized multiple choice test given to students in North Carolina's public schools during the last three weeks of the academic term on days within this time frame, as determined by each local school district. Every student in grades three through eight is required to take these tests. However, in the case of a child having an Individualized Education Program (IEP), he or she may be exempt from the tests due to the specifications of his or her plan. In grade eight, the students take this type of test in the areas of mathematics and reading. Also, a child's performance on the tests is denoted in terms of levels I, II, III, or IV. Students have to reach level III to meet promotion requirements, with regard to a specific test (*Student Accountability Standards*).

Free/Reduced Lunch Student - A student receiving a lunch at school without any monetary charge or at a lesser rate than full price. The Federal Government provides funds to cover the lost revenue from the students associated with either case.

Gateway 3 - The new eighth grade promotion policy adopted by North Carolina's State Board of Education. This policy requires eighth grade students to score at or above level III on state end of grade tests in mathematics and reading. In addition, the students have to score at or above the proficiency level of 2.5 on the writing assessment administered in grade seven. Finally, they have to meet any additional promotion requirements established by their local school system. North Carolina's State Board of Education mandated the implementation of this policy during the 2001-2002 academic term in all middle schools under its jurisdiction. Nonetheless, the Wake County Public School System implemented it, with some additional local requirements, in three middle schools during the 1999-2000 school year and the remainder of them during the 2000-2001 academic campaign (*North Carolina Statewide*).

Grade Promotion - The placement of a student in the next grade for the upcoming school year. A trend in this country's public schools at the present time requires this decision to be based on the student's academic performance results in his or her current grade level. However, on many occasions throughout history, decisions pertaining to a student's promotion have been based on his or her age, not mastery of academic concepts (James and Powell 4).

Grade Retention - The act of requiring a student to repeat a specific grade level for a second year (Fager and Richen 7). This action usually accompanies a child's failure to perform at a level consistent with defined academic standards.

Minority Student - A student without membership in the group of students representing the ethnicity/racial orientation of the largest group of pupils in the Wake County

Public School System. A student not possessing majority status in this country's larger society. Thus, the student is a non-white individual.

Promotion Rate - The number of students promoted from a particular grade, eighth in this study, to the next level of school upon the conclusion of an academic campaign.

Social Promotion - The placement of a student in the next grade for the upcoming academic campaign, despite his or her failure to satisfy the minimum academic competencies associated with his or her current level in school (Fager and Richen 7).

Special Education (SPED) Student - Any student with an Individualized Education Program (IEP) enrolled in one of the middle schools chosen for this study. Children with this classification have a label in one of the following disability categories in the Wake County Public School System database: Hearing Impaired, Orthopedically Impaired, Autistic, Learning Disabled, Speech/Language Impaired, Behaviorally/Emotionally Handicapped, Multi-handicapped, Severely/Profoundly Mentally Handicapped, Deaf/Blind, Developmentally Delayed, Other Health Impaired, Traumatic Brain Injured, Educable Mentally Handicapped, Trainable Mentally Handicapped, or Visually Impaired.

Year 0 - The year before a school selected for this study based its promotion decisions for eighth grade students on the requirements of Gateway 3.

Year 1 - The first year a school selected for this study based its promotion decisions for eighth grade students on the requirements of Gateway 3.

In summary, the reader needs to be aware of the definitions of these key terms throughout the remaining parts of this study to interpret its components and findings in an accurate manner. Nonetheless, now that this information has been presented, the main

research question and the related Sub-questions will be described in the next section.

Furthermore, the research methodology, analytical techniques, and data will be identified.

However, more detail with regard to these parts of the study will be included in Chapter 3.

## V. Research Question

The purpose of this study will be to provide evidence to support an answer to the following main research question: *Does the new Wake County Public School System eighth grade promotion standard affect the resultant promotion rate?* More specifically, this study will attempt to determine the effect of the new Wake County Public School System eighth grade promotion standard by answering the following four Sub-questions:

- Sub-question #1- Is there a statistically significant difference in eighth grade promotion rates before (Year 0) and after (Year 1) the implementation of Gateway 3?
- Sub-question #2- Are there statistically significant differences in eighth grade promotion rates between groups of students based on demographic characteristics?
- a) Are there statistically significant differences in eighth grade promotion rates based on gender?
  - b) Are there statistically significant differences in eighth grade promotion rates based on special education (SPED) status?
  - c) Are there statistically significant differences in eighth grade promotion rates based on free/reduced lunch status?
  - d) Are there statistically significant differences in eighth grade promotion rates based on academically gifted (AG) status?
  - e) Are there statistically significant differences in eighth grade promotion rates based on minority status?
- Sub-question #3- Are there statistically significant correlational relationships between student demographic characteristics and promotion rates?

Sub-question #4- What effects do student demographic characteristics have on the promotion rates of students?

If a difference is identified during the analysis of Year 0 and Year 1 data, a further examination will be conducted. The goal of this additional work will be to determine if the difference results from the demographic characteristics associated with the students in this study. Nonetheless, even in the case of no difference between Year 0 and Year 1 data, analyses in search of possible variations among the students' demographic characteristics will be conducted. This action will be taken to determine if the new Wake County Public School System eighth grade promotion standard adversely affects one group of children. Overall, the motivation for determining any possible relationships between student demographic characteristics and the new promotion policy results from the current overarching performance gap problems in this country's public schools. More specifically, at the present time, school leaders need as much information as possible to use in their attempts to close the performance gap between groups of students.

An identification of statistically significant differences between students' demographic characteristics will lead to further analysis. In this situation, correlation coefficients will be employed to compare student demographic characteristics to promotion rates. Furthermore, the research data will be examined to determine "cause" with regard to the student demographic characteristics' effects on the eighth grade promotion rates of students.

The methodology to be used to complete the process outlined in the previous two paragraphs will involve quantitative analyses of the study's data with the aid of univariate

and multivariate statistics. Some data will pertain to the overall promotion rates of Wake County eighth graders for the 1999-2000 and 2000-2001 school years. However, other statistics to be used will represent the 2000-2001 eighth grade promotion rates of students in relation to the following student demographic characteristics: *academically gifted (AG), female, free/reduced lunch, male, minority, and special education (SPED)*. Nonetheless, this study will only use data associated with eighth graders from twelve middle schools.

Overall, the main research question and four Sub-questions will be the primary forces determining the direction of this study. However, prior to my pursuit of answers to these different parts of the project, a baseline will be established through the provision of descriptive information pertaining to the Wake County students included in this investigation. This information will include data associated with the following variables: *academically gifted (AG), female, free/reduced lunch, male, minority, and special education (SPED)*. The selection of these variables is based on repeated warnings from the educational research to watch out for differences among these student demographic characteristics in relation to policies and other practices implemented in public schools. Specific details, in terms of numbers associated with the variables and the schools included in this study, will be presented in Chapter Three.

In addition to a description of the goals, methodology, analytical techniques, and data associated with this study, reasons for conducting this investigation must be revealed. More specifically, this study's value to the field of public education should be delineated. Thus, the following paragraphs will discuss the significance of this work.

## **VI. Significance of this Study**

Wake County school leaders, like other educators around the country, constantly are trying to meet the needs of their students in a more effective manner. However, teachers and school administrators need data from studies involving their students and programs, such as this one, to make plans to accomplish this task. Thus, this investigation's significance can be attributed to the following ideas:

1. This study will identify groups of Wake County eighth graders needing special attention, in addition to regular classroom instruction, to be successful academically.
2. This study will help school leaders in the areas of resource forecasting and budgeting in their attempts to meet the requirements of Gateway 3.
3. This study will enable the Wake County Public School System to maintain a positive image by addressing problem areas in relation to Gateway 3 prior to the public's awareness of the statewide promotion data associated with this new policy.
4. Positive results from this study will motivate Wake County school leaders to look for new and exciting areas of learning for future students.
5. Positive results from this study will reduce the amount of stress on faculty members in Wake County middle schools with regard to student performance in terms of Gateway 3.
6. This study will give Wake County school board members hard facts to use to support their requests to county commissioners for additional resources.

These issues will be described in greater detail in the remaining paragraphs of this section.

As noted, this research project will be valuable to Wake County school leaders due to its ability to identify eighth grade students with similar demographic characteristics, yet having difficulty satisfying the requirements of the new promotion standard. More specifically, through the attainment of this information, these educators should be able to determine the groups of children with a high probability of needing special attention beyond regular classroom instruction, in the form of after-school tutoring or some other type of

assistance, to be successful. Thus, services can be established at school sites in future years to reduce the likelihood of disaster, in the form of retention, for eighth graders. Furthermore, intervention efforts can be focused more accurately on the eighth grade children with the greatest academic needs.

The Wake County School Board's decision to implement Gateway 3 in three middle schools during the 1999-2000 academic campaign, as well as all of them for the 2000-2001 school year, provides additional value for this study in the areas of resource forecasting and budgeting. To be more specific, the 2001-2002 school year is the first mandated time for all middle schools in North Carolina to implement the new promotion standard. However, Wake County's decision to start this action earlier gives its school leaders an advantage with regard to the development of appropriate budget requests. This situation is especially true for requests geared towards obtaining resources needed to help students meet the requirements of Gateway 3. Overall, this assertion is based on the Wake County Public School System's access to data for such a study; whereas, other school systems have yet to compile any statistics to help them with regard to resource forecasting and budgeting in their efforts to meet this new challenge.

Wake County's implementation of this new promotion standard prior to the mandated date established by North Carolina's State Board of Education also can be advantageous in the case of negative results from this study. In other words, as a result of this investigation, the school system will be able to identify and address any problem areas before most middle schools in North Carolina implement the new policy for the first time. Hence, the Wake County Public School System will have an opportunity to maintain a positive image due to

the study's provision of key information prior to the public's awareness of statewide promotion data in relation to Gateway 3 resulting from everyone's adherence to this policy.

With the aid of this positive image, as in the past, the Wake County Public School System will continue to attract the best available employees and students. Everyone wants to work for a top-notch organization; hence, this study, through its ability to aid in the maintenance of this type of image, can help the Wake County Public School System in the area of personnel recruitment. Furthermore, positive reputations possessed by the schools will continue to attract families with high-performing children to the Raleigh area.

In addition to the value of negative findings associated with this study, positive results will motivate the district's educational leaders to search for new and exciting areas of learning for the students of tomorrow. This assertion results from their knowledge of having mastered the challenges of the present day. In other words, these educators will have the confidence to pursue learning opportunities beyond basic instruction for their children, due to their success with the requirements of Gateway 3. Thus, the school system's eighth graders will receive additional educational experiences, in the form of enrichment, not associated with many middle schools throughout North Carolina and the United States. As a result, the Wake County Public School System's high schools and surrounding community will benefit from their association with well-prepared students.

These positive results will also reduce the amount of stress on faculty members concerned about student performance in relation to the requirements of the new Wake County Public School System eighth grade promotion standard. To be more specific, findings of this nature will reassure them of their ability to prepare students for the challenges of

Gateway 3. This additional confidence will be very valuable in their future efforts with children in the classroom. Overall, the students and staff members will be the winners in this situation. The students will continue to receive excellent teaching with a focus on continuous improvement in the area of instructional methods; whereas, the staff members will gain, or perhaps maintain, a positive work environment.

In summary, this study's results will enable the Wake County school leaders to assess the initial impact of Gateway 3 as well as their middle schools' ability to meet the requirements of this policy with their current resources. Nonetheless, the greatest value of these findings will involve its school board members' battles with the county commissioners. In recent years, neither body of political power has agreed on much in terms of the school system's budget and the county commissioners' contribution of funds to fulfill it. However, with this information, the members of the Wake County Board of Education will have hard facts to use to support their requests for funds from the county commissioners, especially in cases of seeking needed resources to help middle schools with a high number of low-performing/retained eighth grade students. Furthermore, through sharing the conclusions of this study with the public by way of different forms of media, the citizens of the Raleigh area may be persuaded to support tax increases or proposed bond issues to generate more revenue for the schools.

Now that the significance of this study has been described, the final section of this chapter will focus on its limitations. More specifically, several conditions limit this investigation's ability to answer certain questions. Thus, these limitations need to be

delineated to define the boundaries of this study with regard to its ability to draw conclusions based on the selected data.

## **VII. Limitations**

The first limitation of this study pertains to the population under investigation. To be more specific, the data to be used will be generated by the academic performances of students in only one state, North Carolina. In addition, all of the children live in the Raleigh area and are enrolled in the same school district, the Wake County Public School System. Thus, the only opportunities for diversity result from the individual differences among the students residing in this same general geographic location. Furthermore, as a result of this use of a sample population from a single part of the country, the influence of issues such as norms/ways of life on student performance due to one's physical environment will not be included in any of the study's conclusions. Hence, this study will be unable to determine the affect of different environmental pressures, such as lifestyles found in various regions of the country, on a child's academic performance.

Another limitation is the decision to use one grade level. To be more specific, this study only will focus on eighth grade students in the selected middle schools. Hence, its findings will not include the influence of children's academic performances at other grade levels. Furthermore, comparisons between students at different grade levels will not be a part of this investigation. Nonetheless, some uniformity can be identified among the subjects due to the similarity in their stages of development. Furthermore, all of the children will be compatible with each other, in most instances, regarding major concerns of middle school students, such as achieving popularity among peers, maturing into an adult, and developing

an identity. As a result, this investigation will be able to support conclusions involving the typical eighth grade student with relative ease, especially ones enrolled in the Wake County Public School System.

The failure to distinguish between eighth grade students in year-round schools and children on the traditional calendar represents another limitation of this study. As a result of this decision, any possible differences in the promotion rates of students on the different school schedules will not be included in the study. Therefore, no recommendations regarding the best arrangement of the school months in an academic campaign, in terms of promoting student success with the new Wake County Public School System eighth grade promotion standard, will be justifiable through the use of this investigation's findings.

Several other limitations can be identified in the parts of the study focusing on the relationship between student demographic characteristics and promotion rates. However, three main ones have the largest presence in this investigation. To begin with, the use of the academically gifted (AG) students strictly involves any eighth grader in the selected schools with that label. Therefore, no differentiation between the children's specific areas of strength will be included. Hence, the influence of these students' accelerated skills will not be taken into account when determining their level of success with regard to satisfying the new Wake County Public School System eighth grade promotion standard. This situation will diminish the predictability of the study's findings to a certain extent.

The approach for dealing with academically gifted students, described in the previous paragraph, also applies to special education (SPED) children in terms of this study's analysis of promotion data. In other words, the mere presence of an Individualized Education

Program (IEP) for these students in the Wake County Public School System records will be the criterion used for their inclusion in this part of the study. No attempts to distinguish between the influence of the different conditions of special education students, and their accompanying modifications, on the promotion data will be made. Thus, the study's findings may be inconsistent with the actual performance levels of some special education children in relation to Gateway 3.

A third limitation involving student demographic characteristics pertains to the study's failure to recognize the specific ethnicity/nationality of minority individuals in the data selection process. Instead, the major criterion used to select an eighth grade student for the minority group will involve his or her lack of majority status in this country's larger society. In other words, for the purposes of this investigation, any non-white person is labeled as a minority. Thus, as with the academically gifted (AG) and special education (SPED) students, the influence of differences between the numerous minority groups will not be taken into account. As a result, underlying cultural issues associated with different groups of people, yet capable of influencing a child's academic performance, will be ignored in this study.

A final limitation of this study pertains to the availability of data. The schools selected for this investigation have only one year of results associated with the new Wake County Public School System eighth grade promotion standard. Obviously, additional years of data would be helpful in terms of reinforcing the study's conclusions. However, the short life span of the policy prevents the availability of such information. As a result, some

findings may be questioned by outside observers until further studies can be conducted in future years to reinforce them.

### **VIII. Summary**

This chapter has described the background information associated with this study. Definitions of key terms and the main research question, as well as its related Sub-questions, also have been formally discussed. In addition, the methodology, analytical techniques, and data have been identified. Furthermore, explanations of the study's significance and limitations have been included in this chapter. Thus, at this point, the focus of this project will shift to a review of the educational literature related to two highly-contested topics, social promotion and retention, associated with the implementation of the new Wake County Public School System eighth grade promotion standard.

## **Chapter 2-Literature Review**

The development of Gateway 3 to regulate the promotion or retention of eighth grade students in the Wake County Public School System, and the state of North Carolina, revives an argument present in many public school systems in this country throughout history. This issue forces advocates of social promotion to defend their ideas to supporters of using strict promotion standards capable of leading to the retention of students and vice-versa. Thus, as a result of this dilemma's presence in public schools throughout history and its central role in this study, this chapter primarily will be devoted to describing the major themes in the current educational literature associated with social promotion and retention resulting from the implementation of promotion standards. Nonetheless, prior to the presentation of those ideas, the analytic framework and the conceptual framework to be incorporated in this study will be described.

### **I. Analytic Framework**

Throughout the history of K-12 public schools in this country, the practices of educational leaders have alternated between the use of social promotion and the implementation of tougher promotion standards to determine grade level placements for children. However, the latest movement has involved the use of new, higher promotion standards, despite the possibility of increased retention rates resulting from this action (Foster 38). This current trend's implementation of tougher promotion standards, along with the use of promotion/retention labels, forms part of the foundation of the analytic framework to be used in this study. Nonetheless, the analytic framework also will involve a theoretical perspective.

In addition to the contributions of the movement towards tougher promotion standards at the present time, this study's analytic framework will rely on ideas associated with Howard Becker's Labeling Theory developed during 1963 in his book entitled Outsiders: Studies in the Sociology of Deviance (*Howard Becker's Labeling Theory*). However, prior to describing my analytic framework in greater detail, the background and basic elements of Becker's theory will be presented along with examples of support for this concept. In addition, negative aspects of Becker's Labeling Theory will be described.

The development of Howard Becker's Labeling Theory occurred during a time period marked by intense political and social power struggles on college campuses throughout this country. At this time, liberal political movements garnered a great deal of support from college students and faculty members. Thus, Becker took advantage of this situation and merged these individuals' liberal ideas with a modified form of Edwin Lemert's Labeling Theory. As a result, in 1963, Becker revealed his own version of Labeling Theory (*Howard Becker's Labeling Theory*).

Despite his heavy reliance on Lemert's work, Howard Becker also used the ideas of other theorists to create his version of Labeling Theory. For example, his work has strong ties to the symbolic interaction foundation developed by Charles Cooley and George Mead. Furthermore, evidence of the influence of Frank Tannenbaum's work with labeling can be detected in Becker's theory (*Howard Becker's Labeling Theory*). Nonetheless, in addition to this information pertaining to the origins of Howard Becker's work, attention needs to be given to the actual theory, as well as specific ideas associated with it, to provide clarity in terms of

this study's analytic framework. Hence, the following paragraphs will focus on the presentation of this material.

Howard Becker's Labeling Theory says, "Social groups create deviance by making rules whose infraction constitutes deviance. Deviance is not a quality of the act the person commits, but rather a consequence of the application by others of rules and sanctions to an 'offender.' The deviant is one to whom that label has successfully been applied; deviant behavior is behavior that people so label" (*Labeling Theory: Becker*). In other words, deviant behavior is defined by social or group norms. Thus, it is not inherently related to particular types of people or their specific actions (*Labeling Theory: Becker*).

According to Becker, deviant behavior would not exist without the aid of people referred to as moral entrepreneurs (*Labeling Theory Lecture*). These people make and enforce rules based on their positions of power or authority in an attempt to remove evil from society. In addition, their actions are motivated by the responsibilities of their occupations and their desire to obtain respect from people represented by them. Furthermore, on some occasions, rules are applied in a manner capable of creating favorable consequences for these people in positions of power or authority (*Howard Becker's Labeling Theory*).

The enforcement of these societal rules is an enterprising act that gains momentum when brought to the public's attention. More specifically, upon learning of deviant behavior as determined by the labels of moral entrepreneurs, rule-abiding members of society are not willing to accept excuses for these actions (*Howard Becker*). In fact, rule infractions often are accompanied by punitive measures directed at the deviant individuals by the rule enforcers (*Howard Becker's Labeling Theory*). As a result, individuals labeled as deviant

assume feelings of inferiority or immorality in comparison to the rest of society. Hence, they become outsiders and accept the opinions the public generates about them (*Howard Becker*). In addition, these deviant people no longer feel a part of the mainstream society (*Howard Becker's Labeling Theory*).

Overall, Becker's theory takes the primary deviance, or first inappropriate action, by an individual for granted. This action may be intentional or unintentional. However, the real process of Labeling Theory starts with the public's reaction to this initial behavior. In other words, if the behavior is labeled as being deviant, this person's public image could change in a negative manner. Furthermore, the individual's self-concept may be adversely affected. Hence, the motivation for additional displays of behavior labeled as deviant is present. As a result, the deviant individual achieves master status in terms of this theory. This attainment of master status within the parameters of Becker's Labeling Theory leads to the segregation of the person from the rest of society as well as his or her engagement in deviant routines/ways of life (*Labeling Theory Lecture*). The final step in the process involves the individual's attainment of membership in an organized deviant group. Therefore, he or she can engage in deviant behavior with minimum interference as well as gain rationale for actions of this type (*Howard Becker*).

In summary, Becker's Labeling Theory involves the following three primary steps:

1. "Primary deviance-This act may be intentional or unintentional.
2. The person is caught and labeled as being deviant by an authority figure for the action in step 1. At this stage, individuals accept the label of being deviant and assume master status.

3. Rule breakers become members of a deviant subculture” (*Howard Becker’s Labeling Theory*).

According to Becker, most rule breakers’ actions are consistent with these three steps.

However, some variations among patterns of these individuals can be identified (*Howard Becker’s Labeling Theory*). Nonetheless, regardless of the consistency between deviant persons’ actions and the previously described steps, Becker’s theory is based on six main assumptions:

1. “Acts are not inherently deviant/criminal.
2. People are not deviant/criminal until receiving labels of that type from authorities.
3. Labeling is a social process.
4. The characteristics of the offender are more important than the description of the action.
5. Age, sex, and social class are important factors in terms of influence on the labeling process.
6. Deviant/criminal labels can have adverse effects on labeled people” (*Key Assumptions*).

Numerous positive aspects of Howard Becker’s Labeling Theory can be identified in the literature associated with this concept. For example, some scholars credit this theory with making society aware of the possibility of unintended consequences associated with some individuals’ actions. Furthermore, according to some social scientists, the potential problems

encountered during incidents of this nature would not be known without the aid of Becker's work (*Labeling Theory Lecture*).

Labeling Theory also is credited by members of the social science research world for its ability to explain crime and delinquency. According to these individuals, the theory's value increases even more when kept separate from critical or conflict criminology. Furthermore, they attribute the continued efforts to research the theory's essential symbolic elements with the increases in its usefulness in the area of crime and delinquency (Wellford and Triplett).

Another source of support for Becker's work can be identified in literature written by two social scientists named Charles Wellford and Ruth Triplett. According to these individuals, Labeling Theory's foundation in symbolic interactionist theory enables criminologists to use social thought to generate comprehensive explanations of crime and deviance. As a result, the accuracy of conclusions associated with issues of this nature is increased (Wellford and Triplett).

Thomas Scheff also strongly supports Howard Becker's Labeling Theory. In fact, Scheff applied this concept to the area of mental health. As a result, with the aid of Becker's ideas, he was able to identify the cause of the assignment of mentally ill labels to people in society. More specifically, according to Scheff's work, these labels result from society's inability to categorize some types of rule-breaking behavior displayed by individuals. Overall, Scheff has a great deal of empirical evidence to support his findings generated by his initial application of Becker's ideas to the field of mental health (*Howard Becker's Labeling Theory*).

Support for Becker's Labeling Theory also can be found in work completed by Edwin Schur. Due to his agreement with Becker's ideas, this social scientist used them to generate theories pertaining to victimless crimes. For example, Schur identified too much legislation as the primary cause of this type of crime. Furthermore, he determined victimless crimes to be the source of more deviance and the development of deviant subcultures in society. Nonetheless, Schur's work would not have been possible without the support of the ideas associated with Howard Becker's Labeling Theory (*Edwin M. Schur*).

Despite the previously described positive aspects of Howard Becker's Labeling Theory, several negative ideas surrounding his work can be found in the literature associated with this concept. For instance, many sociologists label Becker's theory as being untestable. Thus, they do not consider it to be a true theory. In fact, according to many social scientists, the value of Becker's Labeling Theory will fade in the future due to a lack of empirical support for it as well as the conservative political climate of our country at the present time (*Howard Becker's Labeling Theory*).

Another common complaint among social scientists with regard to Howard Becker's work pertains to the concept of primary deviance. More specifically, a clear definition of primary deviance is never presented in Becker's Labeling Theory, despite its large role in his work. Furthermore, throughout his theory, Becker does not offer any information with regard to the causes of primary deviance (*Labeling Theory Lecture*). Likewise, no efforts are made by the theory to explain why some people engage in deviant behavior, while other individuals refrain from such actions (*Becker's Theory*).

Becker's Labeling Theory also is criticized for its failure to apply labels to individuals with a high level of accuracy. These complaints by social scientists often are expressed in conjunction with concerns regarding the theory's use of inadequate information during the labeling process (*Key Assumptions*). Along these same lines, many scholars do not agree with the Labeling Theory's common assumption of people maintaining a deviant lifestyle once obtaining a label of that nature. In other words, theorists do not feel this label insures these individuals' continued involvement in deviant actions and an eventual career full of deviance (*Becker's Theory*).

Now that Howard Becker's Labeling Theory has been described, the following paragraphs will present the study's analytic framework. This analytic framework involves the current position assumed by educational leaders on the retention/promotion cycle that has been part of K-12 public school education throughout history. Furthermore, ideas from Becker's Labeling Theory play a role in the analytic framework.

At the present time, school leaders around the country are implementing tougher promotion standards, such as the one applied to eighth grade students in Wake County during the 2000-2001 academic campaign. Thus, increases in retention rates, compared to other points in time, are likely. This assertion is based on the educational literature's identification of other moments in the history of K-12 public schools dominated by the use of social promotion. In fact, according to the literature, the specific time period is the key to determining which practice, social promotion or retention, dominated the decision-making processes involving students' grade level placements in public schools (James and Powell 4). Nonetheless, the current plan for educators, especially in the Wake County Public School

System, involves only the promotion of students satisfying the requirements of these new promotion standards. Children failing to perform academically in a manner consistent with the new policies are being retained in the same grade level for a second year.

Based on this nationwide movement towards the implementation of tougher promotion standards, public school students are receiving labels like the subjects involved in other studies focusing on Becker's Labeling Theory. More specifically, two types of labels, retained or promoted, are being assigned to students due to the presence of the current retention cycle. As with Becker's work, these labels are created and assigned by moral entrepreneurs such as legislators, members of the State Board of Education, members of local school boards, superintendents, and principals. These individuals carry out this task to fulfill job requirements and/or obtain respect from members of the society, especially in cases of moral entrepreneurs holding elected positions. Furthermore, social norms or expectations, not the actual academic performance of children, determine the positive and negative connotations associated with these labels.

A similar situation is occurring in the Wake County Public School System. To be more specific, the leaders of that school system implemented a new eighth grade promotion standard during the 2000-2001 school year. Thus, like the current movement towards tougher promotion standards across the country, this action assigns one of two labels to eighth grade students, retained or promoted. Again, these labels are assigned by individuals in leadership positions within the local school system such as the superintendent, members of the school board, and principals. These individuals also experience pressure at the local level

with regard to satisfying their job requirements and the desires of the public, especially the elected school board members.

Overall, this study's analytic framework depends on two major concepts: the current nationwide trend towards tougher promotion standards and the Wake County Public School System's implementation of its new policy governing eighth grade students' movement to high school. In both cases, for the purposes of this study, the deviant behavior associated with Becker's Labeling Theory is represented by the retention of a student in his or her current grade level. Furthermore, promotion represents the behavior labeled by Becker as non-deviant.

Both labels, retained or promoted, receive value from members of society, whether it be negative or positive. Thus, it will be interesting to determine the influence of these labels on the academic futures of the students involved in this study. In other words, an interesting study for the future could involve an analysis of the high school graduation results of this study's subjects. As a result, correlations between labels assigned to students in grade eight and high school dropout rates could be calculated. Hence, conclusions regarding the ability of Becker's Labeling Theory to predict the academic futures of eighth grade students could be generated.

Now that the study's analytic framework has been described, the focus will shift to a description of its conceptual framework. This part of the paper will include ideas associated with two leaders of the Progressive Education era, John Dewey and Charles Eliot. Furthermore, the role of Michael Apple's Educating the "Right" Way in connecting old and new concepts, such as social promotion and retention, will be presented. Howard Becker's

Labeling Theory also will be included due to its ability to provide a bridge between old ideas from the Progressive Education era and K-12 public education of the modern day.

Nonetheless, the initial part of this section will focus on the developments in the United States that surrounded the birth of Progressive Education.

## **II. Conceptual Framework**

During the period of 1870-1920, the United States experienced many changes as a country. For example, the country's dominant rural nature prior to 1870 was overshadowed by a strong movement towards urbanization among the American people. Thus, many people moved to large American cities. An increase in the number of immigrants in this country also was observed during those years (Guttek 200-201). In fact, the majority of the immigrants came from Southern and Eastern Europe (Kliebard 45).

Industrialization and the centralization of decision-making power were two additional concepts that initially occurred in this country between 1870 and 1920 (Tozer et al. 82). Thus, during those years, the way of doing business, particularly with regard to the production of materials, shifted from a focus on the efforts of an individual entrepreneur to the efficiency of a large factory. This change led to the mass production of goods (Guttek 202). Nonetheless, it also was accompanied by the scientific management of factories. As a result, decisions were made by a small group of managers placed throughout the factories to monitor the workers on the floor (Tozer et al. 87-88).

These previously identified changes in the United States during the 1870-1920 time period led to conflicts between many sources of economic, political, and social power in the American society. As a result, a shift in the country's ideology also evolved from the

attempts of classical liberals to justify their beliefs to modern liberals. For instance, on many occasions, the classical liberals tried to defend their idea of truth's foundation being religion and civic morality. Nonetheless, the modern liberals also provided momentum for a debate with the classical liberals by arguing that scientific methods, not religion and civic morality, were the sources of truth (Tozer et al. 100).

Two other major areas of disagreement between the classical liberals and the modern liberals pertained to progress and nationalism. The classical liberals felt progress was inevitable for humans; whereas, the modern liberals attributed it to science and the decision-making skills of experts. Furthermore, classical liberals feared a powerful government and, in their opinion, its ability to reduce the freedom of individuals. However, modern liberals welcomed a strong, active government as a way to preserve their freedom. In fact, they considered strong governments to be sources of protection for less powerful people from individuals with high levels of authority (Tozer et al. 100-101).

All of these changes in the American society had an impact on the educational system in this country. Thus, during the 1890's, the National Education Association appointed several committees to reform the schools' curricula and general functions to make them consistent with the new way of life in the United States. For example, the "Committee of Ten" was formed to explore issues related to the basic tenets of an effective high school program capable of producing graduates with the preparation needed to be successful in college. Overall, this situation led to the birth of Progressive Education (Kliebard 46).

Progressive Education had a positive influence on this country's public schools from 1890-1920 in terms of improving these institutions. For example, leaders of the Progressive

Education movement attempted to implement more efficient operational practices in schools due to overcrowded conditions caused by the urbanization and immigration patterns in the United States (Guttek 200-202). Additionally, they worked to replace the traditional curriculum and instructional methods, such as rote learning, with instruction focused on students. More specifically, these educators wanted to connect the material presented in schools to the students' interests and needs. Furthermore, the development of a positive relationship between the instructional methods used in classrooms, as well as school activities, and the larger American society was a priority of these individuals (Tozer et al.105).

Two major leaders of the Progressive Education movement were John Dewey and Charles Eliot. Nonetheless, they had different ideas with regard to the concepts to be included in positive, effective educational institutions. For example, Dewey felt schools should be democratic laboratories designed to help students obtain an understanding of living in a democracy and develop the skills needed to be successful in that type of environment. According to Dewey, these goals could be attained by students through reading about these concepts and interacting democratically in learning activities. However, in his opinion, the situation would require a shift in the schools' focus from the traditional, textbook-driven instructional methods to new techniques that concentrate on the nature of a child and seek to develop his or her intellectual capacities (Tozer et al. 107).

John Dewey also felt the classroom should promote the idea of students working together on social activities associated with their individual interests in a democratic learning environment. In addition, he supported the idea of teachers and students cooperatively

planning curriculum and educational activities to insure enjoyment for both groups in the school setting (Levine and Ornstein 140). According to this educator, this type of interaction between groups of individuals in a school environment leads to the development of critical thinking skills, intellectual growth, and new interests. Overall, Dewey supported his perspective by describing children as social creatures who like to make things and are creatively expressive. However, he also was quick to point out the traditional schools' tendency to ignore these characteristics of children and, at times, penalize them for actions of this type (Tozer et al. 107).

Despite Dewey's efforts to replace the traditional curriculum with a student-centered one, he did not support the idea of using schools to prepare children for a specific occupation (Tozer et al. 108). Furthermore, according to Dewey, education's ability to generate responses to social problems was one of its main roles in society. As a result, he repeatedly reminded people of his belief in the presence of an intimate relationship between the school and its surrounding community (Levine and Ornstein 138).

Overall, John Dewey supported the Progressive Education movement's attempts to change schools and their traditional methods of operation and instruction. However, he strongly opposed the numerous reform efforts focusing on the development of a socially efficient school curriculum, accompanied by scientific precision and utilitarian payoffs, which resulted from this country's movement in those days to mass production in large factories operated under the guidelines of scientific management (Kliebard 57). As a result, Dewey firmly held to his belief in education's major function as a social process and continued to stress the need to relate instruction to a child's stages of personal and social

growth/development (Levine and Ornstein 139). Hence, according to this educational leader, schools should be organized around age levels and age-appropriate subject matter (Gutek 219).

In summary, John Dewey viewed education as a social process that enables immature children to participate in society during the remainder of their lives. Furthermore, he wanted all schools to operate according to democratic guidelines. Nonetheless, Dewey strongly opposed barriers capable of segregating people in schools. Thus, the development of positive interaction between students and teachers at all times in the educational environment was one of his primary goals (Levine and Ornstein 139-140).

Many people supported Dewey's ideas associated with the Progressive Education movement. However, Charles Eliot's ideas, despite their lack of congruence with Dewey's assertions, also garnered a great deal of support from members of society during those days. Thus, to fully understand the different ideologies associated with this time period, a brief description of the basic tenets of Eliot's educational philosophy also needs to be presented.

One of Charles Eliot's primary beliefs was teachers' responsibility to guide students to appropriate types of work for adulthood. Furthermore, he felt four primary classes of people exist in society: managing/leading, commercial, skilled artisans, and rough workers. Thus, according to Eliot, failure on the part of school officials to recognize these four classes, as well as their responsibility to guide students to the appropriate occupations, could deny children an education capable of preparing them for their destined vocation (Tozer et al. 110).

Based on these beliefs, Eliot became very interested in the development of vocational education programs in schools. In addition to its ability to prepare young people for future occupations, he credited this type of educational program with being able to reduce problems in factories resulting from labor unrest. These problems primarily were due to the scientific management of workplaces instituted for the first time during the years surrounding the Progressive Education movement due to the large amount of industrialization in this country (Tozer et al. 109-110).

In addition to his beliefs about different classes of people and the need for vocational education in schools, Eliot strongly believed in the value of equal educational opportunity for all children. However, based on his definition of this concept, all students were not to be given the same educational experiences; instead, they simply should have an equal opportunity to obtain an education consistent with their individual needs. Nonetheless, despite some disagreements over the definition of equal educational opportunity, the concept, in Eliot's opinion, led to one of his major goals as an educator, the development of a socially efficient educational process (Tozer et al. 113).

Eliot's desire to develop a socially efficient school stemmed from his belief in the need to prepare the most talented people, through the educational process, to assume leadership roles in a democracy later in life. According to him, a socially efficient school would lead to the development of experts in different areas of the curriculum. As a result, the other students would confide in, and respect, these leaders. Hence, the provision of equal educational opportunities indirectly leads to the existence of the democratic ladder in society

characterized by the rise of the most talented and intelligent individuals to the top in terms of leadership positions (Tozer et al. 113-114).

Overall, according to Eliot, schools should develop power and intellectual abilities among students in addition to preparing them for a future occupation. Nonetheless, he also supported educators' efforts to give special attention to differences among students in terms of skills. In fact, Eliot identified these differences, especially in intellectual abilities, as the primary factors used to determine a child's placement in social and vocational roles in the larger society (Kliebard 50).

Charles Eliot's ideas during the Progressive Education movement have survived the test of time to a much greater extent than the ones associated with John Dewey. Many factors may have contributed to this result; however, in my opinion, the close association of Eliot's ideas with the industrial movement in this country during the 1870-1920 time period played the greatest role. More specifically, Eliot patterned his operational structure of schools after the ones used in industry management during those days. Thus, the school environment and the adults' working conditions were similar in many areas such as the existence of criteria for individuals to meet to be successful. Hence, Eliot's efforts to develop more efficient schools most likely were understood by many adults in the larger American society during the early 1900's, especially considering the numerous attempts in those days to increase the efficiency level of working conditions in factories through the employment of scientific management (Kliebard 57).

In summary, Charles Eliot believed strongly in the need for an increase in efficiency and students' freedom of choice, with regard to the subject matter to be studied, in this

nation's schools. Nonetheless, the development of higher standards for students also received a lot of support from Eliot (Guttek 144). All three issues are important; however, Eliot's push for higher standards still attracts a great deal of attention in this country's public schools at the present time.

Michael Apple, a professor of Curriculum and Instruction as well as Educational Policy Studies at the University of Wisconsin-Madison, has written several pieces of literature involving different aspects of the philosophies of Dewey and Eliot. More specifically, in Educating the "Right" Way, he openly admitted to his position on the Left side of the political/educational spectrum found in this country at the present time (Apple 8). Thus, his goal, like Dewey, is to maintain a democratic environment in the schools.

Despite Apple's support of Dewey's democratic school concept, he pointed out that public education in this country at the K-12 level is currently moving in a different direction with the implementation of new ideas such as vouchers, national curricula, and standardized testing in high-stakes situations. Nonetheless, he stressed the need to be cautious with these issues, in spite of their apparent positive face value (Apple 197). These ideas seem to be good; however, according to Apple, they impact schools at the classroom level in a negative manner (Apple 5).

The ultimate goal of the previously identified new ideas, the achievement of higher standards, was described in Apple's Educating the "Right" Way using feedback from teachers and administrators in K-12 public schools throughout the country. In this book, Apple portrayed the emphasis on higher standards, particularly through attempts to raise test scores, as a way to create inequalities between schools and students. Furthermore, he noted

that a focus on test scores for comparisons of schools and student groups most likely will lead to serious negative consequences such as increased damage to the least advantaged children. Thus, Apple felt the push for higher standards had the potential to create additional problems in schools (Apple 91-92). Nonetheless, Apple's description of this topic provided an illustration of his association with Eliot's ideas in terms of research.

Overall, Apple considered the current movement of the conservative modernists (Rightists) towards higher standards accompanied by state and/or national testing programs, such as the implementation of the new Wake County Public School System eighth grade promotion standard, to be a major threat to the future of democratic learning environments (Apple 91-92). Furthermore, according to Apple, the conservative modernists' movement will lead to an inevitable increase in the number of poorly funded K-12 public schools throughout the country due to affluent parents' decisions to move their children to private educational environments. Also, contrary to Dewey's ideas, Apple identified this movement's ability to separate students based on ability, a practice closely associated with Eliot's philosophies (*Educational and Curricular Restructuring*). Likewise, in a manner consistent with Eliot's goals of preparing children for the work environment through vocational education, Apple felt the conservative modernists' actions have strengthened the relationship between schools and the economy. Thus, the number of "school to work" programs have increased in K-12 public education throughout the country over time (*Educational and Curricular Restructuring*). As a result, Dewey's goal pertaining to the development of an effective democratic school eventually will die due to the conservative modernists' ability to keep Eliot's ideas alive.

John Dewey and Charles Eliot easily can be associated with two highly-contested topics in K-12 public education at the present time, social promotion and retention. Hence, the conservative modernists' movement towards higher standards in K-12 public education, due to its connection to the ideas of Dewey and Eliot, has a relationship with the "social promotion vs. retention" dilemma of the present day. Nonetheless, without a literary work like Apple's Educating the "Right" Way, the presence of a relationship between new and old concepts of this nature would not be revealed. Thus, Apple's ideas serve as a bridge between the origin and current form of this project's conceptual framework. As a result, the remainder of this section will describe the relationships between the previously identified leaders of the Progressive Education movement and the "social promotion vs. retention" dilemma.

Throughout the educational literature, a connection between John Dewey's philosophy and the one associated with social promotion can be identified. To be more specific, according to Dewey, schools' organizational structures should be based on students' ages and their stages of growth (Guttek 219). He also wanted the instructional programs of schools to have student-centered curricula based on the nature of pupils (Tozer et al. 107-108). Thus, Dewey's desire for schools to meet the needs of students in an age-appropriate, social manner was very strong. Dewey's view of school as a socially-constructed learning environment with age-appropriate instruction also implied his high value for keeping students with other members of their cohort in terms of age and physical development. Hence, evidence of Dewey's support for social promotion is not hard to find in the educational literature.

Like Dewey, Charles Eliot's ideas easily can be associated with the "social promotion vs. retention" dilemma. However, Eliot's ideas are consistent with the concept of retention, not social promotion. To be more specific, Eliot was a proponent of experts being developed in schools to assume leadership positions in society. Furthermore, his support of the democratic ladder concept, involving the most talented/intelligent individuals' movement to the top, reinforced a connection between his philosophy and the concept of meritocracy (Tozer et al. 113-114).

The relationship between Eliot's ideas and retention also received a great deal of support from his promotion of vocational education and the subsequent stratification of students in preparation for careers after school (Tozer et al. 109). This example, as well as the ones described in the previous paragraph, illustrates Eliot's willingness to separate people based on ability in a manner similar to retention's effect on the grade level movement of low-performing students. Nonetheless, the greatest sources of support for the relationship between Eliot's philosophy and retention pertain to his continual pleas for higher standards in K-12 public schools and his strong opposition to the promotion of students not ready academically to be successful at the next grade level (Guttek 144).

Howard Becker's Labeling Theory also connects the retention phenomenon used in many K-12 public school systems at the present time to Charles Eliot's ideas. According to Becker's theory, deviant behavior is defined by, and receives value from, social or group norms. Thus, a student who is retained in a grade level for a second year often is labeled as "dumb," "not smart," or "not a successful child" by members of social groups (*Labeling Theory: Becker*).

Eliot's work evaluated students in a similar way by separating them into different classes of future occupations through the use of vocational education. In addition, the "expert" label was assigned to the smart individual; whereas, the person without great intelligence or ability was not labeled that way. Thus, retention's stratification of students into one of two groups, retainees or promoted children, is paralleled by Eliot's efforts to label them as belonging to specific occupational classes in the future or as "experts/non-experts" (Tozer et al. 110). Nonetheless, without Becker's Labeling Theory, none of these labeling processes would add any value to the educational literature or society. In other words, Becker's work provides support for these processes and the connection between them.

During the past 10-15 years, many school systems throughout the country have implemented new promotion standards at multiple grade levels in an attempt to increase the academic performance of their students and schools. This nationwide movement has received support from the historical foundation established by Eliot during the days of the Progressive Education movement. Nonetheless, this push for higher standards also has provided the support needed for Eliot's ideas to exceed Dewey's philosophies in terms of life span.

On the local level, the leaders of the Wake County Public School System accepted the challenge of this movement to increase promotion standards during the 2000-2001 academic campaign. At that time, they implemented a new eighth grade promotion standard to govern the movement of students to high school. The effects of this new policy on promotion rates will be the focal point of this study. Nonetheless, it will be important to remember the true origin of this study's conceptual framework, Charles Eliot's efforts during the Progressive

Education movement. Without Eliot's ideas, a study involving the new Wake County Public School System eighth grade promotion standard in conjunction with Howard Becker's Labeling Theory would not be supported by a solid conceptual framework.

Now that the study's conceptual framework has been described, the focus will shift to the presentation of the major themes in the current educational literature associated with social promotion and retention resulting from the implementation of promotion standards. Next, the unique nature of eighth grade students, the population under investigation, will be described to reinforce the need for this study. The final section of this chapter will consist of a formal description of the old and new eighth grade promotion standards used in the Wake County Public School System and North Carolina.

### **III. Historical Perspective**

#### *Social Promotion vs. Retention: An Historical Perspective*

The K-12 public educational system of this country's early days consisted primarily of one-room schools. As a result, children of many different ages could be found in one classroom attempting to learn from the same instructor. Therefore, a child's annual movement to the next grade level, with a new teacher and a different classroom, was not an issue confronted by school officials or students in those days. In other words, the one-room school was not structured according to grade levels associated with the chronological ages of children. Hence, the students' only concern was to focus on the teachings of basic skills in the areas of reading, writing, arithmetic, spelling, geography, and history (Levine and Ornstein 176).

Based on this description of American public schools many years ago, it is hard to imagine the need for a study involving the “social promotion vs. retention dilemma” currently confronting educators in many states. In fact, prior to the middle 1800’s, the highly individualized structure of schools prevented social promotion and retention from being major concerns of educators. During those days, students progressed through school at their own pace based on their mastery of different aspects of the curriculum. However, upon the conclusion of the Civil War, the graded school concept appeared in this country and has remained a driving force in public education since that time (Colby 7).

The birth of the graded school concept motivated this country’s educators to endorse school systems with a definite structure. For example, at the present time, our public school systems primarily consist of 13 levels, kindergarten through grade twelve, associated with the chronological ages of children. Furthermore, each school year lasts approximately 180 days with the provision of an average of five and a quarter hours of instruction on a daily basis (Grant 33).

This uniform structure involving the use of same-aged grade levels is a major source of motivation for this study. More specifically, teachers and administrators of this era of public education decide, on an annual basis, whether to retain students or promote them to the next grade level based on their academic performances in the classroom that school year. Furthermore, on some occasions, the promotion of children to the next grade level due to social, not academic, characteristics occurs. Nonetheless, despite the need for these types of decisions since the middle 1800’s, answers related to the issues surrounding social promotion

and retention have not become any clearer or simpler over the years (Lenarduzzi and McLaughlin 212).

In summary, due to the presence of graded schools in this country, the use of social promotion and retention occurs with regularity in the modern era of K-12 public education. Still, both educational practices have experienced moments in the spotlight with regard to their dominance over the other one, as the more prevalently applied concept, at different points in time. The next few pages will provide the reader with additional insight regarding the roles played by social promotion and retention in the public schools at different times throughout this country's history. However, in some instances, a large number of years will appear between events on this historical time line due to a lack of information in the current educational literature with regard to specific periods in the history of K-12 public education.

*The History of the Presence of Social Promotion and Retention In Public Schools*

Parts of the “social promotion vs. retention dilemma” can be traced back as far as the middle 1800's (James and Powell 4). To be more specific, the use of grade retention in association with promotion standards during the 1840's was the earliest occurrence of educational practices connected to this controversial topic (Balitewicz 4-5). At that time, a student was not promoted to the next grade without his or her mastery of the current school year's academic tasks (James and Powell 4). Overall, this movement, involving retention's relationship to promotion standards, originated from grouping children with the same chronological age in grade levels. Nonetheless, the use of students' levels of academic achievement as a means for guiding the formation of groups for school purposes accompanied the implementation of the age criterion a few years later (Balitewicz 4-5).

By the end of the Civil War (1861-1865), most urban public schools in this country implemented the use of promotion standards to monitor a child's movement among grade levels. As a result, students were retained when not meeting the academic goals of their current grade level. Over the next 70 years, the majority of the rural schools also adopted this same practice (Setencich 3-4).

In summary, the use of retention developed as a result of the division of public schools into grade levels based on the ages of students during the middle to last part of the 1800's (Setencich 3-4). Furthermore, retention was reserved for the slow learners not ready for the challenges of the next grade level (Johnson et al. 333). Nonetheless, the retention rates in the public schools across the country were not consistent during the early days of this practice's use. In fact, during the late 1800's and early 1900's, some schools recorded retention rates as high as 70%; whereas, other institutions reported much smaller figures in terms of the annual number of retained students. For example, in 1909, the state of Massachusetts had a low retention rate of 7.5% in its public schools; however, 75.8% of Tennessee's students were retained that same year (Balitewicz 4-5).

Despite the widespread use of retention since the middle 1800's, a major shift in the philosophies of many educational leaders occurred during the 1930's. Around that time, a large number of individuals, such as social scientists, politicians, and professional educators, started advertising the negative effects of retention on the children to the public. This action led to the birth of the highly contested debate between the use of retention or social promotion still found in many circles of today's educators (Setencich 3-4). Nonetheless, as a result of the 1930's movement, most educators working in this country's public schools at

that time adopted the use of social promotion as the primary means for governing a child's movement from one grade level to another. This educational practice, supported by the presence of compulsory attendance laws, lasted until the early 1960's (Johnson et al. 333). As a result, schools used the age and maturity levels of students to determine their grade level placements for each academic campaign (James and Powell 4).

The end of the 1960's was marked by outcries from many Americans, resulting from a decrease in the nation's standardized achievement test scores in the public schools. Many individuals blamed the schools' use of social promotion for this development and begged for increased educational accountability and tougher promotion standards to govern students' movement among grade levels. As a result, in the 1970's and early 1980's, many school leaders took action to accommodate the public's demands through the implementation of more strenuous promotion standards and the use of retention for slow learners (Johnson et al. 333).

President Ronald Reagan's National Commission on Excellence in Education fostered additional support for the rebirth of tougher promotion standards and the use of retention for students not ready for the next grade level in the public school arena. This action was aided by the commission's publication of A Nation At Risk: The Imperative for Educational Reform in 1983. Overall, due to Reagan's political leadership, a strong movement among educators across the country, in opposition to social promotion, was ignited. As a result, the retention rates immediately rose to high levels during the middle to late 1980's (Fager and Richen 8). In fact, several school systems reported retention rates of

at least 30% of their first graders in 1985 due to this movement towards tougher promotion standards (Harrington-Lueker 10).

Despite the work by many school leaders to tighten the accountability measures in the public schools during the 1970's and the 1980's, the use of social promotion returned in the 1990's. Hence, the old practice of promoting students based on age, not academic achievement, was at the forefront of the minds of many politicians, school leaders, and classroom teachers throughout this country (James and Powell 4). Support for this occurrence came from many sources; however, a primary justification for using social promotion, as delineated in the educational literature, was the negative effects of retention on children with regard to areas such as cognitive achievement (Natriello 15). Nonetheless, this latest appearance of social promotion in the public schools spanned a very brief time period.

During recent years, many school systems have developed new, tougher promotion standards and moved away from the use of social promotion. As a result, they have mandated the retention of students not ready for the next grade level with the idea of giving them an additional year to grow academically. Many members of the general public, as well as stakeholders in powerful political circles, have applauded this latest movement by school leaders (Foster 38). In fact, President Bill Clinton challenged school leaders to move in this direction in a recent State of the Union address. One of Clinton's remarks during that speech was "help us end social promotion...for no child should move from grade school to junior high to high school until he or she is ready" (Balitewicz 4).

Overall, some educators view retention solely as a punitive response to a child's academic failure in school; thus, they support the use of social promotion. However, other

individuals consider retention's use to be a positive mechanism for helping students by giving them extra time in a particular grade (Williams 28). Therefore, especially due to the recently described historical trends with regard to these two practices, an end to this dilemma may not be possible. Instead, the time period appears to determine whose philosophical beliefs are supported with regard to educators on both sides of this argument. Nonetheless, despite this assertion, the next few pages will reveal evidence of educators' efforts over the past 10-12 years to implement promotion standards in the face of potential increased retention rates.

#### **IV. Evidence of Efforts to Implement Promotion Standards in this Country's Public Schools During the Past 10-12 Years, Despite the Potential for Increased Retention Rates**

The latest push for the tightening of promotion standards in this country's public schools should not surprise many members of the public. In fact, a poll by a public opinion research group, Public Agenda, in 1995 indicated 90% of the American citizens favored the establishment of higher standards for students in the core subject areas. Furthermore, 68% of the people agreed with the idea of requiring students to pass standardized tests to be promoted to the next grade level. Hence, the current actions by many public school systems throughout the country to implement tougher achievement-based promotion standards, and end social promotion, are consistent with the desires of the general public (Fager and Richen 9).

Despite this recent movement to retain non-prepared students, retention's use in conjunction with the implementation of promotion standards also has been present in the schools since the middle to late 1980's. For example, according to the Southern Regional

Education Board's statistics with regard to several states, the retention rates for first grade students during the 1987-1988 school year were: 5.1% in Kentucky, 7.7% in North Carolina, 7.8% in Maryland, 8.7% in Virginia, 9.6% in Florida, 10% in Texas, 12.6% in Georgia, 13.6% in Mississippi, and 14% in Louisiana. These retention numbers were not extremely high in comparison to more recent ones in other parts of the country; however, their presence indicates the use of achievement-based promotion standards of some type in the respective states' public school systems during this time period (Meisels and Liaw 69).

Two researchers often associated with the topic of "student retention and promotion," Shepard and Smith, also generated other statistics during the late 1980's to indicate the presence of tighter control over the movement of students from one grade level to another through the use of promotion standards. To be more specific, in a 1989 study, these two individuals found approximately 5% of all students in this country's public schools to be retained on an annual basis. Furthermore, they discovered nearly 50% of the children in many states to have been held back in school at least once by the time of their arrival to eighth grade (Reynolds 101). In addition, a nationwide study in 1989 by another educational researcher, Frymier, found 5.6 million of the students in the United States experience grade retention at some point in grades K-12. Overall, this statistic represented 14% of the total school population of 40 million children during that academic campaign (Norton 204).

A 1990 study by Shepard and Smith produced more alarming numbers for the public education arena with regard to the actual use of promotion standards prior to the late 1990's movement. At that time, the number of students retained each year in the country's public schools was estimated to be 2.6 million. Research determined this action to have cost the

schools \$6,500 per retained child to provide the necessary educational services to prepare him or her to handle future academic challenges in a successful manner. Furthermore, the retention of these students led to a total expenditure of \$1.5 billion per year in terms of public education funds across the country. To make matters worse, by 1993, many researchers revealed an increase of 20% in the retention rate in comparison to the 1990 numbers due to the greater demand for higher academic standards and accountability in the schools (Fager and Richen 9).

As indicated in the previous paragraphs, the presence of retention due to the use of promotion standards in this nation's public schools throughout the last 10-12 years, as well as many more, clearly can be identified. However, in recent years, school systems have moved with much greater determination to end the use of social promotion and establish tougher standards accompanied by numerous standardized assessment programs. The goal of this action is to foster academic excellence in the public schools throughout the country. Nonetheless, the total movement can not be successful without the provision of remedial services for low-performing students. As a result, many school systems recently have employed the concept of mandated summer school/remedial programs for a student failing to meet the promotion requirements of his or her grade level (Pipho 7).

This movement to establish alternative remedial programs to help retained students has produced some astounding statistics, especially with regard to summer school enrollment figures in several large cities around the nation. For example, in 1999, New York had 70,000 students in summer school with a predicted increase of 230,000 pupils for the following year. Likewise, Chicago's three-year ban on the use of social promotion led to a summer school

enrollment of 30,000 children in 1999. Other large cities such as Los Angeles and Washington D.C. reported enrollment figures of 139,000 and 30,000 respectively during the summer of 1999 as well (Pipho 7).

Despite the potential inconvenience posed by summer school with regard to normal family activities, parental support for this type of remedial help for children has been strong. In addition, private vendors have been more than willing to provide quality programs at the summer school sites (Pipho 7). Hence, the recent movement towards establishing tougher promotion standards and potentially increasing the retention rates, while also providing support for low-performing children, seems to be attracting the interest of many key stakeholders with regard to the education of public school students in this country.

Based on the previously described information, the foundation for a nationwide movement towards the use of tougher promotion standards in the public schools, despite the potential for an increase in the number of retained students, can be identified. However, up to this point, no reason for such action has been provided. Thus, the next several paragraphs will shed some light onto the philosophies of many school leaders with regard to this issue.

#### **V. Why the Big Push for Higher Standards and Possible Increased Retentions?**

Many educational leaders throughout the country view the implementation of new accountability measures as a means for improving the quality of education in the schools. Hence, they encourage the recent development and implementation of tougher promotion standards and assessment practices in their states' public schools. To be more specific, these individuals usually support such action as a means for "getting their schools into better shape" (Fager and Richen 6).

This scenario can be identified in numerous places such as the Kennewick School District in the state of Washington. In 1995, a new promotion policy was implemented in that school system with positive results according to its leaders. More specifically, administrators credited the new standards with increases in students' performances and levels of seriousness towards school. Clearer expectations for students, parents, and teachers with regard to the educational system also were attributed to this action. Furthermore, research revealed students, under this new policy, had greater control over their learning goals, accepted more responsibility for their choices, and made better decisions in the school environment. Nonetheless, the district's leaders also identified the large amount of community support for the new promotion policy as being a major player in their schools' recent success (Fager and Richen 30).

In addition to the outcry to improve the quality of public education through the implementation of new promotion standards, some individuals want this type of action due to their beliefs in its ability to lead a "back to the basics" movement in the nation's schools. According to these people, tougher promotion standards will raise national test scores and reduce dropout rates. Furthermore, they feel such action will prevent the promotion of children to the next grade without the necessary basic knowledge to be successful with the academic tasks to be confronted at that level (Pierson and Connell 300).

The ability to guide curriculum development and methods of classroom instruction in a more effective manner also has been used by educational leaders as justifications for their development/implementation of new, tougher promotion standards, despite the potential for increasing the number of retained children. In addition, these individuals credit such

standards with improving their chances of obtaining more accurate information about students' levels of academic progress. As a result, they feel more confident in their ability to reduce the performance gaps between different groups of children in their schools.

Furthermore, with regard to student performance, many teachers and administrators place a high value on children's extra motivation cultivated by the implementation of new academic standards, such as ones pertaining to high school graduation. According to these educators, situations of this type lead to "win-win" situations for the schools and the children (Darling-Hammond 48).

Another common justification for the implementation of higher promotion requirements is many educational leaders' beliefs in retention's ability to help low-performing students strengthen the prerequisite skills needed for the next grade levels. Thus, these children will be less likely to experience academic failure in later stages of their school careers. Proponents of this theory support it as a means of insuring the production of competent high school graduates in the end (Shepard and Smith 84).

Many positive and negative aspects exist with regard to the two major issues associated with the development/implementation of new promotion standards, "the end of social promotion" and "the potential for an increase in the number of retained students." These issues will be examined more closely in later sections of this project. Nonetheless, according to the literature, the previously described ideas are commonly used reasons for the pursuit of new promotion requirements by public school systems around the country. Still, despite such support, some general concerns exist with regard to this movement. The following pages will reveal several issues in this category.

## **VI. General Concerns Regarding the New Promotion Standards and Subsequent Retentions**

Despite the large amount of support for higher promotion standards, some school leaders and parents around the country are concerned about several general issues associated with them. To begin with, many individuals acknowledge the need for the use of some standardized test data to help make promotion/retention decisions in conjunction with such standards. However, they oppose school systems' complete reliance on test scores as the deciding factors. More specifically, many people question the overall reliability of standardized test results. In fact, a lot of citizens and members of the education arena consider solely basing promotion/retention decisions on test scores as being a "cruel and ignorant act towards students" (Olson 48).

Further justification for individuals' strong feelings against the exclusive dependence on standardized test scores when making promotion/retention decisions pertains to children's academic growth patterns. To be more specific, these educators and citizens do not identify a child's academic growth as being a straight linear progression. Instead, they associate an individual's learning pattern with the characteristics of his or her physical growth. In other words, as with physical growth, they feel a child learns in spurts. Thus, his or her amount of intellectual growth will differ greatly from year to year. However, according to these individuals, standardized tests do not take this aspect of human development into account; thus, examinations of this nature can penalize children a great deal, especially in cases of being the sole source of information for promotion/retention decisions (Olson 48).

The use of standardized tests with promotion/retention decisions also poses another major concern among many educational leaders. This issue pertains to the presence of the false positives and negatives often associated with this type of examination. For example, many educators recall cases involving highly prepared students' poor performances on standardized tests. Likewise, they remember incidents of children "guessing" their way through a test with positive results, despite their lack of actual knowledge or understanding of its content. Furthermore, high-tech children, due to their possession of an abundant supply of computer skills, at times have been found to be more uncomfortable taking "pencil and paper" standardized tests than low-tech students. Thus, the high-tech students' scores have been inaccurately lower than the ones of the other children simply as a result of the unfamiliar testing format/environment (Pipho 8).

Overall, with the increasing use of standardized tests associated with tougher promotion standards, the previously described false positives and negatives often dominate the thoughts of educational leaders throughout the country. Furthermore, administrators and teachers, as well as parents, worry about the influence of these abnormal occurrences on promotion/retention decisions based on scores generated by these tools. In their opinion, the standardized tests' presence in these decisions as the only measuring stick, coupled with the presence of false positives and negatives, could be very detrimental to a child's educational career (Pipho 8).

Another major concern pertaining to the movement towards tougher promotion standards and the end of social promotion's use is the possibility for associated litigation. Many state and educational leaders around the country fear the appearance of such action

from parents as a result of promotion/retention decisions by school leaders. Furthermore, the involvement of high-stakes testing with such decisions only leads to increased anxiety for school officials, especially due to concerns about that form of evaluation such as the ones described in the previous paragraphs (Pipho 7).

In summary, these general concerns regarding new promotion standards only paint a small picture of the overall dilemma of “social promotion vs. retention.” However, they adequately provide insight as to the critical nature associated with this situation.

Nonetheless, in later sections of this work, more details will be provided regarding the pros and cons of social promotion and retention. As a result, the reader will be able to assess the difficulty encountered by many school systems in their efforts to establish promotion policies capable of providing accurate assessments of a child’s academic performance and preventing the continued growth of this dilemma.

Throughout the previous parts of this project, information was presented to provide introductory explanations regarding several ideas associated with the country’s movement towards higher promotion standards and the subsequent attempt to end social promotion, despite the potential for an increase in the number of retained students in the public schools. However, other than brief references to programs already employed or in the early stages of implementation in a couple of states, very little specific information regarding such action has been provided. Thus, the following paragraphs will describe several attempts by school officials throughout the country to increase promotion standards for students. Nonetheless, this information will not focus on a single level of a child’s academic path; instead, accounts from the elementary, middle, and high school levels will be presented.

## **VII. Examples of New Accountability Procedures Being Employed in Public Schools Throughout the Nation**

During the 1995-1996 school year, the Kennewick School District in Kennewick, Washington implemented a new Student Accountability Policy in an attempt to improve problems identified in their middle schools. To be more specific, the school leaders in that area discovered a severe apathy problem among students at this level of school. These children did not take their middle school studies seriously; thus, by high school, their academic and social skills were not good enough for them to be successful at that level. Hence, the leaders of the school system established a policy focusing on intervention personalized for each child in grades 6-8. This plan also included students in grade 5 (Fager and Richen 25-26).

Overall, the Kennewick 1995-1996 promotion policy contains several parts. To begin with, a child has to pass all of his or her classes, have good attendance and behavior, and meet the school district's performance requirements on criterion-referenced exams in the areas of mathematics and reading in order to be promoted to the next grade level. Nonetheless, in addition to the performance aspect of the policy, a plan for identifying low-performing children and providing them with intervention services in the form of remediation was included (Fager and Richen 25-26).

With regard to the intervention plan, in the middle of the first grading period of each school year, the faculties of the Kennewick schools with students in grades 5, 6, 7, or 8 identify individuals experiencing academic difficulties. Furthermore, if their grades fall below the "passing" level, intervention plans are developed to provide them with remedial

instruction. These programs are similar to ones established, as a part of the district policy, at the beginning of the school year for students with failing grades during the previous academic campaign (Fager and Richen 25-26).

The intervention programs include services such as after-school tutorials, peer tutoring, and daily/weekly progress reports. In addition, one teacher is assigned to each child with an intervention program. This faculty member serves as a mentor for the student. Furthermore, the educator develops a personal education plan with the aid of the student and his or her parents to address the child's needs in the most effective manner possible. As a result, a great deal of effort is exerted by school-level educators to reinforce previous classroom instruction and monitor the progress of the low-performing students (Fager and Richen 25-26).

At the end of each school year, a committee at the building level reviews the status of each child requiring intervention services for that academic term. Next, their thoughts regarding whether to promote or retain a student are forwarded to the principal of the school. At that point, the principal makes the final decision regarding grade promotion for each student involved in this program. Nonetheless, in the case of not being promoted after the school officials' review of his or her performance results, a child may achieve promotion by attending and passing courses in summer school (Fager and Richen 27).

Like the Kennewick schools, the Chicago Public Schools also have implemented tougher promotion standards for specific grade levels in recent years. For example, in 1997, the school system started requiring students to score at or above grade level on standardized tests in mathematics and reading in order to be promoted (Harrington-Lueker 7).

Furthermore, children in grades 3, 6, 8, and 9 are required to attend a 6-7 week summer school session when failing to meet these minimum performance standards on the tests. At the end of summer school, students at those four grade levels with sufficient increases in their scores on retests are promoted to the next grade level. However, the other children are retained in their current grade level for the next school year and given additional instruction in reading and mathematics after the regular instructional day during that period of time, except for the older retained eighth grade students. These older retained pupils, who will be 15 years of age by December 15, are assigned to a transitional school with small classes and highly-structured instruction in mathematics and reading for the following year. They also enter the transitional schools knowing good academic performances could lead to their placement in a regular high school by the end of the academic campaign (Harrington-Lueker 10).

In addition to the practices in Kennewick and Chicago, other school districts throughout the nation are taking similar action in an attempt to end social promotion and raise their academic standards. For example, school leaders in Virginia are working diligently on policies requiring all public schools in that state to completely abolish the practice of social promotion. Likewise, in 1998, the number of students denied graduation from high school due to poor performances on the Texas Assessment of Academic Skills (TAAS), the main standardized test employed in the state's public schools, was 16,000. Further evidence of the strong stand against students moving to new levels of school without meeting established academic standards was identified in the New York City School System in 1998. At that time, the district's chancellor, Rudy Crew, demanded the school board

terminate its social promotion policy employed during the previous 10 years in favor of achievement-based criteria. Nonetheless, Crew's major area of emphasis only pertained to students in grades 4 and 7 (Harrington-Lueker 7-8).

Finally, despite the previously described action by policymakers at the state level, several examples of the Federal Government's involvement in this quest by educators to raise performance standards can be identified. One such situation occurred during the Spring of 1998. At that time, Congress dispersed \$1.5 billion in special funding to 50 poverty stricken school districts in urban and rural areas in return for their leaders' commitment to end social promotion and implement tougher promotion standards. Thus, the "social promotion vs. retention" dilemma's ability to attract the attention of leaders at all levels of government is apparent (Harrington-Lueker 7).

Overall, numerous other efforts to end social promotion and implement higher academic standards have occurred throughout the country in recent years. Furthermore, school leaders in areas such as Oakland (California), Boston (Massachusetts), Corpus Christi (Texas), and Fulton County (Georgia) presently claim to be in the process of taking similar actions in terms of policy making and everyday operational practices at the building level (Harrington-Lueker 7). Hence, despite the failure of this country's educators and policy makers to completely conquer the problem of social promotion, the amount of effort exerted by these individuals to resolve this issue is a good indicator of the high priority level assigned to it in the public school arena.

Up to this point in the project, a great deal of information has been presented with regard to the overall scenario pertaining to raising promotion standards in an attempt to end

social promotion, despite the risk of an increase in the number of retained students.

However, prior to embarking on this course of action, educators and other stakeholders associated with this nation's public schools need to consider the positive and negative aspects of both ends of the spectrum, social promotion and retention, created by these potential changes in educational policy. Thus, the following paragraphs will be reserved for a description of many pros and cons attributed to social promotion and retention by educational leaders and researchers. This information hopefully will enable the reader to understand each side of the current movement to increase promotion standards in public school systems around the United States.

### **VIII. Pros of Social Promotion**

In the current educational literature, social promotion does not receive as much positive attention from school leaders and policy makers in comparison to the amount related to the retention of students due to the implementation of tougher promotion standards. Nonetheless, several authors identify positive results from the use of social promotion. For example, in a large number of educational studies, children identified as candidates for retention, yet promoted socially, have experienced a great deal of academic success in the years of school following that point in time. In fact, several reports reveal low-performing, socially-promoted students to have done better academically than their retained classmates when comparing their performances at grade levels beyond their point of separation in school, yet encountered by both groups. For instance, comparisons of socially-promoted and retained sixth graders from the same class have revealed differences in their performances at a later level of school. To be more specific, the socially-promoted children in these studies

have performed at higher levels academically than their retained classmates during their time in the seventh grade (Foster 39).

With regard to academics, other studies also support the use of social promotion over retention due to the additional problems often associated with a child's "extra year" in a particular grade. Researchers associated with these studies ascertain social promotion to be less likely than retention to increase the potential for students falling farther behind members of their age cohort in terms of academic skill development. Thus, they consider social promotion to be the best option in situations involving the grade level placement of low-performing students, especially in cases with the only other choice being retention (Martinez and Vandegrift 2).

Another argument supporting the use of social promotion pertains to its implementation in conjunction with the provision of additional assistance for students at the next grade level. More specifically, many educational leaders feel strongly in the "social promotion/provision of additional assistance" concept's ability to surpass the effectiveness of retention in terms of promoting academic success for low-performing children in the years following ones requiring a decision between the two alternatives. In fact, according to many research accounts, the socially-promoted students tend to learn more and maintain a greater focus on their goal of high school graduation than their retained counterparts. Furthermore, the provision of additional assistance at the next grade level for socially-promoted students proves to be more cost effective in terms of per pupil expenditures than simply retaining children (Martinez and Vandegrift 3).

Despite the previously described sources of support for the use of social promotion in the public schools, one of the main reasons for this concept's existence pertains to its ability to maintain the social status quo. In other words, the use of social promotion prevents the separation of a child from his or her age cohort in school. As a result, positive relationships among children can be fostered through the application of this concept to the school setting; whereas, retention has the potential to eliminate them (Pierson and Connell 302).

Overall, many individuals identify the maintenance of positive relationships between students of the same ages as being extremely critical to a child's transformation into an effective, contributing member of society as an adult. Thus, at times, decisions to promote low-performing students, despite their failure to meet academic standards, may override educators' thoughts of retention. This school of thought appears to be more focused on human development than academic performance. Nonetheless, without being socially comfortable in an educational environment among one's peers, a child's potential for academic success could be diminished (Pierson and Connell 302).

#### **IX. Cons of Social Promotion**

In addition to the research's support for social promotion, negative aspects associated with this educational practice have been identified. For example, many researchers have found social promotion to lead to increased feelings of academic incompetence among low-performing students. In these situations, the pupils' academic performances have not improved despite being promoted to the next grade. Thus, their levels of confidence with regard to their ability to master concepts at the same rate as their more competent classmates of the same age greatly diminishes with each passing school year. In other words, despite

one of social promotion's intended goals of keeping students moving through school with their age cohort, low-performing children often develop negative mindsets regarding their ability to learn or master concepts in comparison to their classmates. This situation can be very detrimental to the mental development of a child during his or her progression to adulthood (Pierson and Connell 302).

Another argument for eliminating the use of social promotion pertains to its ability to deny individuals of a quality education. The graduation of a large number of illiterate high school students without the mastery of basic math skills across this country often is cited as a means of support for this assertion. To be more specific, according to many research studies, this practice has led to the development of many adults without the minimum skills needed for a job or even completing an application for one (James and Powell 4-6).

Overall, a variety of factors have contributed to the graduation of these unprepared adults. Nonetheless, many school officials and researchers in the field of education continually attribute this problem to social promotion's ability to diminish the level of concern for academic achievement, by students and parents, and lead to the creation of lax promotion standards. Thus, in many educators' minds, social promotion does not promote learning (Martinez and Vandegrift 2). Furthermore, these individuals view the act of promoting students to the next grade without the mastery of specific academic skills as a means to eliminate any value previously associated with a high school diploma (Pipho 645). Similar thoughts were included in the 1998 "State of the City" address by the mayor of New York, Rudolph Giuliani. On that occasion, Giuliani revealed his dislike for social promotion by referring to it as "cruel" due to its ability to delay educators' identification of a student's

learning problems and foster his or her failure to master the basic academic skills represented by a high school diploma (Rothstein 195-196).

Social promotion also causes problems for teachers in terms of making plans to provide students with appropriate classroom instruction. For instance, students socially promoted upon the conclusion of a school year usually have not mastered the material and skills needed for academic success at the next grade level. Thus, they are not prepared for the new academic challenges of the upcoming school year. As a result, an additional burden is placed on the other members of the classroom during that next school year (“Teachers Favor Standards, Consequences...and a Helping Hand” 19).

The additional burden resulting from socially promoted students referred to in the previous paragraph has two parts. To begin with, the teacher has to meet the needs of these low-performing children while also providing appropriate instruction for the other pupils placed in the class due to their satisfactory level of academic achievement the previous year. Overall, this task is difficult to accomplish without a teacher’s lowering of his or her standards. More specifically, it is generally very hard to satisfy the academic needs of students at multiple levels in one classroom without lowering one’s expectations of the class as a whole. Thus, the inclusion of very low-performing students, a common description of socially promoted children, only increases the likelihood of failure on the part of a teacher to provide classroom instruction at the appropriate level for all students (“Teachers Favor Standards, Consequences...and a Helping Hand” 19).

Through the years, this concern about the additional work placed on classroom teachers due to social promotion’s use has been expressed by educators at all levels of

school. Nonetheless, elementary teachers often encounter this challenge first due to their early role in the simple skill development of children. In fact, many elementary teachers around the country in grades four, five, and six recall numerous instances of socially-promoted, low-performing students coming to their classes without the mastery of basic skills taught at previous levels of school such as knowing their multiplication tables, being able to write in cursive, and having the ability to sound out words.

These elementary educators view a situation of this type as a tragedy, especially due to their lack of instructional time to reteach these skills to these children (Grant 33). Furthermore, they consider it to be a sign of the inability of social promotion to provide positive results, especially considering many students in this predicament have been socially promoted on more than one occasion during their school careers by the time of their appearance in these teachers' classrooms. Thus, according to a large number of educators at the elementary level, social promotion worsens low-performing children's academic problems, primarily due to school leaders' decisions to move the children to the next grade level instead of addressing the needs at the time of the problems' identification. Furthermore, the burden of correcting these problems often shifts to the teacher in his or her attempts to help these students without the luxury of a needed resource, instructional time (Pierson and Connell 306).

Appropriately placed students in the classes containing socially-promoted children also are affected by this occurrence in a negative manner. For example, children with weaker academic skills naturally will require more individual help from the teacher in the classroom to be successful. Thus, the students placed at the appropriate grade level often have fewer

opportunities to interact with their instructor during their encounters with new and more challenging concepts. In other words, the teacher's extra efforts to keep the slower students on pace with the rest of the class, by remediating their deficient skills from the previous year, lessens his or her ability to monitor and help the other children. As a result, the education of the appropriately placed students may be jeopardized, particularly in cases of their difficulty with new material not included in lessons from previous grade levels ("Teachers Favor Standards, Consequences...and a Helping Hand" 19).

Another problem with social promotion is its ability to influence the academic efforts of students, especially low-performing ones. Many studies show this scenario to be extremely dangerous in cases of a child becoming knowledgeable of the likelihood of moving to the next grade level the following school year despite his or her efforts in school. In these situations, the pupil often chooses not to do his or her classwork/homework assignments or study due to, according to him or her, the lack of a good reason to put forth any effort with regard to tasks of that nature (James and Powell 7). Furthermore, the teachers of these students usually lack any credible authority in terms of requiring them to do their work ("Passing on Failure: District Promotion Policies and Practices" 5). Overall, this situation has the potential to hurt the total academic development of any child. However, the low-performing student is particularly at risk due to its ability to prevent academic improvement in previously identified areas of weakness for him or her. As a result, the presence of social promotion can cause the child to fall farther behind the other members of his or her age cohort (James and Powell 7).

In addition to the previously described problems associated with social promotion, this commonly used practice in the public schools also can be associated with several groups of individuals in terms of its negative influence on their efforts to create an American society of productive citizens in this country. To begin with, the presence of social promotion often incorrectly lulls parents of low-performing students into thinking their children are making appropriate progress in school in terms of preparing for their assumption of civic responsibility and the world of work or future studies at the collegiate level. Thus, due to the continual progression of their children from one grade to another, these adults often do not take extra actions at home to identify and work on areas of weakness with the students. Hence, the children move through school and graduate without the needed skills to be successful, contributing members of the American society as adults. Furthermore, their parents often become aware of the deficiencies when it is too late to correct them (“Passing on Failure: District Promotion Policies and Practices” 8).

Other individuals adversely affected by social promotion’s presence in the public schools include businessmen and college/university officials. For example, in the business arena, many leaders of major corporations or private enterprises have to spend a great deal of time teaching basic skills not learned by benefactors of social promotion in grades K-12 upon hiring these individuals. Administrators at the collegiate/university level of school also experience similar issues with students promoted through school without the adequate mastery of basic skills at each grade level. In these cases, millions of dollars have been spent to remediate these pupils upon their arrival to campus to hopefully increase their skills to a

level capable of promoting success for them in their future academic work at the college or university (“Passing on Failure: District Promotion Policies and Practices” 5-8).

A final negative reaction to the products of social promotion can be found among the taxpayers of this country. These individuals increasingly are becoming disgusted with the growing number of uneducated high school graduates resulting from social promotion in the public schools. According to many citizens, these graduates are unable to contribute to the country’s economy and civic life in a positive manner. Thus, the level of support for the country’s public schools from many taxpayers is decreasing due to their lack of confidence in the quality of education associated with a high school diploma as well as the simple promotion from one grade to another. In their eyes, neither accomplishment at the present time denotes any form a academic accomplishment in terms of basic skill development (“Passing on Failure: District Promotion Policies and Practices” 5-8).

After examining the positive and negative aspects of social promotion, a thorough analysis of the other end of the spectrum created by the implementation of tougher promotion standards, retaining low-performing students, must be undertaken. Thus, the next few paragraphs will describe several sources of support for school officials’ use of retention. Nonetheless, as with social promotion, cons of this practice also will be described.

#### **X. Pros of Retention**

One area of support for the use of retention focuses on students’ development of basic academic skills. To be more specific, some educators identify retention as a means for insuring such development in children, especially low-performing ones, due to their ability to retain those pupils for another year at a particular grade level in cases of inadequate academic

progress (Fager and Richen 7). In fact, a recent study by two prominent educational researchers, Smith and Shepard, found the majority of the retained participants to make progress during their second year at a particular grade level (Fager and Richen 11). Furthermore, school leaders in favor of retention identify its use in the early grade levels as a good preventive measure for keeping students from being promoted without the skills needed for success at future levels of school and possibly experiencing more academic failure. Likewise, these educators have found retention to be an effective tool in preventing students from leaving high school without the knowledge necessary to interact with other members of the adult world in a successful manner as productive citizens (Fager and Richen 7).

The previously described positive aspects of retention are supported by school leaders with a mindset of student learning being a linear and sequential phenomenon. Overall, they consider retention to be a “safety net” capable of insuring the mastery of the basic skills associated with each grade level. Furthermore, according to them, through the use of retention, the value of the high school diploma can be preserved by distributing it only to those individuals with the appropriate levels of academic achievement. Nonetheless, this practice also involves holding low-performing students at grade levels for a second year due to their failure to meet designated academic standards for promotion at each stage of school (Martinez and Vandegrift 1).

In addition to the attributes of retention presented in the previous paragraphs, other positive aspects of this practice in relation to a child’s academic development have been identified as a result of several years of educational research. For example, retention has been credited with increasing low-performing students’ rate of learning in school after the

completion of a grade for the second time and receiving remedial help with areas of difficulty. Also, a reduction in the performance gap between retained and non-retained students in the same age cohort has been identified in years following the low-performing children's second time at a particular grade level. Overall, both of these findings primarily have resulted from studies of pupils at the elementary level (Natriello 15). Nonetheless, due to academic difficulties' tendency to remain with low-performing students throughout much of their elementary school days, some form of remediation needs to be provided for these children. Furthermore, several studies' accounts of social promotion's likelihood of worsening low-performing students' academic problems, rather than solving them, leaves retention as one of the only effective options in dealing with situations involving difficult promotion decisions. The findings of many researchers with regard to its high level of effectiveness at the elementary school level provide additional support for this assertion (Pierson and Connell 306).

Retention also has merits with regard to non-academic aspects of a student capable of influencing his or her performance in the classroom. For example, many children, particularly elementary students, do not come to school with the same readiness levels in terms of learning. In addition, they often have different physical, social, and psychological issues to deal with in comparison to their classmates and other members of their age cohort. Hence, in some research accounts, retention has been determined to be a good thing with some students, especially at the elementary level with average or above average ability children among the youngest in their classrooms (Grant, 33-35).

More specifically, retaining students in a particular grade level for a second year has been found to lead to increases in their readiness to learn and levels of self-esteem. This situation is particularly true in relation to low-performing children. Furthermore, some pupils experiencing retention have taken more responsibility for their own efforts and performances during their second year at a particular grade level as well as the remainder of their school careers (Fager and Richen 7). Many accounts of students' improved social/emotional maturity during year two of a grade level also have been identified in studies of retained pupils (Thomas et al. 342).

Many school leaders also credit retention with being a valuable tool for dealing with poor peer relations experienced by some children. Such negative relationships with other students, if ignored by school staff members or parents, can be very detrimental to a child's psyche and possibly affect his or her academic performance in an adverse manner. Thus, the use of retention to separate a student from difficult relationships with members of his or her age cohort has been identified as a positive action; however, school leaders strongly advise this practice to be used for this purpose only at the elementary level (Pierson and Connell 306). Overall, this use of retention may not completely cure these types of problems for a particular student. Nonetheless, it gives the child a fresh start with new peers, an element often required for the positive resolution of problems involving a student being rejected or ignored by his or her previous classmates (Pierson and Connell 302).

Overall, support for the use of retention in the public schools can be identified throughout a great deal of the educational literature. Thus, its presence in school leaders' attempts to raise promotion standards is not difficult to understand. Nonetheless, many

negative aspects of this educational practice also exist and will be described in the next few paragraphs.

## **XI. Cons of Retention**

One of the most frequently identified negative aspects of retention pertains to the retained students' inability to maintain the customary positive performances of their second year in a particular grade level throughout the remainder of their school careers. In other words, many studies have found retained children's academic gains of year two of the same material to fade over time (George 7). Thus, initial increases in low-level students' performances in the classroom often have been followed by a return to their old levels of performance, especially in the elementary grades (Walters and Borgers 308). For example, a study during the late 1990's focusing on retained first grade pupils in the Chicago Public School System revealed negative results with regard to their ability to continue improving in terms of academic performance while progressing through school after their year of retention (Fager and Richen 13).

Another negative aspect of retention refers to its overall lack of effectiveness as a remediation tactic. To be more specific, many school leaders do not consider it to be an effective remediation technique, especially when employed by itself (Meisels and Liaw 70). The primary reason for their assertion is the fact that the commonly used form of retention simply sends a low-level student through the same educational experience for a second year. However, the teachers involved usually exert little or no effort to individualize instruction to eliminate the child's weaknesses responsible for his or her original academic failure.

Nonetheless, despite the likelihood of negative results, retention often is employed as the only means for correcting low-level students' academic problems (Darling-Hammond 49).

Overall, according to many research findings, a retained child's efforts to improve in terms of academic performance involve a reliance on his or her inadequate abilities from the previous school year (Darling-Hammond 49). As a result, the student's chances for passing the grade level work during year two depends primarily on his or her familiarity with it, especially considering the lack of individualized instruction provided for most retained children. However, without special efforts to improve the child's skills needed for the next grade level, more problems in the classroom likely will appear at a later time (Balitewicz 9). Thus, the initial improvement by retained students often returns to a negative form. Furthermore, these children usually do not ever completely catch members of their age cohort with regard to academic achievement at specific grade levels. In fact, the retained pupils tend to fall further behind their counterparts with the passage of time in their school careers (Robertson 2).

Behavior problems in school are another negative result of the use of retention in public schools. In fact, many educational leaders consider the overage retained student to be a major source of problems in the classroom due to his or her commonly observed failure to assume a natural position as a learner in that environment without attempting to attract the attention of his or her classmates. This situation often has been attributed to differences in interests between older and younger children in areas such as puberty (Rothstein 197). For example, at some grade levels, the older retained children have been found to be more inclined to explore their sexuality and engage in sexual intercourse than the younger students

on the normal academic path in terms of age cohorts. Therefore, some teachers are dealing with a difficult “mixed bag” in their efforts to manage and teach classes containing older retained students and younger children while monitoring the different types of age-related issues capable of appearing in the classroom. As a result, a lot of pressure rests on the teacher to maintain order in terms of peer relations, meet the individual needs of all children in the classroom, and provide appropriate instruction (Jimerson 247).

Additional problems pertaining to the overage students can be associated with other negligent behavior as well. For instance, at the middle and high school levels, driving drunk and substance abuse are common problems exposed to children in their correct grade by the older retained students (Jimerson 247). Similarly, in an attempt to get the attention of their younger classmates, many older retained pupils have been found to display worse behavior in school during their second year at a particular grade level. In fact, a 1997 study of sixth graders repeatedly uncovered this idea through the observation of behavior by retained and non-retained students over a period of time (Rodney et al. 185).

Another negative aspect of retention presented by researchers involves its damage to the peer relationships of retained students in the classroom. To be more specific, retention removes low-performing students from their familiar peer groups and places them in strange ones. Thus, the one area of comfort for these at-risk students, their peer group, is destroyed. As a result, they often add feelings of loneliness to their existing ones of academic inferiority (Pierson and Connell 302). Furthermore, at times, the older retained students in a classroom become the targets of discrimination through the non-retained pupils’ attempts to move away from these so-called “not normal” classmates (Lenarduzzi and McLaughlin 212). In

summary, situations of this type can be very damaging to the psyche of the retained children and greatly interfere with their efforts to improve academically.

Overall, this social phenomenon has been identified at all levels of school; however, it appears more in the elementary grades (Lenarduzzi and McLaughlin 212). Furthermore, it gains momentum as the older, retained students continue to attempt to make friends with members of their own age cohort at higher grade levels, despite their separation from them during the day, rather than with their classmates. Hence, retention alienates low-performing students from their friends and creates situations of no interest to them in terms of developing new peer groups in their actual classrooms. Therefore, according to many school leaders, this practice totally destroys the “socialization with peers” aspect of the public school environment for the retained children (Norton 204).

In addition to its potential negative impact on a retained child’s social relations at school, retention’s ability to damage his or her self-concept greatly concerns many educators throughout the country. In fact, many studies have found such action to lead to demoralized children with negative attitudes about school, poor feelings about themselves in terms of their academic abilities, and a decrease in their levels of social/emotional functioning (Thomas et al. 342). Furthermore, the previously described tactic of providing retained children with the same teaching method without any changes during the second year in a particular grade level often does nothing to help improve their outlook towards school. Thus, the self-concept problems increase beyond the initial ones associated with the first communication by a school’s leaders to retain a particular student (Rothstein 197). Overall, this situation fosters the development of apathy among these low-performing students, even the young ones in

elementary school, and causes them to give up on themselves as learners on many occasions (Darling-Hammond 18).

These self-esteem issues gradually worsen with a low-performing child's realization of being overage in comparison to his or her classmates during year two of a particular grade level (Balitewicz 9). Thus, coupled with their interpretation of retention being a form of punishment, this action by school leaders has been perceived on many occasions by children as a stigma. Furthermore, according to many studies, a large number of low-performing students view retention as being more stressful than most potential negative occurrences other than blindness or the death of a parent. Nonetheless, many retained students do not feel any of these three situations differ a great deal in terms of the amount of stress generated by them on an individual basis (Foster 40).

In summary, according to many educational researchers of the retention phenomenon, the resulting negative self-concept often associated with it leads to a child's withdrawal or disengagement from regular school activities such as learning in the classroom (Reynolds 102). Thus, over time, these low-performing students become increasingly alienated from their original goal of attaining an education. Hence, they begin to consider high school graduation as being an unrealistic occurrence in their lifetime (Martinez and Vandegrift 1). This scenario leads to the next major negative aspect of retention, its relationship to school dropouts.

As alluded to in the previous paragraph, the direct correlation between the likelihood of a child dropping out of school and the number of retentions experienced by him or her is another negative aspect of requiring low-performing students to repeat a particular grade

level (Harrington-Lueker 8). In fact, a 1990 study by the National Association of Elementary School Principals identified children retained on one or more occasions during their elementary years as the best candidates for quitting school prior to entering the ninth grade (Meisels and Liaw 76). More specifically, in one of their studies, Shepard and Grissom found pupils with at least one retention experience in their school careers to have a 30% greater tendency to drop out prior to grade nine than their non-retained peers (George 7). Furthermore, additional examinations of data have convinced many researchers to guarantee a decision to quit school prior to graduation by children retained on two or more occasions during their movement from kindergarten through grade twelve (Foster 40).

Overall, according to some research accounts, the use of this practice would only increase the likelihood of a child dropping out of high school, especially the low-performing ones. Thus, the efforts of many educational leaders to reduce dropout rates in schools would be nullified. Hence, the previously described research does not lend much support for the use of retention in schools with high dropout rates.

In addition to the cons of retention presented in earlier paragraphs, formal studies over the last decade or so have found the cost of such action to be extremely high. For example, a study by Frymier during the late 1980's estimated the cost of reteaching low-performing retained students in the public schools of this country to be approximately \$2 billion over the previous 12-year period (Norton 204). In addition, another late 1980's investigation by two educational researchers, Smith and Shepard, determined a child spending an extra year in a particular grade to increase the total value of his or her education by 8%, provided he or she reached high school graduation (Foster 38). Nonetheless, despite

these discoveries, the previously revealed dollar amounts have increased to approximately \$10 billion, or \$4,051 per child, in terms of the amount of money spent on retention annually in the American public schools at the present time (Shepard and Smith 87). Thus, based on this information, decisions to retain students may interfere with the provision of adequate resources for other children in their appropriate grade levels and lessen the quality of their education. As a result, the entire educational program could suffer in the long run.

A final major problem with the use of retention involves a practice found in many public schools around the country. This issue pertains to some school leaders' use of factors other than academic progress indicators to make retention decisions. To be more specific, many researchers have discovered educators' inclusion of characteristics such as a child's age and sex as well as his or her family's social economic status in retention decisions. Thus, in these school systems, retention policies have moved away from their original focus of a child's academic progress to one involving subjective, and often discriminatory, ideas not related to education (Reynolds 102). Overall, this situation has the potential to totally prevent the development of any positive results from the use of retention.

The past few paragraphs painted a picture of the two major issues, social promotion and retention, often associated with educational leaders' attempts to raise the promotion standards in many public school systems throughout the United States. Nonetheless, in most cases, the tougher standards have a greater negative effect on low-performing students than children without academic struggles. Hence, school leaders often are forced to choose between using social promotion or retention as a means for determining the grade level placement of those low-level children for the next academic campaign.

This situation can be very stressful for school officials, parents, and students due to the thorough analysis of information usually associated with decisions of this nature. Furthermore, when receiving unpleasant news such as the retention of their children, parents typically become argumentative and difficult to deal with in terms of their interactions with school leaders. As a result, instead of making decisions regarding the social promotion or retention of low-performing children, many researchers suggest alternative measures be used by school leaders to keep these students moving through school while also upholding high academic standards. The following paragraphs will describe several ideas with regard to alternatives to the use of social promotion and retention presented in the current educational literature.

## **XII. Alternatives to the Use of Social Promotion and Retention**

The use of mixed-age classes in schools is one method for working with low-performing students without socially promoting or retaining them. This technique creates classes without grade-level labels for the children. Furthermore, they are allowed to learn at their own rates and progress through school upon their mastery of required skills. In other words, the mastery of skills, not age, determines one's rate of movement through school towards his or her high school diploma (Robertson 2-3).

Many researchers promote the use of multi-age classes due to its ability to enable teachers to get to know and support their students to a greater extent. Overall, this occurrence primarily results from the concept's goal of assigning children to the same teacher for more than one year. Hence, the instructor can assess the students' learning styles

more accurately and provide instructional support consistent with the children's means of interpreting and processing information (Darling-Hammond 20).

Many accounts of educational research also identify home assistance programs as being very beneficial to educators' attempts to prevent further development of the social promotion/retention dilemma. With most programs of this nature, teachers give the students' parents structured, specific information to use in helping their sons or daughters at home with their academic work (Robertson 2-3). Overall, the parental involvement with a low-level child's school work in the home, fostered by this program, has led to increases in the pupil's academic performance in the classroom. In other words, this parental involvement has a big influence on children in many cases (Fager and Richen 17-19).

Another option often recommended by many educational leaders to reduce the need for a decision to be made between the use social promotion or retention with regard to low-performing children is "looping." This tactic involves the pairing of two consecutive grade levels. Furthermore, a teacher remains with the same group of students from one grade level through the following year. In addition, even with poor performances in the initial grade level of the pair, students are given a chance to stay on track by moving to the following grade and working with the same teacher during the next academic campaign. As a result, they are exposed to the same classroom routines for two consecutive years and, while encountering some new information and concepts, can concentrate on remedial efforts designed to develop their deficient skills from the previous grade (Grant 34).

As alluded to in the previous paragraph, the decision to promote or retain a child does not occur on an annual basis with "looping." Instead, teachers determine a student's fate

after two complete school years based on his or her level of academic development at that time. In other words, regardless of their performances during the first year of the paired grades, students are guaranteed to move to the next grade level for the following academic campaign. Hence, two years are allotted for the low-performing students to learn a specified amount of material with tolerance for their potentially different rates of comprehension. As a result, the negative side effects of social promotion and the stigma of retention are removed from the situation. Overall, the focus of this tactic pertains to the mastery of academic skills over a specified number of years, which is inconsistent with the traditional school concept's use of one year time frames, due to low-performing children's differences from other pupils of the same age (Grant 34).

In summary, the previously described "looping" method can lead to success after year two of the paired grade levels with low-performing children; whereas, the traditional school concept most likely will lead to their social promotion without the appropriate skills or retention. Thus, many educators promoting the mastery of academic skills as the criterion for a child's movement through school support the use of "looping" in conjunction with numerous efforts by school leaders to raise the promotion standards in our country's public schools. Nonetheless, this concept primarily appears in lower elementary levels of school such as kindergarten and first or second grade (Grant 34).

Another means of preventing the need for social promotion/retention decisions by school officials is the use of remediation programs within grade levels. This tactic is very similar to the previously described concept of "looping" due to its combination of promotion and remedial help for at-risk students as they move to the next grade level despite poor

performances in school. To be more specific, these low-performing children are allowed to continue moving through school rather than being retained and encountering the same material for two consecutive years. Nonetheless, extra efforts are made through remedial services to help them improve their academic skills not adequately developed at the previous grade level (Norton 206).

At-risk pupils also have been kept out of the center of the social promotion/retention controversy in some schools through the use of advisor/advisee programs sponsored by guidance departments. With this concept, low-performing students form one-on-one relationships with teachers, counselors, or other adult mentors. Furthermore, the children meet with their partners at scheduled times on a regular basis. Overall, this program has been successful in terms of providing many low-performing students with the support and guidance needed for academic success (Robertson 2-3). For example, the advisors help them set learning goals, manage academic tasks, and assume responsibility for their own learning. As a result, the at-risk children are better prepared for the challenges of school on an everyday basis, especially considering their commonly identified major weaknesses of being unable to focus on concepts and organize materials (Fager and Richen 17-19).

The provision of alternative educational settings for low-performing students is another way to prevent the dilemma associated with higher promotion standards. These settings may include summer school or after-school learning labs with a “hands on” approach (Robertson 2-3). Other potential alternatives include satellite learning programs and career-focused academics. Nonetheless, the primary objective of action of this type is to provide

these children with an alternative educational venue due to their lack of success in the traditional school environment (Fager and Richen 17-19).

In addition to the previously described ideas, numerous other concepts have been presented by researchers as potential ways to elude the major problems associated with the use of social promotion and retention in the public schools. For example, according to many school leaders, smaller class sizes enable all children to receive adequate individual instruction and prevent academic problems among many students. Thus, through efforts to take such action, the role of social promotion and retention in the K-12 public education system of this country would be minimized (Robertson 2-3).

Other educators consider concepts such as child study teams and the use of specialist teachers to be effective ways to prevent achievement problems among low-level children and the rise of the social promotion/retention dilemma (George 12). Furthermore, some educational theorists point to the use of tutorials, after school or on Saturdays, with specialized/individualized instruction as cures for these problems (Harrington-Lueker 12). Nonetheless, other individuals attribute the real negative issues surrounding low-performing students' movement through school to the school leaders' methods of assessment. Therefore, they promote the idea of measuring student success in non-traditional ways such as portfolios, especially with at-risk children (Fager and Richen 17).

In summary, many alternatives capable of preventing the appearance of the social promotion/retention issue in the school careers of students, even low-performing ones, exist. Hence, teachers and administrators should research these potential actions and apply the ones consistent with their school environments. Overall, action of this nature could completely

eliminate the need for social promotion/retention decisions as well as the emergence of the negative qualities associated with them. As a result, promotion standards could be increased without severely hurting at-risk students' chances of receiving a high school diploma. In other words, through these efforts, a support plan to keep them on grade level, despite new and tougher promotion standards, could be developed and implemented.

Despite the previously described alternatives, a big emphasis in a large number of public schools around the country during the past few years has been placed on retaining low-performing, non-prepared students in their present grade levels at the end of an academic term and ending the use of social promotion. This assertion has been presented in several earlier parts of this project through a description of several states' attempts to implement tougher promotion standards. Nonetheless, based on many research accounts, this scenario seems to be very bleak due to its apparent potential to affect only certain groups of children. In other words, retainees, or the prime candidates for retention, often can be identified well in advance of such action due to certain characteristics possessed by them.

The following paragraphs will describe some common characteristics of most retained students as identified by numerous educational researchers' studies. Thus, this part of the project actually will identify the major student groups adversely affected by movements towards higher promotion standards in this country's public schools. In addition, by describing commonly retained children, a mental picture of ones typically involved in social promotion/retention decisions hopefully can be formed. As a result, school leaders and staff members should be able to identify those individuals associated with the "social

promotion vs. retention dilemma” more accurately and take the necessary precautions to help them.

### **XIII. Common Characteristics of Retained Students**

The top candidates for retention usually have poor academic skills. To be more specific, these children often perform poorly in prescreening assessments used by school leaders to determine their class/grade level placements (Robertson 2). In fact, at the elementary level, the IQ levels of retained children typically are much lower than the ones possessed by their classmates (Kaczala 1).

With regard to specific academic performance, retained students commonly have been found to possess limited English skills (Robertson 2). Furthermore, in many cases, their test scores in the areas of reading and mathematics, as well as their class grades in many areas of the curriculum, in the years prior to retention have been very poor (McCoy and Reynolds 274). As a result of research findings of this nature, specific retention numbers can be associated with certain groups of children. For example, many studies have determined the total number of retained learning disabled students to be twice the size of the group of non-learning disabled retainees (Barnett et al. 285).

Retention also has been common among the minority students in our country’s public schools. Furthermore, this phenomenon is associated with boys more than girls (Fager and Richen 13). In fact, many educational researchers have found African American boys to be retained in much greater numbers than their white classmates, particular in the elementary grade levels (Rodney et al. 185).

As early as 13 years ago, this idea of minority students being affected a great deal by school leaders' retention decisions was identified in a National Educational Longitudinal Survey of eighth grade children. In fact, this study found at least 40% of its poor African American and Latino participants to have been retained at least one time during their school careers. Nonetheless, while reaffirming the notion about retention's negative effect on minority groups, this study also identified another common characteristic among retained children, one's membership in a poor family in terms of financial well-being. In fact, one out of every three low-income students in the study was identified as having been a retaineer at some point in their previous years of school (Harrington-Lueker 8-10).

The previously identified membership of many retained students in families of a low socioeconomic status has created many more obstacles for these children with regard to being successful in school (Meisels and Liaw 73). To be more specific, the parents of these retainers often have much less, if any at all, formal education beyond high school in comparison to the mothers and fathers of students progressing through school as normal (Jimerson 245). Thus, at times, school may not seem important for the low-achieving students' parents; as a result, their provision of motivation from home for their children to do well academically could be minimal or totally nonexistent (Robertson 2).

Overall, this situation has been found to put low-achieving students in situations without any form of parent advocacy due to the inability of their mothers and fathers to, or unwillingness to, engage in such behavior. Furthermore, this lack of support or encouragement from home often forces the children to deal with issues or problems by themselves, despite the need for some adult help. As a result, failure in school and the

subsequent retention typically has been the final destination of these children at some point in their school careers (Robertson 2).

Age and physical characteristics also have been associated with retained students by many forms of educational research. In fact, the youngest students in the class often have been the prime candidates for retention. Furthermore, the smallest children also have been common targets of such decisions by school leaders on many occasions (Robertson 2).

Another area of commonality among retained students includes their poor behavior in school. For example, poor conduct in the classroom is common among these children (McCoy and Reynolds 274). To be more specific, a positive correlation between retention and students with high numbers of suspensions from school has been identified through the work of many educational researchers. Furthermore, retained children have been found to exhibit violent behavior towards other people in the school environment much more frequently than their non-retained counterparts. Other studies also have identified retention as a common occurrence among students without fathers at home and thus, little discipline away from school (Rodney et al. 188).

Retention also has been a common result for students having difficulty interacting with their peers. More specifically, students with poor peer relationships often have problems with their social adjustment to the school environment. As a result, their attention can be diverted from academics during their efforts to resolve these issues. In the end, the pupils' desire to improve their relationships with their peers typically leads to greater academic problems in the form of retention (McCoy and Reynolds 274).

A final common characteristic of retainees pertains to school attendance. Many studies have focused on this issue and generated some alarming results. Nonetheless, the basic idea behind all of these studies is the inverse relationship between a school's average daily attendance and its retention rates. To be more specific, a decrease in the attendance rate at a particular school usually leads to an increase in the number of its students retained at the conclusion of an academic campaign (Kaczala 6).

#### **XIV. Summary of the Review of Related Literature**

The intent of this review was to provide a description of the results of many studies conducted in numerous K-12 public schools around the country during the past 10-15 years involving the "higher promotion standards and social promotion/retention" dilemma. Thus, with knowledge of such information, most readers will question the need for an additional study involving the Wake County Public School System's results in relation to its new eighth grade promotion standard. Hence, the following paragraphs will provide more clarity with regard to the motivation for this study through the identification of holes in the current educational literature associated with this topic.

Overall, my research primarily focused on literature written no earlier than 1990. Thus, it was limited in terms of quantity to a certain degree. Nonetheless, a lot of material was available for students at the elementary and high school levels. Furthermore, a few accounts of studies conducted with a focus on students in grades six and seven were found. However, research specifically describing eighth grade promotion results in public schools around the country was almost non-existent. Hence, in addition to its provision of valuable findings for Wake County teachers and administrators, my work with the Wake County

Public School System's new eighth grade promotion standard will be helpful to school leaders throughout the nation in their efforts to increase promotion requirements at that grade level while attaining positive results for the affected students. Also, with the aid of this study, school leaders in North Carolina will have a point of reference during their efforts to align all middle schools with the requirements of Gateway 3.

Furthermore, despite the presence of results from changes in promotion criteria in school systems around the country, the literature never described any studies conducted with a focus on annual numbers for multiple schools. Thus, this study's use of eighth grade promotion data obtained from twelve schools differentiates it from other works. Furthermore, this project's emphasis on the previously identified student demographic characteristics was not associated in the literature with any earlier investigations pertaining to promotion standards. Hence, this study definitely will generate a unique addition to the current literature in this area of educational research.

The previous pages have described a large amount of information associated with this study. More specifically, my intention during that part of the work was to enable the reader to develop a baseline understanding of the main concepts associated with this investigation such as its key elements, goals, and significance. Furthermore, a description of any related educational literature needed to be included in the early parts of the work to aid in one's comprehension of my findings. Nonetheless, despite the importance of the role played by this information in this project, the unique nature of the population under study, eighth grade students, must also be described.

Without an understanding of the special characteristics associated with children in the eighth grade, the value or significance of this study will be diminished. Thus, the next section of this chapter will focus on eighth grade students, who typically are fourteen years old. To be more specific, the unique characteristics possessed by children at this stage of life will be described. Overall, the goal of this section will be to provide additional reinforcement of the need for this study.

#### **XV. What Is Special About Eighth Grade Students?**

In addition to the reasons presented in Chapter 1, a primary source of motivation for conducting this study revolves around its key subjects, eighth grade students. These individuals, predominantly in the fourteen years of age range, are unique due to their stages of development. In fact, at this age, children undergo multiple changes physically, intellectually, emotionally, and socially. For example, at this point in life, some children experience the development of sexual functions or engage in abstract thinking for the first time. On the other hand, the attainment of independence becomes a high priority for some individuals at this age (Santrock 29). Thus, this study's goal of obtaining new information pertaining to this group of children is another sign of its significance with regard to the educational research arena.

To be more specific, eighth grade students are members of a special breed. Hence, any new insight about them is valuable to educators in their attempts to work with fourteen year olds. With this in mind, the next few paragraphs will reveal the potential conflicts between the developmental make-up of eighth graders and the components of Gateway 3.

With regard to physical development, many fourteen year olds experience life-altering occurrences such as uneven growth in comparison to their peers, regular periods of restlessness followed by fatigue, and an underdeveloped sense of time (Reynolds/ABSS 1). Hence, especially with the latter two characteristics, the requirement of an eighth grade child to sit for a long period of time to take a standardized test may be a difficult task for him or her. Furthermore, the use of test scores from evaluations such as end of year exams to determine grade promotion does not seem to be totally consistent with the developmental characteristics of children at this age. To be more specific, a child's ability to sit still for the entire examination period could be contradicted by his or her inability to maintain a good work pace and vice-versa. Thus, he or she may not complete a test of this nature and be punished with retention even though natural characteristics were the primary contributors to his or her failure.

Eighth grade students' levels of intellectual development also may cause problems for these children due to the large influence of end of grade test scores on promotion decisions under Gateway 3. For instance, according to research, these children often have short attention spans and require relevance in terms of the school tasks' relationships to everyday living (Reynolds/ABSS 1). As a result, the new Wake County Public School System eighth grade promotion standard's dependence on standardized test results interferes with the normal development of these children. More specifically, these children may have trouble concentrating on tasks encompassing a long period of time, such as end of grade tests, due to their short attention spans. Furthermore, their preference of real-life learning opportunities

may cause them to concentrate on these important examinations to a lesser degree creating a potential negative result of retention.

Emotionally, eighth grade students are like time bombs. In other words, their emotions always are running in many directions (Collins 3). Thus, these children often experience high levels of anxiety, especially with key tasks such as major standardized tests used in promotion decisions. They also have fluctuating moods capable of distracting them from the primary goals of school. Hence, school often becomes less important in comparison to their feelings, particularly in times of distress. As a result, their test performances, and ultimately their chances for promotion to grade nine, could be affected in a negative manner (Skill for Adolescence 39).

With regard to social development, the behavior of most children in this age group is influenced a great deal by their interactions at school with peers, extracurricular activities, and club events as well as members of the larger community surrounding the campus. In fact, these students typically view their school as a large social system (Santrock 269). However, the achievement of acceptance by their peers is one of their top priorities. Success in this area causes a fourteen year old to form relationships with numerous other children and develop a very social type of behavior. Nonetheless, failure to be accepted by one's peers usually results in a child's display of reclusive behavior or withdrawal from the social scene, especially with regard to school activities (Santrock 227-233).

Eighth grade students' need to be accepted also has a direct effect on their choices of actions. For example, at this time in their lives, children at this age level usually place a lower priority on family activities in comparison to opportunities to spend time with their

peers (Collins 3). Furthermore, in many situations, these individuals will engage in positive actions, such as working hard at school in the classroom, during their interactions with peers to fit in with the larger crowd. Nonetheless, decisions to engage in inappropriate behavior to be accepted also are possibilities with these children (Skills for Adolescence 39).

The need for acceptance by one's peers also can lead to more lasting negative effects on a child in cases of retention. To be more specific, retention removes a child from his or her age cohort during the school day. Thus, it contradicts retained individuals' efforts to establish friends among their peer groups during previous years. As a result, these fourteen year olds often become very confused in terms of their social developmental stages.

Overall, this wide range of possibilities for fourteen year olds in terms of social activity makes them highly vulnerable in the face of monumental tests such as end of grade examinations associated with a promotion standard like the Wake County Public School System's new eighth grade policy. To be more specific, the social concerns of these children may take priority over their desire to do well on tests of this nature. Thus, retention decisions may be based on false negatives. As a result, a child with a great deal of ability might be retained in a grade level for a second year due to his or her inability to put academics above social relations for even just a few days during the school year, particularly the ones with scheduled end of grade tests.

In conclusion, eighth grade is the last step before a child's entrance into high school. As a result, in recent years, many states have established academic competencies for students to satisfy prior to being promoted to grade nine. These actions by states are intended to insure success for children at the high school level (Reynolds/ABSS 3). Therefore, the

results of this investigation, due its focus on the Wake County Public School System's new eighth grade promotion standard, will be beneficial to educators in all parts of the country in their attempts to improve the present quality of education for their students at this stage in school.

The assertion presented in the previous paragraph is based on the study's ability to shed light on the educational gains or pitfalls of a group of children, eighth graders, who often are characterized as enigmas due to their unique developmental characteristics. Overall, through the attainment of this investigation's findings, Wake County school leaders will be able to establish effective plans with regard to functions such as program evaluation, resource forecasting, and budgeting. Thus, the likelihood of success on their part in meeting the needs of this unique group of students in relation to Gateway 3 will be increased.

Now that this study's goals have been presented, the remaining paragraphs of this section will be reserved for a formal description of the promotion standards under investigation. Thus, the eighth grade promotion policies used by the Wake County Public School System, and the state of North Carolina as a whole, before and after the North Carolina State Board of Education's April 1999 action will be described. As a result, the reader will have full knowledge of the concepts under investigation in this study. However, it is important to remember, as revealed earlier, Gateway 3 is the first statewide eighth grade promotion standard in the history of North Carolina's public schools. Hence, a description of an eighth grade promotion standard enforced by the state's educational leaders prior to April 1999 will not be provided.

## **XVI. The Old and New Eighth Grade Promotion Standards Used in the Wake County Public School System and North Carolina**

Prior to April 1999, the eighth grade promotion policy for the Wake County Public School System was broad in terms of its inclusion of several levels of students. More specifically, unlike Gateway 3's direct relationship only to grade eight, the old guideline also applied its parameters to grades six and seven. Overall, its specific criteria for promotion for all three grades were: "All students in the middle grades are required to pass three (3) of four (4) courses in the core curriculum areas of English/language arts, mathematics, social studies, and science. In addition, students must pass at least fifty percent (50%) of the remaining courses taken" (WCPSS *Retention: Criteria And Procedures*).

Action by the Wake County Board of Education on May 9, 1992 led to the old promotion policy. Nonetheless, in addition to the previously described part, the former policy included two other major points. To begin with, it stated: "In determining whether or not a student has successfully met course standards, the evaluation shall include consideration of all activities that have occurred during a particular evaluation period. Such activities include: (1) homework, (2) projects, (3) reports, (4) class participation, and (5) tests. The relative value attached to any activity shall be determined by the importance of the activity in achieving the objective of the course" (WCPSS *Retention: Criteria And Procedures*). The other major point of emphasis with this Wake County policy delineated: "In the event a student does not meet the standard criteria for promotion, that student shall be evaluated for possible placement. The following factors shall be considered.

1. Available test data

2. Age
3. Previous retention
4. Physical maturity
5. Social maturity
6. Attendance
7. Student's performance compared with ability
8. Any other factors that may be appropriate" (WCPSS *Retention: Criteria And Procedures*).

On December 18, 1995, the Wake County Board of Education elaborated further on the promotion criteria for eighth grade students in a policy revision, inclusive of the K-7 levels as well. This action stated: "In grades K-8, each student shall be placed by the principal at a grade level to which each is best adjusted academically, socially, emotionally, chronologically, and physically. The educational program shall provide for continuous progress of students from grade to grade, with a student spending one year in each grade. A small number of students may benefit from spending two years in the same grade. Such retention may be considered when criteria developed by the superintendent have been met and when consultation has been held with the parents of the student" (WCPSS *Promotion And Retention Of Students*).

The previous paragraphs illustrated a major point about the promotion of eighth grade students in the Wake County Public School System, prior to its implementation of Gateway 3. To be more specific, academic achievement was not the only vehicle for advancement by a student from one grade level to the next. In other words, additional factors, such as

physical or social maturity and age, could lead to a low-performing student's promotion to grade nine, despite his or her failure to master material needed for success at the high school level. Thus, a large opportunity for social promotion to be used in many instances appeared to be present in the school district's old promotion practices with regard to eighth grade students. Nonetheless, the North Carolina State Board of Education's April 1999 decision to implement Gateway 3 to govern the promotion of eighth graders added more structure in this area of the Wake County Public School System policies.

North Carolina's new eighth grade promotion policy, Gateway 3, states: "In addition to meeting local promotion requirements, students in grade 8 shall demonstrate proficiency by having test scores at Level III or above on an end-of-grade test in both reading and mathematics. Additionally, the grade 7 writing assessment shall be used as a screen to determine whether students are making adequate progress in developing writing skills. If a student has not scored at or above proficiency level 2.5 on the grade 7 writing assessment, the school shall provide intervention and assistance to develop writing skills. The principal and teacher(s) shall use locally developed and scored writing samples during grade 8 to determine if students have made adequate progress to be promoted to grade 9. Students scoring at Level III or above on reading and mathematics, meeting all local promotion standards, and making adequate progress in writing shall be promoted to grade 9 unless determined otherwise by the school principal, in consultation with teacher(s)" (NCDPI *Draft 10*).

This policy also includes measures to be taken in cases of eighth grade students not performing in a manner consistent with these expectations. To be more specific, it states:

“For students not scoring at Level III or above on the reading and mathematics tests and not making adequate progress in developing writing skills, the school district shall follow these procedures to determine if students are performing at grade level and able to succeed at the next grade.

1. Students scoring below Level III on an end-of-grade test are given a second test within a reasonable time from the receipt of test results. Parents may request that their child be excused from the second administration of the test. In this case, the parents and child accept participation in focused intervention.
2. Teachers or parents may request a promotion for students scoring below Level III on an end-of-grade test after the second or third test administration. Teachers shall provide documentation of the students’ performance during a review process.

Documentation may include:

- a) Student work samples
- b) Other test data
- c) Information supplied by parents
- d) For students with disabilities, information that is included in the individualized education program (IEP).
- e) Other information that verifies that a student is at grade level. (Students with disabilities shall be at grade level or be making adequate progress to meet requirements at grade 9.)

3. Students who are not promoted after the second or third administration of the test shall be given focused intervention of a time period that is instructionally sound. Strategies may include, but are not limited to, alternative learning models, special homework, smaller classes, tutorial sessions, extended day school, Saturday school, modified instructional programs, parental involvement, summer school instruction, or retention” (NCDPI *Draft 10*).

The previously described aspects of Gateway 3 identify protection for “Students with Disabilities” from these tough requirements, capable of preventing their promotion due to their individual problems with some areas of school. This protection comes from specifications included in these students’ Individualized Education Programs (IEPs). However, they are not the only individuals with this type of protection. The “Students of Limited English Proficiency,” by federal law, also can not be punished by the requirements of this new promotion policy due to their special conditions, primarily difficulties with this country’s dominant language (NCDPI *Draft 10*).

A final piece to the North Carolina State Board of Education’s Gateway 3 policy pertains to the waiver process for students recommended for retention. It states: “A committee shall be appointed to review student waiver requests. This committee, composed of teachers and principals from other schools or the central office staff, shall make recommendations to the student’s principal about whether the student should be promoted to the next grade. This recommendation is based on documentation presented by teachers on behalf of the student. Special education personnel and the student’s parent(s) shall be on the committee if a student with a disability is being considered for a waiver” (NCDPI *Draft 10*).

In summary, a retention candidate's success with this process leads to his or her movement to the ninth grade, despite his her failure to meet the required academic standards for promotion (NCDPI *Draft 10*).

Overall, as previously described, the Wake County Public School System's leaders moved quickly in response to the North Carolina State Board of Education's initial revelation of Gateway 3 throughout its area of jurisdiction. To be more specific, the Wake County Board of Education adopted a new eighth grade promotion policy, with its latest revision coming in October of 2000, within the parameters of the new statewide requirements and implemented it prior to the North Carolina State Board of Education's required start date. Thus, the requirements of the state policy were meshed with several additional criteria determined by Wake County school officials. This new Wake County Public School System promotion standard, serving as the basis for this project, includes the following requirements in need of being met by an eighth grade student to move to the ninth grade:

1. “Passing grades in Language Arts and Mathematics
2. Passing grades in Science or Social Studies
3. Passing grades in half of the other courses
4. Level III on End-of-Grade Reading Test
5. Level III on End-of-Grade Mathematics Test
6. 2.5 on NC Grade 7 Writing Test or evidence of adequate progress

\*Students who are absent more than 20 days may be referred to a review committee to determine if retention with intervention is appropriate” (WCPSS *Promotion & Intervention Policy*).

In terms of the retesting options and the provision of intervention services with regard to eighth grade retention candidates, the Wake County Public School System's plan is very similar to the basic one defined by the North Carolina State Board of Education. To begin with, children in danger of being retained due to poor end-of-grade test scores, Level I or II, are given a retest opportunity, prior to the end of the school year. Furthermore, in cases of a second poor performance on these tests, the students have the opportunity to attend the school system's Summer Academy, or an approved intervention program, to obtain remedial help in preparation for a second retest. Nonetheless, parents of these low-performing children also have the right to send their children directly to the school system's remedial program, the Summer Academy, without participating in the first retest. In most cases of this nature, the parents want their children to get help and focus on the second round of retests, with the hope of the extra remediation enabling them to be successful (*WCPSS Promotion And Intervention*).

On either retest, a child's score of Level III or above makes him or her a candidate for promotion. However, continual failure to reach that level of performance on the tests leaves a "waiver from promotion standards" as the only hope for the low-performing child to move to grade nine the following school year. Overall, the Wake County Public School System's waiver process is consistent with the state's plan of using a review committee, of teachers and principals, external to the retention candidate's school. These individuals examine the information pertaining to the situation and convey their recommendations to the person empowered to make the final decision in waiver cases, the student's principal (*WCPSS Promotion And Intervention*).

In summary, some noticeable differences between the eighth grade promotion policy established by the North Carolina State Board of Education in April of 1999 and the one developed by the Wake County Public School System in response to that action can be identified by studying the previous pages. These differences are the result of North Carolina's empowerment of local school systems to add their own additional requirements to the State Board of Education's basic ones. On the other hand, numerous commonalities such as protection for "Students with Disabilities" and "Students of Limited English Proficiency," as well as performance cutoffs on end-of-grade tests, between the Wake County and North Carolina State Board of Education versions of Gateway 3 also can be found (WCPSS *Promotion And Intervention*). Nonetheless, despite these differences and similarities, the Wake County Public School System's version of Gateway 3, the district's new eighth grade promotion standard, and its relationship to student movement to high school will be the focal point of this study.

## **XVII. Summary**

This chapter described the analytic framework to be used in this study. Furthermore, a presentation of the major themes in the educational literature associated with social promotion and retention was included. Descriptions of the typical eighth grade child as well as the old and new eighth grade promotion policies associated with this study also were major parts of this chapter. Nonetheless, this study can not move forward without a description of its methodology. Thus, the next chapter will focus on the methodology to be employed to complete this investigation.

## **Chapter 3-Methodology**

### **I. Introduction**

This chapter will describe the methodology to be employed to provide evidence to support an answer to the following main research question: *Does the new Wake County Public School System eighth grade promotion standard affect the resultant promotion rate?*

To begin with, the four parts of the investigation, aligned with the Sub-questions, and the mathematical processes to be used with them will be discussed. These four Sub-questions, which create the need for the different parts of the investigation, are:

- Sub-question #1- Is there a statistically significant difference in eighth grade promotion rates before (Year 0) and after (Year 1) the implementation of Gateway 3?
- Sub-question #2- Are there statistically significant differences in eighth grade promotion rates between groups of students based on demographic characteristics?
- a) Are there statistically significant differences in eighth grade promotion rates based on gender?
  - b) Are there statistically significant differences in eighth grade promotion rates based on special education (SPED) status?
  - c) Are there statistically significant differences in eighth grade promotion rates based on free/reduced lunch status?
  - d) Are there statistically significant differences in eighth grade promotion rates based on academically gifted (AG) status?
  - e) Are there statistically significant differences in eighth grade promotion rates based on minority status?
- Sub-question #3- Are there statistically significant correlational relationships between student demographic characteristics and promotion rates?
- Sub-question #4- What effects do student demographic characteristics have on the promotion rates of students?

The third section of this chapter will describe the data to be used in this study. Thus, the population to be examined will be identified. In addition, reasons behind the selection of the data will be described. The source of the data also will be included in this part of the investigation. Finally, the types of data to be used will be revealed.

An overview of the Wake County Public School System will be included in the fourth section of this chapter. Furthermore, reasons for the selection of the Wake County Public School System as the focal point of this study will be described in this chapter's final segment. Overall, the goal of this last section will be to increase the reader's awareness of the type of school district involved in this investigation. Nonetheless, prior to moving forward in this chapter, some attention must be given to the labels to be used in association with the theoretical piece of this study's analytic framework, Howard Becker's Labeling Theory.

*The Labels Used in this Study-Are They Positive or Negative?*

The four parts of this study, represented by Sub-questions, will involve labels assigned to students. Two of these labels, promoted and retained, will represent year-end results for Wake County students in grade eight. However, other labels will denote various demographic characteristics associated with eighth graders in that school system. This section will identify these labels in terms of their association with Howard Becker's Labeling Theory.

Descriptions of this study's analytic framework in chapters 1 and 2 identified two main labels to be used in the analysis of eighth grade promotion results generated by the sample of students from twelve Wake County middle schools: promoted and retained. In

those parts of the study, promoted was determined to be positive; whereas, retained received a negative connotation. Thus, according to Becker's Labeling Theory, promoted was associated with non-deviant behavior. Furthermore, deviant behavior and retained were paired with each other.

In addition to the promoted and retained labels, six additional characteristics must be identified, in terms of being positive or negative, due to their value to the final parts of this project. These labels (academically gifted, female, free/reduced lunch, male, minority, and special education) are the ones associated with the six sub-groups of students to be used extensively in Parts Two, Three, and Four of this study. Thus, for the purposes of this investigation, the following labels will be identified as positive (or non-deviant): AG and female. However, like retention, free/reduced lunch, male, minority, and special education will be assigned a negative (or deviant) connotation.

The demographic characteristics' identification as being positive or negative was based on the basic premise of Howard Becker's Labeling Theory that deviant behavior is defined by social or group norms. In other words, their positive or negative statuses are not inherently related to particular types of people or specific actions by individuals. Instead, according to Becker, it is labels of this nature that create deviant, or negative, behavior such as retention (*Labeling Theory: Becker*). Nonetheless, the designation of the demographic characteristics as positive or negative will add value to conclusions associated with the primary labels: promoted and retained. Thus, at this point in the study, their presentation as being positive or negative was a necessity.

Now that the identification of the labels as positive or negative has been presented, the next section of this chapter will describe the four main parts of the study. Thus, the Sub-question associated with each section will be included. In addition, the goal of the Sub-questions will be revealed. Finally, the methodology to be used in each section will be identified.

## **II. The Four Parts of the Study**

### *Part One (Sub-question #1)*

This part of the study will be used to answer the following Sub-question: *Is there a statistically significant difference in eighth grade promotion rates before (Year 0) and after (Year 1) the implementation of Gateway 3?* Thus, the focus, in terms of data, will be on the total number of eighth grade students promoted to grade nine during the 1999-2000 and 2000-2001 school years. This data will be obtained from the 1999-2000 and 2000-2001 promotion results of twelve Wake County Public School System middle schools. Nonetheless, the overall goal of this part of the project will be to determine if the new eighth grade promotion standard created any significant differences in the number of students promoted to grade nine during the 2000-2001 school year in relation to the 1999-2000 results.

A comparison between the 2000-2001 promotion rates and the 1999-2000 results, under the old policy, will be conducted to generate an answer to this Sub-question. This task will be accomplished through the use of a one sample t-test. Furthermore, the following null hypothesis will be tested with this part of the investigation:

Null hypothesis: No statistically significant difference exists between the eighth grade promotion rates for the 1999-2000 and 2000-2001 school years.

The identification of a statistically significant difference between the 1999-2000 and 2000-2001 eighth grade promotion rates will create a need for further analysis. More specifically, these additional efforts will attempt to determine if the difference results from the demographic characteristics associated with the children in this study. Nonetheless, even if no such difference is discovered, the possibility of differences in terms of eighth grade promotion rates associated with students' demographic characteristics still will be examined. Thus, the eighth grade promotion rates of students with specific demographic characteristics will be analyzed in the study's second part. The goal of this section will be to determine if the new Wake County eighth grade promotion standard adversely affects one group of children. With this scenario in mind, a description of the second part of this study will be presented in the next few paragraphs.

Part Two (Sub-question #2)

The second part of this investigation will generate an answer to the following Sub-question: *Are there statistically significant differences in eighth grade promotion rates between groups of students based on demographic characteristics?*

- a) *Are there statistically significant differences in eighth grade promotion rates based on gender?*
- b) *Are there statistically significant differences in eighth grade promotion rates based on special education (SPED) status?*
- c) *Are there statistically significant differences in eighth grade promotion rates based on free/reduced lunch status?*
- d) *Are there statistically significant differences in eighth grade promotion rates based on academically gifted (AG) status?*

e) *Are there statistically significant differences in eighth grade promotion rates based on minority status?*

More specifically, an answer to this Sub-question will be pursued to determine if any statistically significant differences in the promotion rates associated with the Wake County Public School System's new eighth grade promotion standard can be attributed to the following six student demographic characteristics: *academically gifted (AG), female, free/reduced lunch, male, minority, and special education (SPED)*. These demographic characteristics will represent the variables to be used with this part of the investigation. Furthermore, the data will only pertain to the 2000-2001 school year.

In order to accomplish the task associated with this Sub-question, independent samples t-tests will be conducted to compare the promotion rate of each demographic sub-group with the promotion rate associated with the students not in that particular sub-group. Furthermore, the null hypothesis to be tested will be:

Null hypothesis: No statistically significant differences between the eighth grade promotion rates of sub-groups formed on the basis of the six identified student demographic characteristics and the promotion rates of students not in the sub-groups exist during the 2000-2001 school year.

Nonetheless, to establish a baseline for the discussion of these results, one sample t-tests also will be employed to analyze the relationships between the total 2000-2001 eighth grade promotion rate and the promotion rates associated with each demographic sub-group for that year. Thus, the null hypothesis to be tested with the one sample t-tests will be:

Null hypothesis: No statistically significant differences between the total eighth grade promotion rate and the promotion rates of sub-groups formed on the basis of the six identified student demographic characteristics exist during the 2000-2001 school year.

Overall, the second part of this study will focus on the identification of statistically significant differences associated with the previously identified student demographic characteristics, pertaining to promotion rates, in the Wake County Public School System during the first year of its new eighth grade promotion standard's use, if any exist. Nonetheless, regardless of Sub-question #2's findings, an answer to the third Sub-question with the aid of correlation coefficients will be pursued. This situation will lead to the application of the regression process to the research data to generate an answer to the final Sub-question and determine cause with regard to the student demographic characteristics' effect on the eighth grade promotion rates among the pupils included in this study. These two additional aspects of the study, Parts Three and Four, will be described further in the next few pages.

Part Three (Sub-question #3)

This aspect of the study will attempt to answer the following Sub-question: *Are there statistically significant correlational relationships between student demographic characteristics and promotion rates?* A correlation coefficient, the Pearson Product-Moment Correlation Coefficient, will be employed to accomplish this task. In addition, the 2000-2001 group membership associated with each previously identified student demographic

characteristic, generated by the group of Wake County pupils involved in the study, will be used. The data set also will include total 2000-2001 eighth grade promotion rate.

This section of the investigation will involve two parts in terms of variables. More specifically, with one set of comparisons, *the 2000-2001 group membership for a particular student demographic characteristic (academically gifted, female, free/reduced lunch, male, minority, and special education)* shall be the *independent variable*. Likewise, *total 2000-2001 eighth grade promotion rate* will be the *dependent variable*.

Part two will compare all possible pairs of the previously identified student demographic characteristics (*academically gifted, female, free/reduced lunch, male, minority, and special education*) in terms of 2000-2001 group membership to examine the intercorrelation between them. Thus, the student demographic characteristics will fulfill the roles of *independent variable* and *dependent variable* in these comparisons. However, the assignment of a specific student demographic characteristic to either role, the independent or dependent variable, will not make a difference in the results.

Overall, the primary objective of this part of the study will be to determine if statistically significant correlational relationships exist between the previously identified variables representing promotion rates and group membership. Nonetheless, after determining the type of relationship (statistically significant or not statistically significant) between these variables, the study's focus will shift to the final Sub-question. This section follows the work with the third Sub-question due to the relationship between the concepts involved with both parts of the study.

#### Part Four (Sub-question #4)

The goal of this part of the study will be to answer the following Sub-question: *What effects do student demographic characteristics have on the promotion rates of students?*

Logit regression will be used with this part of the methodology. In addition, the 2000-2001 eighth grade promotion rates associated with the previously identified student demographic characteristics will be involved in the analysis. The total 2000-2001 eighth grade promotion rate also will be utilized.

In summary, this part of the study will determine the influence of the student demographic characteristics on the total 2000-2001 eighth grade promotion rate. Thus, *the 2000-2001 eighth grade promotion rate for a particular student demographic characteristic (AG, female, free/reduced lunch, male, minority, and SPED)* will fulfill the role of the *independent predictor*. As a result, the *dependent variable* will be *the total 2000-2001 eighth grade promotion rate*.

Now that the different parts of the study have been discussed, a description of the data to be used will be presented. This data will be analyzed quantitatively using univariate and multivariate statistics with the aid of the SPSS statistical package. As a result of this resource's use, the development of conclusions pertaining to the investigation's main research question and Sub-questions will be possible.

### **III. Data Description**

#### Population

This study's population only included eighth grade students enrolled in middle schools belonging to the Wake County Public School System located in the region

surrounding Raleigh, North Carolina. Overall, this school system contains twenty-four middle schools; however, a few of them were new and lacked sufficient data to be included in the study. Thus, my goal for this study was to use a sample representing 50% of the district at the middle school level with regard to the number of schools. As a result, the data involved in this investigation was obtained from twelve Wake County middle schools.

The majority of the information used in this study pertained to the 2000-2001 school year. This situation resulted from the Wake County Public School System's implementation of its new eighth grade promotion standard in all of its middle schools during that time period. Nonetheless, one set of data from the 1999-2000 academic campaign, the total eighth grade promotion rate, was chosen to provide evidence to support a response to the first Sub-question.

Overall, this study's primary focus will be to provide evidence to support an answer to the following main research question: *Does the new Wake County Public School System eighth grade promotion standard affect the resultant promotion rate?* As a result, the total 2000-2001 eighth grade promotion rate generated by the sample of students involved in this study will be a major component of the data set. Furthermore, in the last three parts of the investigation, the promotion results of this sample of students will be analyzed according to the six specific demographic characteristics presented in Chapter 1: *academically gifted (AG), female, free/reduced lunch, male, minority, and special education (SPED)*.

The following table (Table 1) will provide a more detailed description of the study's population. Overall, the intent of this summary, based on 2000-2001 school year data, is to

establish a baseline awareness for the reader in terms of the study's population. Additional descriptions of individual schools used in this study can be found in Appendix 1.

Table 1

Number of Eighth Graders in Each Category During 2000-2001 School Year

| <b>Category</b>             | <b>Total Number of Students Per Category</b> | <b>Minimum Value Per School</b> | <b>Maximum Value Per School</b> |
|-----------------------------|--|---------------------------------|---------------------------------|
| <b>academically gifted</b>  | 926  | 16                              | 149                             |
| <b>female</b>               | 1830   | 87                              | 209                             |
| <b>free/reduced lunch</b>   | 684  | 26                              | 101                             |
| <b>male</b>                 | 1906   | 116                             | 235                             |
| <b>minority</b>             | 1337   | 89                              | 150                             |
| <b>special education</b>    | 603  | 32                              | 74                              |
| <b>total student sample</b> | 3736   | 203                             | 426                             |

Source: Wake County Public School System, Evaluation and Research Department.

<sup>a</sup> All students included in these figures were either promoted or retained at the conclusion of the 2000-2001 school year.

Using 2000-2001 data, Table 1 summarized the sample of students with regard to the six demographic characteristics to be included in this study. More specifically, the number of students in each demographic category was identified. Furthermore, despite the study's focus on the total sample of students, the minimum and maximum numbers of pupils per school in terms of each sub-group's representation were included.

The final row of Table 1 focused on the total student sample. Thus, no specific demographic characteristics were associated with the numbers included in this part of the table. As a result, the total number of students included in the study was denoted in the last row of Table 1. The minimum and maximum numbers of students per school included in this study also were revealed in the last row.

Overall, Table 1 suggested that students belonged to mutually exclusive categories represented by the demographic characteristics. For the purposes of this study, this idea will be employed. However, students’ membership in multiple demographic categories was a real possibility. Nonetheless, this potential occurrence will not be examined in this study.

Another description of the study’s population can be found in the following table (Table 2). However, unlike the previous one, this table will focus on promotion data rather than the number of students in each category. Nonetheless, this table will only represent 2000-2001 data.

Table 2

Promotion Data Associated with Categories of Eighth Graders During 2000-2001 School Year

|                                | <b>academically gifted</b> | <b>female</b> | <b>free/reduced lunch</b> | <b>male</b> | <b>minority</b> | <b>special education</b> | <b>total student sample</b> |
|--------------------------------|----------------------------|---------------|---------------------------|-------------|-----------------|--------------------------|-----------------------------|
| <b>Sample Total Promoted</b>   | 925                        | 1780          | 631                       | 1822        | 1257            | 552                      | 3602                        |
| <b>Sample Percent Promoted</b> | .9989                      | .9727         | .9225                     | .9559       | .9402           | .9154                    | .9641                       |
| <b>Sample Mean Promoted</b>    | .9989                      | .9727         | .9225                     | .9559       | .9402           | .9154                    | .9641                       |

Table 2 (continued)

|  |         |         |         |        |        |       |         |
|--|---------|---------|---------|--------|--------|-------|---------|
| <b>Mean Percent Promoted Per School</b>    | .9992   | .97     | .9192   | .9542  | .9417  | .9125 | .96     |
| <b>Mean Number Promoted Per School</b>     | 77.0833 | 148.333 | 52.5833 | 151.83 | 104.75 | 46    | 300.167 |
| <b>Minimum Number Promoted Per School</b>  | 16      | 85      | 20      | 105    | 81     | 30    | 195     |
| <b>Minimum Percent Promoted Per school</b> | .99     | .91     | .77     | .88    | .87    | .85   | .89     |
| <b>Maximum Number Promoted Per School</b>  | 149     | 208     | 94      | 227    | 147    | 73    | 417     |
| <b>Maximum Percent Promoted Per School</b> | 1.00    | 1.00    | .99     | .99    | .98    | .99   | .99     |

Source: Wake County Public School System, Evaluation and Research Department.

<sup>a</sup> All students included in these figures were either promoted or retained at the conclusion of the 2000-2001 school year.

This table presented 2000-2001 promotion data in relation to the six demographic sub-groups and the total student sample included in this study. Furthermore, in the first three rows of Table 2, the data was categorized in terms of statistics associated with the study's total sample. For example, Sample Total Promoted, Sample Percent Promoted, and Sample

Mean Promoted were derived through the use of the promotion results for all students included in the study. Nonetheless, some statistics associated with individual schools were included in Table 2.

Mean Percent Promoted Per School and Mean Number Promoted Per School were two of the statistics that focused on the contributions of individual schools rather than the results associated with the total sample of students. In fact, the calculation of both statistics involved obtaining a single promotion rate for a specific category of students from each school included in the study. On the other hand, Minimum Number Promoted Per School, Minimum Percent Promoted Per School, Maximum Number Promoted Per School, and Maximum Percent Promoted Per School did not involve the same type of calculations needed for the derivation of a mean. Instead, all four of these statistics only required the examination of individual schools' data. Nonetheless, the results associated with the total sample were not needed to generate these figures.

With knowledge of the previously presented information, it is time to move forward to a more detailed description of the data to be included in this study. Thus, support for the choice of the data will be presented. In addition, the sources and specific types of the data will be identified.

#### *Why the Data Used In the Study Was Chosen*

The main research question, as well as the four Sub-questions associated with it, determined the type of data needed for this study. All of these questions focus on promotion rates in relation to the Wake County Public School System's new eighth grade promotion standard. Thus, the eighth grade promotion results of a sample of students from twelve

Wake County middle schools will be used. Nonetheless, this data will be categorized according to specific school years as well as six student demographic characteristics in different parts of the methodology. These demographic characteristics, previously identified in Chapter 1, are: *academically gifted (AG), female, free/reduced lunch, male, minority, and special education (SPED)*.

In summary, this study's data selection process centered around the attainment of two primary goals. The first objective was to obtain data capable of generating a response regarding the impact of the Wake County Public School System's new promotion standard on the overall number of eighth graders promoted to grade nine. Secondly, the influence of the previously identified six student demographic characteristics on the eighth grade promotion rates will be sought through the use of the selected data. Nonetheless, now that the reasons behind the selection of this data set have been revealed, the source of this information will be identified.

#### Source of Data

This project will require the assistance of the Evaluation and Research Department of the Wake County Public School System with regard to the provision of data. Thus, in September of 2001, a request was made to that organization's leader, Dr. Karen Banks, for the data to be included in this investigation. Dr. Banks and her colleagues complied with this request and provided the necessary data to complete this study. Nonetheless, student identities were withheld to maintain confidentiality with regard to the study's population. However, it should be noted that student identity was not an essential criterion of this investigation. The next section will identify the different types of data requested.

Types of Data Requested

The following types of data were requested from the Wake County Public School System for this study:

1. For the twelve middle schools included in the study:

- a) Total 8<sup>th</sup> grade enrollment
- b) Number of 8<sup>th</sup> grade students promoted to 9<sup>th</sup> grade
- c) Number of 8<sup>th</sup> grade students retained

(Note: This information is needed for the 1999-2000 and 2000-2001 school years. Furthermore, it should be categorized by year and school.)

2. For the twelve middle schools included in this study:

- a) Total number of 8<sup>th</sup> grade students separated into the following categories: academically gifted (AG), female, free/reduced lunch, male, minority, special education (SPED).
- b) Number of 8<sup>th</sup> grade students promoted in each category listed in 2a
- c) Number of 8<sup>th</sup> grade students retained in each category listed in 2a

(Note: This information is needed for the 2000-2001 school year. Furthermore, it should be categorized by school.)

Using this data, the four parts of this study will be conducted. Each part differs in terms of the Sub-question determining its point of emphasis. Nonetheless, the results of all four parts will be combined to answer the previously presented main research question: *Does the new Wake County Public School System eighth grade promotion standard affect the resultant promotion rate?*

Now that the major components of the study's methodology have been described, some attention must be given to the school system involved in this investigation. Thus, the next section will describe the Wake County Public School System in a variety of areas such as its surrounding adult and business environment, student performance, personnel, facilities, technology, and operational structure. Overall, the presentation of this information is intended to increase the reader's level of awareness in terms of the nature of this school system. Furthermore, it will give educators across the country a point of reference to use in making comparisons between the Wake County Public School System and their own school districts. As a result, the generalizability of this study's findings will extend beyond the borders of the Wake County Public School System, in spite of its role as the focal point of my efforts.

#### **IV. Overview of the Wake County Public School System**

The focal point of this study is the Wake County Public School System located in the region surrounding Raleigh, North Carolina. Recently, this area was identified as one of the "top 10 places" to raise a family in the United States. In addition, many adults in this part of the country are employed by major world-wide technological corporations such as IBM and ERICSSON. This region also contains many business leaders desiring a world-class public school system, due to its ability to promote economic development in the area, as well as taxpayers with high expectations regarding the use of their tax dollars on the schools (WCPSS *Overview*).

Despite the presence of some suburban and rural areas within its geographic boundaries, in August of 2001, the Wake County Public School System primarily was

identified as an urban district. Furthermore, it has approximately 100,000 students in kindergarten through grade twelve (WCPSS *Overview*). As a result, Wake County has the second largest public school district in North Carolina. Furthermore, only thirty-two school districts nationwide have larger student populations. In addition, over recent years, the Wake County Public School System has been one of the fastest growing districts in the country, with an annual enrollment increase of about 5,000 students (WCPSS *Overview*). Overall, this large size forces the district's transportation system to transport 52,000 children to and from school on a daily basis (WCPSS *Overview*).

With regard to Wake County students' academic performances, more than three-fourths of them (76%) took the Scholastic Aptitude Test (SAT) in 1995; whereas, the national average for participation during that particular year was only 41%. Furthermore, the Wake County Public School System's average SAT score in 1995 was 938. This score exceeded North Carolina's average for that year by 73 points. In addition, the national average was 28 points lower than the Wake County result. Similarly, due to its relation to students' academic performances, another interesting statistic from a recent year identified the Wake County Public School System as being 16% higher in comparison to North Carolina's average regarding the number of students at or above grade level in grades three through eight in the areas of reading and mathematics (WCPSS *Overview*).

In terms of personnel, the Wake County Public School System's workforce includes more than 11,000 individuals employed on a full- or part-time basis. Males comprise 16.6% of this group; whereas, non-white individuals constitute 26.6% of the workforce. More specifically, with regard to job assignments, the number of full-time classroom teachers in

the school district is approximately 5,420. Furthermore, administrators make up 4% of Wake County's personnel. In addition, 35% of the professional staff members have earned graduate degrees (*WCPSS Overview*).

The Wake County Public School System contains 122 schools: 78 elementary schools, 24 middle schools, 15 high schools, and 5 special/alternative schools. Within this group of institutions, a strong network of magnet schools can be identified. For instance, nine year-round schools have been established in this school system. In addition, fifteen institutions have gifted and talented programs; whereas, ten schools promote other special offerings such as Montessori instruction, creative arts instruction, extended day schedules, and accelerated studies (*WCPSS Overview*).

Despite this large number of schools, the previously described annual enrollment growth experienced by the Wake County Public School System over recent years has led to the construction of new facilities on a regular basis. To be more specific, 35 new school buildings were built in Wake County from 1990 to 2000. Furthermore, 525 portable teaching spaces, in the form of trailers, also have been placed on various campuses throughout Wake County to accommodate large student bodies at those locations (*WCPSS Overview*).

A major technology movement also has occurred in the Wake County Public School System. In fact, a wide area network has been implemented during the past five years. As a result, all schools in the district are networked to each other. Furthermore, students and teachers have gained access to a great deal of information by way of technology through this movement. Nonetheless, this movement also has created the need for required technology training for teachers and staff members at all Wake County schools (*WCPSS Overview*).

With regard to its operational structure, the Wake County Public School System's chief executive officer, the superintendent, is hired by its school board, which consists of nine elected officials. The board members serve four-year terms and represent different geographical regions of the county containing the district. Their primary responsibility resides with the establishment of school system policies to be implemented by the superintendent and his or her administrative team (*WCPSS Overview*).

The superintendent and his or her administrative team also are given the responsibility of establishing procedures and managing operations for the entire Wake County Public School System. Nonetheless, school-level responsibilities are delegated to the principals. Thus, the individuals at the building level encounter many challenges on a daily basis, such as working with leadership teams to develop, implement, and monitor school improvement plans (*WCPSS Overview*).

Overall, a 1996-1997 benchmark management study of central operations by KPMG, Peat Marwick LLP, found the Wake County Public School System to be effective in many areas of its organizational structure. More specifically, the areas of transportation, Evaluation and Research, and leadership organization were cited as its primary strengths. In addition, this school system was closely matched by the study with the following districts across the nation in terms of a high level of similarity: Anne Arundel in Maryland, Cobb County in Georgia, Fairfax County in Virginia, and Metropolitan Nashville in Tennessee (*WCPSS Overview*).

In conclusion, this description of the Wake County Public System will be useful to educators throughout the country in their efforts to apply this study's results to their own

school systems. Nonetheless, in spite of this descriptive information, my reason for the selection of the Wake County Public School System as the study's focal point needs to be identified. Thus, the next section will discuss this information.

**V. Why is it appropriate to use the Wake County Public School System for this Study?**

The primary reason for my decision to focus on the Wake County Public School System in this study pertains to the availability of data. More specifically, this investigation originated from my interest in analyzing the effect of the state's new eighth grade promotion standard on the number of students promoted to grade nine. The State Board of Education approved this new promotion policy, Gateway 3, in April of 1999 (*NCDPI Minutes*). However, at that time, the mandated start date for the implementation of this standard in all public middle schools in North Carolina was established as the 2001-2002 academic campaign (*North Carolina Statewide*).

Leaders of the Wake County Public School System decided to implement the new eighth grade promotion standard, accompanied by some additional local options permitted by the state, prior to the State Board of Education's mandated time, the 2001-2002 school year. Thus, during the 2000-2001 academic campaign, all Wake County middle schools based their promotion decisions for eighth graders on the parameters of Gateway 3 (Banks 1). As a result, Wake County school leaders had access to performance data associated with this new promotion standard that was not available to other educators throughout North Carolina. This assertion results from the decision of most local boards of education in this state to wait to implement Gateway 3 for the first time during the 2001-2002 school year.

In summary, the selection of the Wake County Public School System for this study pertained to the availability of data. The school system's implementation of the new eighth grade promotion standard a year earlier than the State Board of Education's required time generated data not available in other districts around North Carolina. Hence, due to the primary goal of this study and the lack of data associated with other North Carolina middle schools, the selection of the Wake County Public School System was an appropriate choice.

## **VI. Summary**

This chapter described several important components of this study. To begin with, the main research question and the related Sub-questions were identified. Next, the four parts of the investigation in relation to the Sub-questions were discussed. In addition, the analytical methods to be employed, as well as their relationships to the Sub-questions, were presented. A description of the data to be used with this study also was included in this chapter. The final parts of the chapter included an overview of the Wake County Public School System and reasons for its selection as the focal point of this study.

## **Chapter 4-Analysis**

Now that the four parts of this study and the methodology associated with them have been described, Chapter 4 will focus on the analytical techniques to be used with each Sub-question's data set. In addition, the results of this study will be presented and summarized. Thus, this chapter will further aid the study's efforts to generate an answer to its main research question: *Does the new Wake County Public School System eighth grade promotion standard affect the resultant promotion rate?* Overall, this chapter will be divided into sections representing the four Sub-questions.

### **I. Part One (Sub-question #1)**

This part of the study will generate an answer to Sub-question #1: *Is there a statistically significant difference in eighth grade promotion rates before (Year 0) and after (Year 1) the implementation of Gateway 3?* Thus, the analysis pertaining to this Sub-question will involve the total 1999-2000 eighth grade promotion rate generated by students in the study's selected schools during that year. In addition, the sample of 2000-2001 promotion results from these schools will be involved in this part of the study.

#### Analysis

In order to complete this part of the study, the following sample will be used: the promotion results of the eighth grade students enrolled in one of the study's twelve middle schools during the 2000-2001 school year. All of these students from different schools will be combined to form one large 2000-2001 sample. Additionally, the known 1999-2000 total eighth grade promotion rate generated by the students in the schools involved in this study, .9830, will be utilized. This value was calculated through the use of

the total number of 1999-2000 eighth grade promotions and the overall eighth grade enrollments of the twelve schools involved in this study. This action was taken since a complete sample for the 1999-2000 school year, in terms of individual students' results, was not reported.

The third step will involve the application of a one sample t-test to compare the total promotion rates for the 1999-2000 and 2000-2001 school years. As a result, the null hypothesis to be tested with the t-test is:

Null hypothesis: No statistically significant difference exists between the eighth grade promotion rates for the 1999-2000 and 2000-2001 school years.

Nonetheless, prior to the completion of this procedure, the total eighth grade promotion rate with regard to the 2000-2001 sample will have to be calculated.

Overall, in this part of the study, the primary focus will be on the use of a 95% confidence interval, or .05 p-value. More specifically, a p-value will be calculated for this one sample t-test to be compared to the standard .05 p-value. In the case of the calculated p-value being less than .05, the null hypothesis will be rejected. However, a p-value greater than .05 will lead to the acceptance of the null hypothesis. Thus, despite the one sample t-test's calculation of several figures, p-values will be the key to determining the acceptance or rejection of the null hypothesis.

### Results

As forecasted in the previous paragraphs, a one sample t-test was conducted in conjunction with the use of a 95% confidence interval (or .05 p-value). This mathematical concept's provision of an answer to Sub-question #1 will be described in greater detail in the

remaining paragraphs of this section. Nonetheless, the following tables (Table 3 and Table 4) provide an initial summary of the results.

Table 3

Descriptive Statistics Involved in One Sample t-test

| School Year | N    | Mean Promotion Rate Per Year | Total Number Promoted Per Year | Total Percent Promoted Per Year | Standard Deviation of Sample |
|-------------|------|------------------------------|--------------------------------|---------------------------------|------------------------------|
| 1999-2000   | 4009 | .9830                        | 3941                           | .9830                           | Not available                |
| 2000-2001   | 3736 | .9641                        | 3602                           | .9641                           | .19                          |

Source: Wake County Public School System, Evaluation and Research Department.

<sup>a</sup> All students included in these figures were either promoted or retained at the conclusion of the 1999-2000 and 2000-2001 school years.

<sup>b</sup> The standard deviation for the 1999-2000 school year was not included due the absence of a complete sample for that year in the data set. In other words, the promotion results of individual students were not included in the data set. The only known value for that school year was the total promotion rate.

Table 4

Summary of One Sample t-test

| t-score | Degrees of Freedom | Significance (2-tailed) |
|---------|--------------------|-------------------------|
| -6.201  | 3735               | .0001                   |

Source: Wake County Public School System, Evaluation and Research Department.

<sup>a</sup> All students included in these figures were either promoted or retained at the

conclusion of the 1999-2000 and 2000-2001 school years.

### Summary of Results

The one sample t-test provided the necessary results to evaluate the null hypothesis associated with Sub-question #1. More specifically, the one sample t-test generated a significance figure of .0001. This significance figure, or p-value, was less than the standard .05 p-value. Thus, the rejection of the null hypothesis was supported by this one-sample t-test's results. Additional reinforcement for this conclusion was provided by the fact that the ability of chance to cause this result was less than 5%.

In summary, the total eighth grade promotion rate for the 1999-2000 school year was .9830. However, during the 2000-2001 academic campaign, this figure fell to .9641. The one sample t-test determined this difference to be statistically significant. As a result, the following null hypothesis was rejected:

Null hypothesis: No statistically significant difference exists between the eighth grade promotion rates for the 1999-2000 and 2000-2001 school years.

Thus, a statistically significant difference between the eighth grade promotion rates before (Year 0) and after (Year 1) the implementation of Gateway 3 among the students involved in this study was identified.

After the identification of a statistically significant difference between the eighth grade promotion rates associated with the 1999-2000 and 2000-2001 school years, the focus of this study will move to students' demographic characteristics. More specifically, 2000-

2001 promotion data associated with six demographic characteristics will be analyzed. This process, as well as its results, will be described in the next section of this chapter.

## II. Part Two (Sub-question #2)

Part Two of this study will produce an answer to Sub-question #2: *Are there statistically significant differences in eighth grade promotion rates between groups of students based on demographic characteristics?*

- a) *Are there statistically significant differences in eighth grade promotion rates based on gender?*
- b) *Are there statistically significant differences in eighth grade promotion rates based on special education (SPED) status?*
- c) *Are there statistically significant differences in eighth grade promotion rates based on free/reduced lunch status?*
- d) *Are there statistically significant differences in eighth grade promotion rates based on academically gifted (AG) status?*
- e) *Are there statistically significant differences in eighth grade promotion rates based on minority status?*

An answer to this sub-question will be pursued to determine if any statistically significant differences in the promotion rates associated with the Wake County Public School System's new eighth grade promotion standard can be attributed to the six student demographic characteristics identified in the previous chapters. This analysis will only involve the 2000-2001 eighth grade promotion rates of the students selected for this study. In addition, the data will be analyzed in terms of sub-groups formed according to the following six student demographic characteristics: *academically gifted (AG), female, free/reduced lunch, male, minority, and special education (SPED)*. Nonetheless, to establish a baseline for this

discussion, the total 2000-2001 eighth grade promotion rate also will be involved in this part of the study.

Analysis

In order to complete this part of the study, the following samples will be formed:

1. The promotion results of the male eighth grade students during the 2000-2001 school year.
2. The promotion results of the female eighth grade students during the 2000-2001 school year.
3. The promotion results of the special education eighth grade students during the 2000-2001 school year.
4. The promotion results of the non-special education eighth grade students during the 2000-2001 school year.
5. The promotion results of the free/reduced lunch eighth grade students during the 2000-2001 school year.
6. The promotion results of the non-free/reduced lunch eighth grade students during the 2000-2001 school year.
7. The promotion results of the academically gifted eighth grade students during the 2000-2001 school year.
8. The promotion results of the non-academically gifted eighth grade students during the 2000-2001 school year.
9. The promotion results of the minority eighth grade students during the 2000-2001 school year.

10. The promotion results of the non-minority eighth grade students during the 2000-2001 school year.

Next, an independent samples t-test will be employed to compare the promotion rates of the following five pairs of samples: male and female, special education and non-special education, free/reduced lunch and non-free/reduced lunch, academically gifted and non-academically gifted, and minority and non-minority. As a result, the null hypothesis to be tested with the independent samples t-test is:

Null hypothesis: No statistically significant differences between the eighth grade promotion rates of sub-groups formed on the basis of the six identified student demographic characteristics and the promotion rates of students not in the sub-groups exist during the 2000-2001 school year.

The total 2000-2001 eighth grade promotion rate also will be compared, through the use of a one sample t-test, to the promotion rates associated with the following demographic sub-groups: male, female, special education, free/reduced lunch, academically gifted, and minority. Thus, the null hypothesis to be tested will be:

Null hypothesis: No statistically significant differences between the total eighth grade promotion rate and the promotion rates of sub-groups formed on the basis of the six identified student demographic characteristics exist during the 2000-2001 school year.

Nonetheless, as reported in Chapter 3, these one sample t-tests involving the total 2000-2001 promotion rate will be conducted only to provide a baseline for the discussion of the results focusing on the demographic sub-groups.

Overall, with this analysis, the primary focus will be on the use of a 95% confidence interval, or .05 p-value. A p-value will be calculated for each independent samples t-test and one sample t-test conducted in this part of the study. This p-value will be compared to the standard .05 p-value. In the case of a calculated p-value being less than .05, the null hypothesis associated with that particular t-test will be rejected. However, a p-value greater than .05 will lead to the acceptance of the null hypothesis. Thus, despite the calculation of several figures by these t-tests, p-values will be the key to determining the acceptance or rejection of the null hypothesis.

### Results

The previous section identified the analytical methodology to be used with Sub-question #2: independent samples t-test and one sample t-test. In addition, the use of a 95% confidence interval, or .05 p-value, was denoted. Additional details will be provided in the remaining paragraphs of this section with regard to the answer to Sub-question #2 generated by these t-tests. Nonetheless, the following tables (Table 5, Table 6, Table 7, Table 8, Table 9, Table 10, Table 11, Table 12, Table 13, Table 14, Table 15, and Table 16) provide an initial summary of the results.

Table 5 presents descriptive statistics for students in the academically gifted and non-academically gifted sub-groups involved with this part of the study. The number of students in the academically gifted sub-group was 925; whereas, the percent promoted for this category was 1.00. Furthermore, the standard deviation for that sub-group was 3.29E-02. On the other hand, 2811 was the number of students in the non-academically gifted sub-

group. In addition, this category's percent promoted and standard deviation were .95 and .21 respectively. All of these statistics are summarized in the following table.

Table 5

Descriptive Statistics for Students in Academically Gifted and Non-Academically Gifted Sub-groups

| Academically Gifted Status | Number of Students in Sub-group | Percent Promoted | Std. Deviation | Std. Error Mean |
|----------------------------|---------------------------------|------------------|----------------|-----------------|
| non-academically gifted    | 2811                            | .95              | .21            | 4.01E-03        |
| academically gifted        | 925                             | 1.00             | 3.29E-02       | 1.08E-03        |

Source: Wake County Public School System, Evaluation and Research Department.

<sup>a</sup> All students included in these figures were either promoted or retained at the conclusion of the 2000-2001 school year.

The next table provides a summary of the independent samples t-test between the promotion rates of the academically gifted and non-academically gifted sub-groups. Nonetheless, several statistics generated by this methodology will be highlighted due to their key role in the study's conclusions. To begin with, the t-score and p-value for the "equal variances assumed" adjustment were -6.595 and .000 respectively. On the other hand, the t-score for the "equal variances not assumed" adjustment was -11.145; whereas, a p-value of .000 accompanied that statistic. Overall, a statistically significant difference between the promotion rates of the academically gifted and non-academically gifted sub-groups was identified through this independent samples t-test.

Table 6

Summary of Independent Samples t-test between Promotion Rates of Academically Gifted and Non-Academically Gifted Sub-groups

|                  |                             | Levene's Test for Equality of Variances |      | t-test for Equality of Means |          |                 |                 |                       |   |           |
|------------------|-----------------------------|---|------|------------------------------|----------|-----------------|-----------------|-----------------------|---|-----------|
|                  |                             | F                                       | Sig. | T                            | Df       | Sig. (2-tailed) | Mean Difference | Std. Error Difference | 95% Confidence Interval of the Difference |           |
|                  |                             |   |      |                              |          |                 |                 |                       | Lower                                     | Upper     |
| Promotion Status | Equal Variances Assumed     | 191.891                                 | .000 | -6.595                       | 3734     | .000            | -4.62E-02       | 7.01E-03              | -6.00E-02                                 | -3.25E-02 |
|                  | Equal Variances Not Assumed |   |      | -11.145                      | 3182.999 | .000            | -4.62E-02       | 4.15E-03              | -5.44E-02                                 | -3.81E-02 |

Source: Wake County Public School System, Evaluation and Research Department.

<sup>a</sup> All students included in these figures were either promoted or retained at the conclusion of the 2000-2001 school year.

Table 7 presents descriptive statistics for students in the free/reduced lunch and non-free/reduced lunch sub-groups involved with this part of the study. The number of students in the free/reduced lunch sub-group was 684; whereas, the percent promoted for this category was .92. Furthermore, the standard deviation for that sub-group was .27. On the other hand, 3052 was the number of students in the non-free/reduced lunch sub-group. In addition, this category's percent promoted and standard deviation were .97 and .16 respectively. All of these statistics are summarized in the following table.

Table 7

Descriptive Statistics for Students in Free/reduced Lunch and Non-Free/reduced Lunch

Sub-groups

| <b>Free/reduced Lunch Status</b> | <b>Number of Students in Sub-group</b> | <b>Percent Promoted</b> | <b>Std. Deviation</b> | <b>Std. Error Mean</b> |
|----------------------------------|--|-------------------------|-----------------------|------------------------|
| <b>Non-free/reduced</b>          | 3052                                   | .97                     | .16                   | 2.91E-03               |
| <b>free/reduced</b>              | 684                                    | .92                     | .27                   | 1.02E-02               |

Source: Wake County Public School System, Evaluation and Research Department.

<sup>a</sup> All students included in these figures were either promoted or retained at the conclusion of the 2000-2001 school year.

The next table provides a summary of the independent samples t-test between the promotion rates of the free/reduced lunch and non-free/reduced lunch sub-groups. Nonetheless, several statistics generated by this methodology will be highlighted due to their key role in the study's conclusions. To begin with, the t-score and p-value for the "equal variances assumed" adjustment were 6.511 and .000 respectively. On the other hand, the t-score for the "equal variances not assumed" adjustment was 4.790; whereas, a p-value of .000 accompanied that statistic. Overall, a statistically significant difference between the promotion rates of the free/reduced lunch and non-free/reduced lunch sub-groups was identified through this independent samples t-test.

Table 8

Summary of Independent Samples t-test between Promotion Rates of Free/reduced Lunch and Non-Free/reduced Lunch Sub-groups

|                         |                                    | Levene's Test for Equality of Variances |      | t-test for Equality of Means |         |                 |                 |                       |   |          |
|-------------------------|------------------------------------|---|------|------------------------------|---------|-----------------|-----------------|-----------------------|---|----------|
|                         |                                    | F                                       | Sig. | T                            | Df      | Sig. (2-tailed) | Mean Difference | Std. Error Difference | 95% Confidence Interval of the Difference |          |
|                         |                                    |   |      |                              |         |                 |                 |                       | Lower                                     | Upper    |
| <b>Promotion Status</b> | <b>Equal Variances Assumed</b>     | 164.643                                 | .000 | 6.511                        | 3734    | .000            | 5.09E-02        | 7.82E-03              | 3.56E-02                                  | 6.63E-02 |
|                         | <b>Equal Variances Not Assumed</b> |   |      | 4.790                        | 796.827 | .000            | 5.09E-02        | 1.06E-02              | 3.01E-02                                  | 7.18E-02 |

Source: Wake County Public School System, Evaluation and Research Department.

<sup>a</sup> All students included in these figures were either promoted or retained at the conclusion of the 2000-2001 school year.

Table 9 presents descriptive statistics for students in the female and male sub-groups involved with this part of the study. The number of students in the female sub-group was 1830; whereas, the percent promoted for this category was .97. Furthermore, the standard deviation for that sub-group was .16. On the other hand, 1906 was the number of students in the male sub-group. In addition, this category's percent promoted and standard deviation were .96 and .21 respectively. All of these statistics are summarized in the following table.

Table 9

## Descriptive Statistics for Students in Female and Male Sub-groups

| <b>Gender Status</b> | <b>Number of Students in Sub-group</b> | <b>Percent Promoted</b> | <b>Std. Deviation</b> | <b>Std. Error Mean</b> |
|----------------------|--|-------------------------|-----------------------|------------------------|
| <b>female</b>        | 1830                                   | .97                     | .16                   | 3.81E-03               |
| <b>Male</b>          | 1906                                   | .96                     | .21                   | 4.70E-03               |

Source: Wake County Public School System, Evaluation and Research Department.

<sup>a</sup> All students included in these figures were either promoted or retained at the conclusion of the 2000-2001 school year.

The next table provides a summary of the independent samples t-test between the promotion rates of the female and male sub-groups. Nonetheless, several statistics generated by this methodology will be highlighted due to their key role in the study's conclusions. To begin with, the t-score and p-value for the "equal variances assumed" adjustment were 2.754 and .006 respectively. On the other hand, the t-score for the "equal variances not assumed" adjustment was 2.767; whereas, a p-value of .006 accompanied that statistic. Overall, a statistically significant difference between the promotion rates of the female and male sub-groups was identified through this independent samples t-test.

Table 10

Summary of Independent Samples t-test between Promotion Rates of Female and Male  
Sub-groups

|                         |                                    | Levene's Test for Equality of Variances |      | t-test for Equality of Means |          |                 |                 |                       |   |          |
|-------------------------|------------------------------------|---|------|------------------------------|----------|-----------------|-----------------|-----------------------|---|----------|
|                         |                                    | F                                       | Sig. | T                            | Df       | Sig. (2-tailed) | Mean Difference | Std. Error Difference | 95% Confidence Interval of the Difference |          |
|                         |                                    |   |      |                              |          |                 |                 |                       | Lower                                     | Upper    |
| <b>Promotion Status</b> | <b>Equal Variances Assumed</b>     | 30.601                                  | .000 | 2.754                        | 3734     | .006            | 1.67E-02        | 6.08E-03              | 4.83E-03                                  | 2.87E-02 |
|                         | <b>Equal Variances Not Assumed</b> |   |      | 2.767                        | 3608.278 | .006            | 1.67E-02        | 6.05E-03              | 4.88E-03                                  | 2.86E-02 |

Source: Wake County Public School System, Evaluation and Research Department.

<sup>a</sup> All students included in these figures were either promoted or retained at the conclusion of the 2000-2001 school year.

Table 11 presents descriptive statistics for students in the minority and non-minority sub-groups involved with this part of the study. The number of students in the minority sub-group was 1337; whereas, the percent promoted for this category was .94. Furthermore, the standard deviation for that sub-group was .24. On the other hand, 2399 was the number of students in the non-minority sub-group. In addition, this category's percent promoted and

standard deviation were .98 and .15 respectively. All of these statistics are summarized in the following table.

Table 11

Descriptive Statistics for Students in Minority and Non-Minority Sub-groups

| <b>Minority status</b> | <b>Number of Students in Sub-group</b> | <b>Percent Promoted</b> | <b>Std. Deviation</b> | <b>Std. Error Mean</b> |
|------------------------|--|-------------------------|-----------------------|------------------------|
| <b>minority</b>        | 1337                                   | .94                     | .24                   | 6.49E-03               |
| <b>non-minority</b>    | 2399                                   | .98                     | .15                   | 3.03E-03               |

Source: Wake County Public School System, Evaluation and Research Department.

<sup>a</sup> All students included in these figures were either promoted or retained at the conclusion of the 2000-2001 school year.

The next table provides a summary of the independent samples t-test between the promotion rates of the minority and non-minority sub-groups. Nonetheless, several statistics generated by this methodology will be highlighted due to their key role in the study's conclusions. To begin with, the t-score and p-value for the "equal variances assumed" adjustment were -5.907 and .000 respectively. On the other hand, the t-score for the "equal variances not assumed" adjustment was -5.212; whereas, a p-value of .000 accompanied that statistic. Overall, a statistically significant difference between the promotion rates of the minority and non-minority sub-groups was identified through this independent samples t-test.

Table 12

Summary of Independent Samples t-test between Promotion Rates of Minority and Non-Minority Sub-groups

|                         |                                    | Levene's Test for Equality of Variances |      | t-test for Equality of Means |          |                 |                 |                       |   |           |
|-------------------------|------------------------------------|---|------|------------------------------|----------|-----------------|-----------------|-----------------------|---|-----------|
|                         |                                    | F                                       | Sig. | t                            | Df       | Sig. (2-tailed) | Mean Difference | Std. Error Difference | 95% Confidence Interval of the Difference |           |
|                         |                                    |   |      |                              |          |                 |                 |                       | Lower                                     | Upper     |
| <b>Promotion Status</b> | <b>Equal Variances Assumed</b>     | 141.357                                 | .000 | -5.907                       | 3734     | .000            | -3.73E-02       | 6.32E-03              | -4.97E-02                                 | -2.49E-02 |
|                         | <b>Equal Variances Not Assumed</b> |   |      | -5.212                       | 1930.612 | .000            | -3.73E-02       | 7.16E-03              | -5.14E-02                                 | -2.33E-02 |

Source: Wake County Public School System, Evaluation and Research Department.

<sup>a</sup> All students included in these figures were either promoted or retained at the conclusion of the 2000-2001 school year.

Table 13 presents descriptive statistics for students in the non-special education and special education sub-groups involved with this part of the study. The number of students in the non-special education sub-group was 3133; whereas, the percent promoted for this category was .97. Furthermore, the standard deviation for that sub-group was .16. On the other hand, 603 was the number of students in the special education sub-group. In addition,

this category's percent promoted and standard deviation were .92 and .28 respectively. All of these statistics are summarized in the following table.

Table 13

Descriptive Statistics for Students in Non-Special Education and Special Education Sub-groups

| <b>Special Education Status</b> | <b>Number of Students in Sub-group</b> | <b>Percent Promoted</b> | <b>Std. Deviation</b> | <b>Std. Error Mean</b> |
|---------------------------------|--|-------------------------|-----------------------|------------------------|
| <b>non-special education</b>    | 3133                                   | .97                     | .16                   | 2.87E-03               |
| <b>special education</b>        | 603                                    | .92                     | .28                   | 1.13E-02               |

Source: Wake County Public School System, Evaluation and Research Department.

<sup>a</sup> All students included in these figures were either promoted or retained at the conclusion of the 2000-2001 school year.

The next table provides a summary of the independent samples t-test between the promotion rates of the non-special education and special education sub-groups. Nonetheless, several statistics generated by this methodology will be highlighted due to their key role in the study's conclusions. To begin with, the t-score and p-value for the "equal variances assumed" adjustment were 7.069 and .000 respectively. On the other hand, the t-score for the "equal variances not assumed" adjustment was 4.965; whereas, a p-value of .000 accompanied that statistic. Overall, a statistically significant difference between the promotion rates of the non-special education and special education sub-groups was identified through this independent samples t-test.

Table 14

Summary of Independent Samples t-test between Promotion Rates of Non-Special Education and Special Education Sub-groups

|                         |                                    | Levene's Test for Equality of Variances |      | t-test for Equality of Means |         |                 |                 |                       |   |          |
|-------------------------|------------------------------------|---|------|------------------------------|---------|-----------------|-----------------|-----------------------|---|----------|
|                         |                                    | F                                       | Sig. | t                            | Df      | Sig. (2-tailed) | Mean Difference | Std. Error Difference | 95% Confidence Interval of the Difference |          |
|                         |                                    |   |      |                              |         |                 |                 |                       | Lower                                     | Upper    |
| <b>Promotion Status</b> | <b>Equal Variances Assumed</b>     | 192.330                                 | .000 | 7.069                        | 3734    | .000            | 5.81E-02        | 8.22E-03              | 4.20E-02                                  | 7.42E-02 |
|                         | <b>Equal Variances Not Assumed</b> |   |      | 4.965                        | 681.019 | .000            | 5.81E-02        | 1.17E-02              | 3.51E-02                                  | 8.11E-02 |

Source: Wake County Public School System, Evaluation and Research Department.

<sup>a</sup> All students included in these figures were either promoted or retained at the conclusion of the 2000-2001 school year.

Table 15 summarizes the 2000-2001 promotion rates for the demographic sub-groups included in this study. The promotion rates for the academically gifted and special education sub-groups were .9989 and .92 respectively. In addition, the minority sub-group had a promotion rate of .94; whereas, the same statistic associated with the free/reduced lunch students was .9225. The male sub-group's promotion rate was .96. Finally, a promotion rate

of .97 was generated by the female students included in this study. These statistics will be used in the final part of Sub-question #2 involving the application of one sample t-tests.

Table 15

Summary of 2000-2001 Promotion Rates for Demographic Sub-groups

| <b>academically gifted</b> | <b>Special education</b> | <b>Minority</b> | <b>free/reduced lunch</b> | <b>male</b> | <b>female</b> |
|----------------------------|--------------------------|-----------------|---------------------------|-------------|---------------|
| .9989                      | .92                      | .94             | .9225                     | .96         | .97           |

Source: Wake County Public School System, Evaluation and Research Department.

<sup>a</sup> All students included in these figures were either promoted or retained at the conclusion of the 2000-2001 school year.

The following table presents the results of the one sample t-tests between the total 2000-2001 promotion rate and the promotion rates of the demographic sub-groups. Nonetheless, as with the tables included in the previous parts of this chapter, several statistics will be highlighted due to their key role in the study's conclusions. To be more specific, the academically gifted/total 2000-2001 promotion rate comparison produced a t-score of 11.426 and a significance value (p-value) less than .05. Furthermore, the t-score and significance value (p-value) for the special education/total 2000-2001 promotion rate comparison were 14.504 and  $p < .05$  respectively. A t-score of 7.931 and a significance value (p-value) of  $p < .05$  was generated by the minority/total 2000-2001 promotion rate comparison. In addition, the free/reduced lunch/total 2000-2001 promotion rate comparison resulted in a t-score of 13.682 and a significance value (p-value) of  $p < .05$ . The male/total 2000-2001 promotion rate comparison was associated with a 1.38 t-score and a significance value (p-

value) of  $p > .05$ . Finally, the female/total 2000-2001 promotion rate comparison involved a 1.92 t-score and a significance value (p-value) of  $p > .05$ . Overall, statistically significant differences between the promotion rates of the following pairs of variables were identified in these one sample t-tests: academically gifted/total 2000-2001 promotion rate, special education/total 2000-2001 promotion rate, minority/total 2000-2001 promotion rate, and free/reduced lunch/total 2000-2001 promotion rate.

Table 16

Summary of One Sample t-tests between Total 2000-2001 Promotion Rate and Promotion Rates of Demographic Sub-groups

|  | <b>t-score</b> | <b>Degrees of Freedom</b> | <b>Significance (2-tailed)</b> |
|--|----------------|---------------------------|--------------------------------|
| <b>academically gifted/<br/>total 2000-2001<br/>promotion rate</b> | 11.426         | 3735                      | $P < .05$                      |
| <b>special education/<br/>total 2000-2001<br/>promotion rate</b>   | 14.504         | 3735                      | $P < .05$                      |
| <b>minority/<br/>total 2000-2001<br/>promotion rate</b>            | 7.931          | 3735                      | $P < .05$                      |
| <b>free/reduced lunch/<br/>total 2000-2001<br/>promotion rate</b>  | 13.682         | 3735                      | $P < .05$                      |
| <b>male/<br/>total 2000-2001<br/>promotion rate</b>                | 1.38           | 3735                      | $P > .05$                      |
| <b>female/<br/>total 2000-2001<br/>promotion rate</b>              | 1.92           | 3735                      | $P > .05$                      |

Source: Wake County Public School System, Evaluation and Research Department.

<sup>a</sup> All students included in these figures were either promoted or retained at the conclusion of the 2000-2001 school year.

### Summary of Results

Normal distributions of data were not associated with any variables representing the demographic sub-groups used in the independent samples t-tests conducted with this part of the study. As a result, the “equal variances not assumed” adjustments based on Levene’s Test for Equality of Variances were used in all cases associated with the independent samples t-tests. Nonetheless, the t-scores and p-values associated with the Levene procedure provided enough information to evaluate the null hypothesis used with the comparisons involving the demographic sub-groups.

In terms of the independent samples t-tests, all of the comparisons produced significance levels, or p-values, less than the standard .05 p-value. Hence, the following null hypothesis was rejected for each independent samples t-test:

Null hypothesis: No statistically significant differences between the eighth grade promotion rates of sub-groups formed on the basis of the six identified student demographic characteristics and the promotion rates of students not in the sub-groups exist during the 2000-2001 school year.

More specifically, a statistically significant difference was identified between all of the following pairs of sub-groups in terms of promotion rates: academically gifted and non-academically gifted (.9989 to .95 for academically gifted and non-academically gifted respectively), free/reduced lunch and non-free/reduced lunch (.92 to .97 for free/reduced lunch and non-free/reduced lunch respectively), female and male (.97 to .96 for female and male respectively), minority and non-minority (.94 to .98 for minority and non-minority respectively), and special education and non-special education (.92 to .97 for special

education and non-special education respectively). Thus, according to this study, the differences in the promotion rates associated with these pairs of sub-groups resulted from more than chance.

Despite the rejection of the null hypothesis in all cases with regard to the independent samples t-tests, the one sample t-tests comparing the total 2000-2001 promotion rate and the promotion rate for each demographic sub-group did not produce the same results. To be more specific, the one sample t-tests generated p-values less than the standard .05 p-value in only four of the six scenarios. Those four pairs of variables with p-values less than .05 were:

1. academically gifted and total 2000-2001 promotion rate
2. special education and total 2000-2001 promotion rate
3. minority and total 2000-2001 promotion rate
4. free/reduced lunch and total 2000-2001 promotion rate

Thus, the following null hypothesis was rejected when applied to those four cases:

Null hypothesis: No statistically significant differences between the total eighth grade promotion rate and the promotion rates of sub-groups formed on the basis of the six identified student demographic characteristics exist during the 2000-2001 school year.

As a result, the following pairs of promotion rates were determined to be statistically significant in terms of the difference between them: .9641 to .9989 (total 2000-2001 promotion rate and academically gifted respectively), .9641 to .92 (total 2000-2001 promotion rate and special education respectively), .9641 to .94 (total 2000-2001 promotion rate and minority respectively), and .9641 to .9225 (total 2000-2001 promotion rate and

free/reduced lunch respectively). Nonetheless, the p-values associated with the cases that rejected the null hypothesis provided support against notions that chance led to these results.

Now that the differences between the promotion rates associated with the demographic sub-groups have been defined, the focus of this study will shift to the identification of relationships between them. This action will involve the application of the Pearson Product-Moment Correlation Coefficient to the study's data set. A more detailed description of this process will be provided in the next section of this paper.

### **III. Part Three (Sub-question #3)**

Part Three of this study will answer the following question (Sub-question #3): *Are there statistically significant correlational relationships between student demographic characteristics and promotion rates?* The 2000-2001 group memberships associated with the previously identified student demographic characteristics (academically gifted, female, free/reduced lunch, male, minority, and special education), generated by the study's sample of students, will be used in this Sub-question's analytical model. In addition, the total 2000-2001 eighth grade promotion rate of the sample shall be employed.

#### Analysis

The analysis associated with Sub-question #3 will rely on a correlation coefficient, the Pearson Product-Moment Correlation Coefficient, and two sets of comparisons. To begin with, the Pearson Product-Moment Correlation Coefficient, represented by  $r$  (where  $-1.00 \leq r \leq 1.00$ ), will be calculated for six pairs of variables through the use of the following formula:  $r = (\sum xy) / (N S_y S_x)$  (where  $x =$  the 2000-2001 group membership for a particular student demographic characteristic,  $y =$  the total 2000-2001 eighth grade promotion rate,  $N =$

number of data points,  $S_y$  = standard deviation of  $y$ , and  $S_x$  = standard deviation of  $x$ ). As a result, an  $r$ -value will be generated for the following pairs of variables:

1. academically gifted & total 2000-2001 eighth grade promotion rate
2. female & total 2000-2001 eighth grade promotion rate
3. free/reduced lunch & total 2000-2001 eighth grade promotion rate
4. male & total 2000-2001 eighth grade promotion rate
5. minority & total 2000-2001 eighth grade promotion rate
6. special education & total 2000-2001 eighth grade promotion rate.

Hence, *the 2000-2001 group membership for a particular student demographic characteristic* shall be the *independent variable*; whereas, *the total 2000-2001 eighth grade promotion rate* will be the *dependent variable*.

Another set of comparisons will involve all possible pairs of the student demographic characteristics (academically gifted, female, free/reduced lunch, male, minority, and special education) included in this study. Thus, the Pearson Product-Moment Correlation Coefficient, represented by  $r$  (where  $-1.00 \leq r \leq 1.00$ ), will be calculated for 15 pairs of variables to examine the intercorrelation between the demographic characteristics through the use of the following formula:  $r = (\sum xy) / (N S_y S_x)$  (where  $x$  = *the 2000-2001 group membership for a particular student demographic characteristic*,  $y$  = *the 2000-2001 group membership for a particular student demographic characteristic*,  $N$  = *number of data points*,  $S_y$  = *standard deviation of  $y$* , and  $S_x$  = *standard deviation of  $x$* ). As a result, an  $r$ -value will be generated for the following pairs of variables:

1. academically gifted & female

2. academically gifted & free/reduced lunch
3. academically gifted & male
4. academically gifted & minority
5. academically gifted & special education
6. female & free/reduced lunch
7. female & male
8. female & minority
9. female & special education
10. free/reduced lunch & male
11. free/reduced lunch & minority
12. free/reduced lunch & special education
13. male & minority
14. male & special education
15. minority & special education.

However, unlike the first set of comparisons, no specific designations of the student demographic characteristics as the independent or dependent variable will be made. Specific assignments of this nature will not influence the results with this part of the study.

This work with the Pearson Product-Moment Correlation Coefficient will involve 21 comparisons of variables whose results will be summarized in a table included in the next section of this chapter. Furthermore, the r-value calculated for each pair of variables will be accompanied by a p-value. This p-value will be compared to the standard .05 p-value. If the p-value generated by one of the 21 comparisons is greater than .05, the correlational

relationship between those two variables will be labeled as “not statistically significant.” However, if the p-value is less than .05, the correlational relationship will be identified as “statistically significant.” In addition, for the purposes of this study, r-values in either of the following two intervals will be denoted as representing strong correlations:  $-1.00 \leq r \leq -0.6$  and  $0.6 \leq r \leq 1.00$ .

Overall, the primary goal of this methodology will be to identify pairs of variables having statistically significant correlational relationships. After identifying all statistically significant correlational relationships involving these pairs of variables, the focus will shift to an analysis of their r-values. As a result, the statistically significant correlational relationships that are strong will be denoted. Nonetheless, the identification of statistically significant relationships between two variables that are not strong correlations is a possibility.

### Results

The last section described the analysis involving the Pearson Product-Moment Correlation Coefficient to be used to generate an answer to Sub-question #3 with the aid of a 95% confidence interval (or .05 p-value). Additional details will be provided in the remaining paragraphs of this section of the chapter regarding the answer derived through the use of the Pearson Product-Moment Correlation Coefficient. However, prior to the presentation of those details, the following table (Table 17) provides an initial summary of the results.

Table 17 identifies the presence of a statistically significant correlational relationship between the total 2000-2001 eighth grade promotion rate and the following five sub-groups:

academically gifted, free/reduced lunch, gender, minority, and special education.

Furthermore, the r-values associated with these comparisons were .107 (total 2000-2001 eighth grade promotion rate vs. academically gifted), -.106 (total 2000-2001 eighth grade promotion rate vs. free/reduced lunch), -.045 (total 2000-2001 eighth grade promotion rate vs. gender), .096 (total 2000-2001 eighth grade promotion rate vs. minority), and -.115 (total 2000-2001 eighth grade promotion rate vs. special education). In addition, a statistically significant correlational relationship was denoted between the academically gifted sub-group and the following four sub-groups: free/reduced lunch, gender, minority, and special education. These comparisons produced the following r-values: -.235 (academically gifted vs. free/reduced lunch), -.057 (academically gifted vs. gender), .252 (academically gifted vs. minority), and -.252 (academically gifted vs. special education).

In addition to the previously identified results, Table 17 reveals the free/reduced lunch sub-group's statistically significant correlational relationship with the following two sub-groups: minority and special education. The r-values generated by these comparisons were -.506 (free/reduced lunch vs. minority) and .223 (free/reduced lunch vs. special education). Statistically significant correlational relationships also were identified between the gender and special education sub-groups as well as the minority and special education sub-groups. The r-values for each comparison were .127 (gender vs. special education) and -.122 (minority vs. special education).

Table 17

Summary of Correlational Relationships

|  |                            | <b>total 2000-2001 eighth grade promotion rate</b> | <b>academically gifted</b> | <b>free/reduced lunch</b> | <b>gender</b> | <b>minority</b> | <b>special education</b> |
|--|----------------------------|--|----------------------------|---------------------------|---------------|-----------------|--------------------------|
| <b>total 2000-2001 eighth grade promotion rate</b> | <b>Pearson Correlation</b> | 1.000  | .107*                      | -.106*                    | -.045*        | .096*           | -.115*                   |
| <b>academically gifted</b>                         | <b>Pearson Correlation</b> | .107*  | 1.000                      | -.235*                    | -.057*        | .252*           | -.252*                   |
| <b>free/reduced lunch</b>                          | <b>Pearson Correlation</b> | -.106*   | -.235*                     | 1.000                     | .008          | -.506*          | .223*                    |
| <b>gender</b>                                      | <b>Pearson Correlation</b> | -.045*   | -.057*                     | .008                      | 1.000         | .005            | .127*                    |
| <b>minority</b>                                    | <b>Pearson Correlation</b> | .096*  | .252*                      | -.506*                    | .005          | 1.000           | -.122*                   |
| <b>special education</b>                           | <b>Pearson Correlation</b> | -.115*   | -.252*                     | .223*                     | .127*         | -.122*          | 1.000                    |

Source: Wake County Public School System, Evaluation and Research Department.

<sup>a</sup> All students included in these figures were either promoted or retained at the conclusion of the 2000-2001 school year.

<sup>b</sup> Gender represents males and females in the study's 2000-2001 sample. The data coding used with this sample will permit the results associated with gender to be

interpreted in Chapter 5. Male students were labeled as 1; whereas, females received a label of 0.

<sup>c</sup> Significance at the .05 level is denoted by an asterisk (\*).

<sup>d</sup> The number of students, N, for all comparisons in this part of the study was 3736 (N=3736).

### Summary of Results

Comparisons of the data associated with the 21 pairs of variables identified in the analysis section were completed using the Pearson Product-Moment Correlation Coefficient. These tests found statistically significant correlational relationships to exist between the following thirteen pairs of variables:

1. total 2000-2001 eighth grade promotion rate & academically gifted
2. total 2000-2001 eighth grade promotion rate & free/reduced lunch
3. total 2000-2001 eighth grade promotion rate & gender
4. total 2000-2001 eighth grade promotion rate & minority
5. total 2000-2001 eighth grade promotion rate & special education
6. academically gifted & free/reduced lunch
7. academically gifted & gender
8. academically gifted & minority
9. academically gifted & special education
10. free/reduced lunch & minority
11. free/reduced lunch & special education

12. gender & special education
13. minority & special education.

Thus, with each pair of variables, the p-value generated by the study's data set was less than .05. However, the Pearson Product-Moment Correlation Coefficient,  $r$ , for none of these pairs of variables was found to be in one of the following two intervals:  $-1.00 \leq r \leq -0.6$  or  $0.6 \leq r \leq 1.00$ . Thus, strong correlational relationships were not associated with these thirteen cases.

After determining the type of relationship (statistically significant or not statistically significant) between Sub-question #3's variables, the focus of this study will shift to Sub-question #4. This part of the study follows Sub-question #3 due to the relationship between the concepts. In other words, the findings with the Pearson Product-Moment Correlation Coefficient simply will be extended into the application of regression to the study's data set to generate an answer to Sub-question #4.

#### **IV. Part Four (Sub-question #4)**

The goal of this part of the study will be to generate an answer to the following question (Sub-question #4): *What effects do student demographic characteristics have on the promotion rates of students?* To accomplish this task, the 2000-2001 eighth grade promotion rates associated with the previously identified student demographic characteristics (academically gifted, female, free/reduced lunch, male, minority, and special education) will be used in this Sub-question's analytical model. In addition, the total eighth grade promotion rate of the 2000-2001 sample will be involved in this analysis. Nonetheless, prior to interpreting the results of this part of the study, the presence of dummy codes in relation to

the logit regression methodology must be identified. More specifically, the SPSS statistical package will automatically change the original binary coding for the variables, found in Appendix 2, to a dummy set of binary codes when running the logit regression. This dummy set of binary codes is included in Appendix 3. Furthermore, it must be used to interpret the results associated with Sub-question #4.

### Analysis

This process will involve the use of logit regression. As a result, *the 2000-2001 eighth grade promotion rate for a particular student demographic characteristic (academically gifted, female, free/reduced lunch, male, minority, and special education) will serve as the independent predictor. The dependent variable will be defined as the total 2000-2001 eighth grade promotion rate involved in this study..*

Three important figures will be produced by the logit regression: a significance figure (or p-value), an R-value, and an Exp(B) value. The significance figure will be compared to the standard .05 p-value associated with the 95% confidence interval. To be more specific, if the p-value for a particular demographic characteristic's comparison with the total 2000-2001 eighth grade promotion rate is less than .05, that sub-group will be identified as having a statistically significant partial correlation with the total 2000-2001 eighth grade promotion rate.

The R-value will identify the strength of the association between a demographic characteristic and the total 2000-2001 eighth grade promotion rate. Furthermore, the Exp(B) value will refer to the odds ratio associated with the logit regression technique. More specifically, this figure will reveal the relationship between the promotion rates of students

with specific demographic characteristics and the promotion rates of individuals not belonging to that particular sub-group. However, unless the p-value associated with a demographic sub-group is less than .05, the R-value and Exp(B) value will not play major roles in this analysis. Nonetheless, the logit regression methodology will begin with the derivation of a Chi-Square statistic from the data set that is capable of producing probabilities to be used in relation to the significance figure, the R-value, and the Exp(B) value.

Overall, the decision to use logit regression was based on the results of research involving two other types of methodology: multiple linear regression and probit regression. In other words, multiple linear regression and probit regression also were given consideration in terms of being used to generate an answer to this Sub-question. Thus, the following paragraphs will provide support for the decision to use logit regression instead of the multiple linear regression and probit regression techniques.

Multiple linear regression was the first methodology to be considered with Sub-question #4's analysis. As a result, an initial analysis of the study's data set was attempted using this technique. This action produced some beta values greater than 1. However, by definition, standardized beta values range from -1 to 1. Thus, problems with this methodology in relation to this study were detected in the early stages of its use. In addition, multiple linear regression produced misleading statistics such as significance values and standard error of regression. Hence, the results of the application of multiple linear regression could not be interpreted.

Overall, due to the dichotomous nature of the independent and dependent variables, multiple linear regression could not be applied to this part of the study to produce accurate

results. More specifically, the binary nature of the variables violated one of the assumptions of regression analysis, the normal distribution of data associated with them (*Log-Linear, Logit, and Probit Models*). Hence, probit regression and logit regression were given consideration in terms of the methodology to be used.

Like multiple linear regression, probit regression was considered as a possibility to be used with Sub-question #4. However, several basic concepts associated with this methodology led to its elimination from the study. The following paragraphs will support the decision not to use probit regression in this part of the analysis.

Probit regression involves the calculation of a Chi-Square statistic used to generate probabilities. In addition, three primary features are associated with this technique: a response frequency variable, a total observed variable, and covariance. To be more specific, the response frequency variable is the outcome measure. Thus, this variable indicates the number of cases that exhibit a response to a test stimulus involved in a particular study. Furthermore, its values can not be negative. As a result, this concept serves as the dependent variable in applications of the probit regression technique (Pedhazur 714).

The total observed variable represents the number of cases that receive an application of a study's stimulus. Again, as with the response frequency variable, the values of this variable can not be negative. In addition, its values are not permitted to be less than the ones associated with the response frequency variable for each case. Finally, the total observed variable defines the experimental and control groups in studies employing the use of probit regression (Pedhazur 714).

With regard to this study, the response frequency variable would be represented by the promotion status, promoted or retained, of all students in the 2000-2001 sample. Furthermore, the total observed variable would identify the number of students to which the stimulus is applied. However, the study's lack of a true experimental treatment, or stimulus, prevents the use of probit regression to generate a response to Sub-question #4 (Pedhazur 714).

Overall, the type of data included in this study reduced the possibilities, in terms of the methodology to be used, to probit regression and logit regression. Next, probit regression was discounted due to the lack of an experimental nature of this study (Pedhazur 714). To be more specific, the use of probit regression involves the analysis of a treatment effect in studies with an experimental design. However, the presence of an experimental design was not identified in this study. Furthermore, an experimental treatment was not applied to the students, or cases, belonging to the study's data set. Thus, due to being more appropriate for non-experimental designs, logit regression was selected as the methodology to be employed (Pedhazur 714). Additional justification for this decision was the recommendation by research to use logit regression instead of probit regression with studies involving a heavy concentration of cases in the tails of the distributions of variables' data sets. This situation was illustrated with the 2000-2001 sample of students associated with this study (*Log-Linear, Logit, and Probit Models*).

In conclusion, probit regression and logit regression have been determined to be effective when applied to non-linear data associated with dichotomous independent and dependent variables. Additionally, on many occasions, similar results are generated by both

techniques when applied to the same data set. Furthermore, they produce probabilities that identify the relationships between independent and dependent variables. Nonetheless, logit regression is considered to be more robust than probit regression (Hair et al. 276).

### Results

The previous section described the analytical methodology to be used to generate an answer to Sub-question #3: logit regression. In addition, the use of a 95% confidence interval, or .05 p-value, in this analysis was denoted. Additional details derived through the use of the logit regression methodology with regard to Sub-question #4's answer will be presented in the final paragraphs of this section. However, prior to the presentation of those details, the following table (Table 18) provides an initial summary of the results of the logit regression.

Table 18 identifies three important measures for each comparison conducted through the use of logit regression: a significance value (or p-value), an R-value, and an Exp(B) value. The following significance values (or p-values) were generated by this part of the study: .0750 (total 2000-2001 eighth grade promotion rate vs. free/reduced lunch), .0191 (total 2000-2001 eighth grade promotion rate vs. minority), .0534 (total 2000-2001 eighth grade promotion rate vs. gender), .0010 (total 2000-2001 eighth grade promotion rate vs. academically gifted), and .0003 (total 2000-2001 eighth grade promotion rate vs. special education). In addition, the R-values were .0318 (total 2000-2001 eighth grade promotion rate vs. free/reduced lunch), -.0550 (total 2000-2001 eighth grade promotion rate vs. minority), .0387 (total 2000-2001 eighth grade promotion rate vs. gender), -.0877 (total 2000-2001 eighth grade promotion rate vs. academically gifted), and .0992 (total 2000-2001

eighth grade promotion rate vs. special education). Finally, the Exp(B) values associated with this part of the methodology were 1.4839 (total 2000-2001 eighth grade promotion rate vs. free/reduced lunch), .6046 (total 2000-2001 eighth grade promotion rate vs. minority), 1.4319 (total 2000-2001 eighth grade promotion rate vs. gender), .0359 (total 2000-2001 eighth grade promotion rate vs. academically gifted), and 2.0156 (total 2000-2001 eighth grade promotion rate vs. special education).

Table 18

## Summary of Logit Regression

| <b>Variable</b>            | <b>B</b> | <b>Standard Error</b> | <b>Wald</b> | <b>Degrees of Freedom</b> | <b>Significance</b> | <b>R-value</b> | <b>Exp(B)</b> |
|----------------------------|----------|-----------------------|-------------|---------------------------|---------------------|----------------|---------------|
| <b>free/reduced lunch</b>  | .3947    | .2217                 | 3.1699      | 1                         | .0750               | .0318          | 1.4839        |
| <b>minority</b>            | -.5032   | .2148                 | 5.4903      | 1                         | .0191*              | -.0550         | .6046         |
| <b>gender</b>              | .3590    | .1859                 | 3.7304      | 1                         | .0534               | .0387          | 1.4319        |
| <b>academically gifted</b> | -3.3259  | 1.0085                | 10.8755     | 1                         | .0010*              | -.0877         | .0359         |
| <b>special education</b>   | .7009    | .1918                 | 13.3590     | 1                         | .0003*              | .0992          | 2.0156        |
| <b>constant</b>            | 5.6598   | 1.0399                | 29.6221     | 1                         | .0000               |                |               |

Source: Wake County Public School System, Evaluation and Research Department.

<sup>a</sup> All students included in these figures were either promoted or retained at the conclusion of the 2000-2001 school year.

<sup>b</sup> Gender represents males and females in the study's 2000-2001 sample. The data coding used with this sample will permit the results associated with gender to be interpreted in Chapter 5. Male students were labeled as 1; whereas, females received a label of 0.

<sup>c</sup> Significance at the .05 level is denoted by an asterisk (\*).

<sup>d</sup> The Chi-Square statistic used with the logit regression was 110.154 (i.e.,  $\chi^2=110.154$ ). Furthermore, this statistic was significant at 5 degrees of freedom (i.e.,  $p<.05$ ).

### Summary of Results

An analysis of the relationships between the independent predictors, *the 2000-2001 eighth grade promotion rate for a particular student demographic characteristic*, and the dependent variable, *the total 2000-2001 eighth grade promotion rate*, involved in this study was conducted with the aid of logit regression. As a result, statistically significant relationships were identified between the following pairs of variables:

1. total 2000-2001 eighth grade promotion rate & minority
2. total 2000-2001 eighth grade promotion rate & academically gifted
3. total 2000-2001 eighth grade promotion rate & special education.

Thus, in each case, the significance figure, or p-value, was less than the standard .05 p-value associated with the 95% confidence interval.

In addition to the identification of statistically significant relationships involving three pairs of variables, the strength of the association, or partial correlation, between each demographic sub-group and the total 2000-2001 eighth grade promotion rate was illustrated through the calculation of R-values. For example, the R-value indicating the strength of the minority sub-group's partial correlation with the total 2000-2001 eighth grade promotion rate was -.0550. Likewise, -.0877 was the R-value associated with the comparison of the

academically gifted sub-group and the total 2000-2001 eighth grade promotion rate. Finally, special education students, as a group, shared an R-value of .0992 with the total 2000-2001 eighth grade promotion rate. R-values for the other pairs of variables examined in this study also were produced; however, due to their lack of involvement in a statistically significant relationship, these figures did not reveal important ideas to be used in the study's conclusions.

The final set of important figures generated by the logit regression was the Exp(B) values representing odds ratios of the statistically significant relationships between pairs of variables. The Exp(B) value for the comparison between the minority and non-minority sub-groups was .0646. In addition, the Exp(B) value for the academically gifted and non-academically gifted comparison was .0359. The final Exp(B) figure of value to this study was 2.0156. This figure was associated with the relationship between the special education and non-special education sub-groups.

## **V. Summary**

This study's analysis involved four main sections associated with Sub-questions. The first part required the use of a one sample t-test to compare the 1999-2000 and 2000-2001 total eighth grade promotion rates. The 1999-2000 figure was known; however, the 2000-2001 promotion rate had to be calculated from the sample of students involved in the study. With the aid of this methodology, a statistically significant difference between the total eighth grade promotion rates for those two years was discovered. More specifically, the decrease in the total eighth grade promotion rates (.9830 in 1999-2000 to .9641 in 2000-2001) was evaluated as being statistically significant.

Part Two of the study included the application of independent samples t-tests to compare the promotion rates of the following five pairs of samples: male and female, special education and non-special education, free/reduced lunch and non-free/reduced lunch, academically gifted and non-academically gifted, and minority and non-minority. The total 2000-2001 eighth grade promotion rate also was compared, through the use of a one sample t-test, to the promotion rates associated with the following demographic sub-groups: male, female, special education, free/reduced lunch, academically gifted, and minority.

A statistically significant difference was identified between all of the following pairs of sub-groups of students in terms of promotion rates: male and female, special education and non-special education, free/reduced lunch and non-free/reduced lunch, academically gifted and non-academically gifted, and minority and non-minority. Furthermore, through the use of the one sample t-tests, the total 2000-2001 eighth grade promotion rate was found to be significantly different from the promotion rates associated with the following demographic sub-groups: special education, free/reduced lunch, academically gifted, and minority. Overall, these results led to the rejection of the following main null hypothesis associated with this Sub-question:

Null hypothesis: No statistically significant differences between the eighth grade promotion rates of sub-groups formed on the basis of the six identified student demographic characteristics and the promotion rates of students not in the sub-groups exist during the 2000-2001 school year.

As a result, an answer to Sub-question #2 was generated.

The third part of this study involved the use of the Pearson Product-Moment Correlation Coefficient to compare the 2000-2001 group membership for a particular student demographic characteristic with the total 2000-2001 eighth grade promotion rate. In addition, all possible pairs of student demographic characteristics were compared in terms of the 2000-2001 group membership associated with them. Overall, the work with the Pearson Product-Moment Correlation Coefficient found statistically significant correlational relationships to exist between the following thirteen pairs of variables:

1. total 2000-2001 eighth grade promotion rate & academically gifted
1. total 2000-2001 eighth grade promotion rate & free/reduced lunch
2. total 2000-2001 eighth grade promotion rate & gender
3. total 2000-2001 eighth grade promotion rate & minority
4. total 2000-2001 eighth grade promotion rate & special education
5. academically gifted & free/reduced lunch
6. academically gifted & gender
7. academically gifted & minority
8. academically gifted & special education
9. free/reduced lunch & minority
10. free/reduced lunch & special education
11. gender & special education
12. minority & special education.

Still, none of these correlational relationships were determined to be strong in relation to the definition of this concept employed in this study. More specifically, no r-value generated by

the application of the Pearson Product-Moment Correlation Coefficient was found to be in one of the following two intervals:  $-1.00 \leq r \leq -0.6$  and  $0.6 \leq r \leq 1.00$ .

Part Four of the study involved the application of logit regression to the study's data set. The goal of this part of the study was to determine the strength of the association, or partial association, between the independent predictors or variables, the demographic subgroups, and the dependent variable, the total 2000-2001 eighth grade promotion rate. In summary, this analysis identified only three independent variables as having statistically significant partial correlations with the total 2000-2001 eighth grade promotion rate: minority, academically gifted, and special education.

## **Chapter 5-Conclusion**

### **I. Introduction**

This study focused on the Wake County Public School System's new eighth grade promotion standard implemented for the first time during the 2000-2001 school year. As a result, the main research question for this project was: *Does the new Wake County Public School System eighth grade promotion standard affect the resultant promotion rate?*

However, in order to generate an answer to this question, data was analyzed in relation to the following four Sub-questions:

- Sub-question #1- Is there a statistically significant difference in eighth grade promotion rates before (Year 0) and after (Year 1) the implementation of Gateway 3?
- Sub-question #2- Are there statistically significant differences in eighth grade promotion rates between groups of students based on demographic characteristics?
- a) Are there statistically significant differences in eighth grade promotion rates based on gender?
  - b) Are there statistically significant differences in eighth grade promotion rates based on special education (SPED) status?
  - c) Are there statistically significant differences in eighth grade promotion rates based on free/reduced lunch status?
  - d) Are there statistically significant differences in eighth grade promotion rates based on academically gifted (AG) status?
  - e) Are there statistically significant differences in eighth grade promotion rates based on minority status?
- Sub-question #3- Are there statistically significant correlational relationships between student demographic characteristics and promotion rates?
- Sub-question #4- What effects do student demographic characteristics have on the promotion rates of students?

In addition to the main research question and the four Sub-questions, a multi-faceted analytic framework was involved in this study. To begin with, the analytic framework was based on the current nationwide movement to implement tougher promotion standards in K-12 public schools. The Wake County Public School System's implementation of its new eighth grade promotion policy also constituted a part of this framework. As a result, this aspect of the study was consistent with the current philosophy of the country's leaders of K-12 public education. Throughout history, these individuals have alternated between the use of social promotion and the implementation of tougher promotion standards to determine the grade level placements of children in America's K-12 public schools. However, the latest trend has involved the use of tougher promotion requirements (Foster 38).

The theoretical part of the analytic framework was provided by Howard Becker's Labeling Theory. With the use of this theory, non-deviant behavior was associated with a child's promotion to the next grade level; whereas, deviance was represented by retention. Thus, in this study, the promoted label was positive. On the other hand, retained had a negative connotation. This theory's inclusion in the study also provided an opportunity to analyze data in terms of other positive and negative labels associated with student demographic characteristics.

In summary, the study's four Sub-questions produced some interesting results that led to the derivation of numerous implications in relation to theory, policy, and the Wake County Public School System. Thus, the remainder of this chapter will involve a presentation of

these ideas. Nonetheless, the first section will focus on the theoretical implications of this study in relation to its analytic framework.

## **II. Theoretical Implications of this Study**

Howard Becker's Labeling Theory provided the theoretical foundation for this study's analytic framework. This theory is based on the following basic premise: "Social groups create deviance by making rules whose infraction constitutes deviance. Deviance is not a quality of the act the person commits, but rather a consequence of the application by others of rules and sanctions to an 'offender.' The deviant is one to whom that label has successfully been applied; deviant behavior is behavior that people so label" (*Labeling Theory: Becker*). In other words, deviant behavior is defined by social or group norms. Thus, it is not inherently related to particular types of people or their specific actions (*Labeling Theory: Becker*).

In short, Becker's Labeling Theory implies that certain labels receive positive (non-deviant) or negative (deviant) connotations due to public perceptions and/or opinions. Thus, for the purposes of this study, the promoted, academically gifted, and female labels were identified in Chapter Three as positive; whereas, retained, free/reduced lunch, male, minority, and special education were determined to be negative. With the aid of this information, the remainder of this section will explain the relationship between these labels, Becker's Labeling Theory, and the study's results. Hence, conclusions regarding the results' support, or lack of support, of the basic premise of Becker's Theory will be presented.

Becker's Labeling Theory was accurate in terms of its prediction of the 2000-2001 eighth grade promotion rates associated with the student demographic characteristics

(academically gifted, free/reduced lunch, female, male, minority, and special education). To be more specific, the two labels identified as positive in Chapter Three, academically gifted and female, had the highest 2000-2001 eighth grade promotion rates. The academically gifted promotion rate was .9989; whereas, a figure of .9727 was associated with the female label.

Overall, the labels with the positive public images stood out above the other four demographic characteristics with regard to promotion rates. This phenomenon was predicted by Becker's Labeling Theory and the previous delineation of the six student demographic characteristics as positive or negative. In other words, the findings in terms of promotion rates were consistent with the predictions of Becker's Labeling Theory. More specifically, positive results were associated with positive labels. Hence, the positive labels had the best promotion rates. However, the four lowest promotion rates belonged to the student demographic characteristics labeled as negative.

Becker's Labeling Theory also was accurate in terms of its prediction of results associated with Sub-question #2. To be more specific, a statistically significant difference was identified between the promotion rate of each demographic sub-group and the group of students not included in a particular sub-group. For example, the promotion rate for the academically gifted sub-group differed in a statistically significant way from the promotion rate of the non-academically gifted students. Nonetheless, the real value of Becker's Labeling Theory with this part of the study was found by examining each pair of variables used in all five of these independent samples. These efforts determined the highest promotion rate in each pair to be associated with the member having a positive label.

The rationale regarding the association of the highest promotion rate with the positive demographic label in each independent samples t-test was based on the idea that the group of students not belonging to a demographic sub-group identified as positive or negative in Chapter Three will take on the opposite value. Thus, the minority sub-group's label being negative caused the non-minority students to be labeled as positive. Nonetheless, one independent samples t-test involved a comparison of two demographic sub-groups, female and male, specifically labeled as positive and negative respectively in Chapter Three. As a result, the positive or negative statuses of those two sub-groups delineated in Chapter Three were used for that comparison.

As with the independent samples t-tests, the results of the comparisons of the total 2000-2001 eighth grade promotion rate with the promotion rates of the demographic sub-groups through the use of one sample t-tests were consistent with Becker's Labeling Theory. More specifically, the only statistically significant differences in promotion rates were found to be aligned with the designations of the demographic labels as positive or negative. For example, the total 2000-2001 eighth grade promotion rate and the academically gifted promotion rate were determined to differ in a statistically significant way. Furthermore, through interpretations of Becker's ideas, positive labels, like academically gifted, should stand out above negative labels or other variables not given a positive or negative status such as the total 2000-2001 eighth grade promotion rate. Likewise, negative labels should have promotion rates less than the ones of neutral labels without a positive or negative status. Thus, the fact that the academically gifted sub-group's promotion rate exceeded the total 2000-2001 eighth grade promotion rate was not a surprise.

The other three statistically significant differences identified between promotion rates through the use of the one sample t-tests involved the following pairs of variables:

1. free/reduced lunch and total 2000-2001 eighth grade promotion rate
2. minority and total 2000-2001 eighth grade promotion rate
3. special education and total 2000-2001 eighth grade promotion rate.

Again, consistency between these results and the basic premise of Becker's Labeling Theory was detected. In other words, all three pairs of variables contained a negatively labeled demographic sub-group: free/reduced lunch, minority, and special education. Additionally, one variable, total 2000-2001 eighth grade promotion rate, had no positive or negative status. Hence, the fact that each negatively labeled sub-group's promotion rate was less than the total 2000-2001 eighth grade promotion rate was expected due to the comparison of a negative variable with a neutral one.

In summary, all of Sub-question #2's independent samples t-tests and one sample t-tests that identified statistically significant differences between the promotion rates of pairs of variables resulted in one of two possibilities. One result was the association of the highest promotion rate in each pair with a positive label, if that type of label existed. On the other hand, a negative label was involved in all comparisons of variables having statistically significant differences yet no positive label. In these situations, the lowest promotion rate was associated with the negatively labeled variable. Hence, Becker's ideas pertaining to the positive and negative influence of labeling were consistent with the results of the data analyses associated with Sub-question #2. This situation was particularly true when comparing variables with statistically significant differences in terms of promotion rates.

Despite Labeling Theory's accuracy in relation to Sub-question #2's results, it was not very effective with regard to the analyses involving the Pearson Product-Moment Correlation Coefficient in Sub-question #3. For example, for correlations involving positive and negative labels, the anticipated result was a negative r-value. Furthermore, pairings of sub-groups involving two positive labels were expected to produce positive correlation coefficients. Finally, correlational relationships between two negative labels created the anticipation of a positive r-value. Overall, these expectations were based on the basic definitions of positive and negative correlation. In addition, the positive and negative statuses of the labels identified in Chapter Three contributed to the development of these ideas. Nonetheless, the actual results of the analyses associated with the use of the Pearson Product-Moment Correlation Coefficient did not concur with these expectations on many occasions.

Thirteen pairs of variables were identified by Sub-question #3's analyses as having statistically significant correlational relationships. However, due to the application of the definitions of correlation types to determine the theoretical implications of this study, the statistically significant correlational relationships involving the following five pairs of variables did not identify the presence of a connection between Becker's Labeling Theory and the results of Sub-question #3's methodology:

1. total 2000-2001 eighth grade promotion rate and academically gifted
2. total 2000-2001 eighth grade promotion rate and free/reduced lunch
3. total 2000-2001 eighth grade promotion rate and gender
4. total 2000-2001 eighth grade promotion rate and minority

5. total 2000-2001 eighth grade promotion rate and special education.

This assertion is based on the fact that all five of these correlational relationships included the total 2000-2001 eighth grade promotion rate as one of their variables. However, this variable did not have a positive or negative status in the study. Thus, conclusions associated with predictions by Becker's Labeling Theory could not be derived.

Additional problems with the ability of Sub-question #3's results to support the basic premise of Becker's Labeling Theory were identified in other pairs of variables. More specifically, three of these pairs produced results, in terms of r-values, that were not consistent with the expectations created by the definitions of correlation types and the designation of labels as positive or negative. These pairs of variables were:

1. academically gifted and minority
2. free/reduced lunch and minority
3. minority and special education.

For example, the comparison between the academically gifted and minority sub-groups produced a positive r-value. However, the expected result was a negative r-value due to the combination of a positive label, academically gifted, and a negative label, minority.

Similarly, free/reduced lunch and minority were both negative labels. Nonetheless, the resultant correlation coefficient for this study was negative instead of the anticipated positive value. The same situation resulted from the comparison of the negative labels in the statistically significant correlational relationship between minority and special education. Again, the expectation was a positive, not negative, r-value due to the combination of two negative labels. Thus, Labeling Theory's use of positive and negative labels, in conjunction

with the Pearson Product-Moment Correlation Coefficient, to predict the results of Sub-question #3's analyses was not supported by the findings associated with these statistically significant correlational relationships.

Despite the previously identified problems, three of the statistically significant correlational relationships identified by Sub-question #3 generated r-values consistent with the definitions of correlation types and the positive or negative values associated with variables by Becker's Labeling Theory. These relationships were:

1. academically gifted and free/reduced lunch
2. academically gifted and special education
3. free/reduced lunch and special education.

The first two pairs represented the correlation of a positive label and a negative label to generate a negative r-value as expected. However, the final pair of variables involved the combination of two negative labels to generate an anticipated positive r-value. Thus, the correlation coefficients associated with these pairs of variables provided support for the ability of Labeling Theory's use of positive and negative labels to predict results in terms of correlational relationships.

Two other pairs of variables were determined by the analyses associated with Sub-question #3 to have statistically significant correlational relationships. One of these correlational relationships existed between the academically gifted and gender sub-groups. The gender and special education sub-groups formed the second statistically significant correlational relationship. Nonetheless, due to the gender sub-group's inclusion of males and

females, the interpretation of these results required the use of the binary coding system applied with Sub-question #3. This coding system can be found in Appendix 2.

The correlational relationship between the academically gifted and gender sub-groups was associated with a negative r-value. A more precise interpretation of this result matched two positive labels with each other, academically gifted and female. Furthermore, this situation led to the alignment of two negative labels, non-academically gifted and male, with each other. Thus, the ideas of Becker were supported by these findings due to his inferences that positive labels should be grouped together. Likewise, according to this line of reasoning, negative labels typically are associated with each other.

A similar situation was identified in the correlational relationship between the gender and special education sub-groups that produced a positive r-value. Again, with the aid of the binary coding system illustrated in Appendix 2, positive labels were aligned with each other during the analysis. In addition, negative labels were connected. As a result, the female and non-special education labels, both positive, were paired with each other. Furthermore, the negative male and special education labels were grouped together. Thus, support for Labeling Theory's basic premise also was provided by this correlational relationship.

Overall, the value of Becker's Labeling Theory in relation to Sub-question #3's results was not easy to determine. More specifically, this theory's ability, in terms of accuracy, to predict the influence of the positive and negative statuses of labels involved in these analyses was not extremely good, especially in relation to the statistically significant correlational relationships. Nonetheless, some consistency between Becker's ideas and the results was present in a few of the statistically significant correlational relationships.

Like Sub-question #3, Becker's Labeling Theory did not have a strong relationship with Sub-question #1 and Sub-question #4 in terms of accurate predictions of results. To be more specific, Sub-question #1 only pertained to a year-end result, promoted. Furthermore, no comparisons involving the positive promoted label and the negative retained label were conducted. Thus, the presence of results predicted by Becker's Labeling Theory was not generated by Sub-question #1's methodology. In addition, Sub-question #4's results were not consistent with the expectations generated by Becker's ideas of positive and negative labels.

Sub-question #4 determined the total 2000-2001 eighth grade promotion rate to have a statistically significant partial correlation with the following three demographic sub-groups: academically gifted, minority, and special education. However, due to the lack of a positive or negative status for the total 2000-2001 eighth grade promotion rate, the demographic labels were viewed as the main factors in determining the strength and type of each partial correlation. Thus, according to this line of reasoning, positive demographic labels would be involved in the strongest partial correlations. Furthermore, these labels would belong to pairs of variables with positive R-values. Likewise, negative demographic labels should lead to the smallest R-values. Also, these R-values would be negative. Nonetheless, these expectations were nullified by the results associated with the academically gifted and special education sub-groups.

Academically gifted was the only positive label assigned to one of the sub-groups having statistically significant partial correlations with the total 2000-2001 eighth grade promotion rate. Thus, it was expected to generate a positive R-value. Furthermore, being the

only positive label in this group, the partial correlation between academically gifted and the total 2000-2001 eighth grade promotion rate was expected to have the largest R-value.

However, these results did not occur. Similarly, the special education sub-group's involvement with the highest R-value, .0992, was not the expected result. This R-value's positive status also contradicted the previously described expectations.

Overall, the ideas communicated by Becker's Labeling Theory in terms of the value of positive and negative labels were not illustrated in Sub-question #4's results. To be more specific, the positive labels were not strong enough to outweigh the negative ones as implied in the basic tenets of Becker's Labeling Theory. As a result, Becker's Labeling Theory was not accurate in terms of its predictions with regard to this part of the study.

In the previous paragraphs of this section, the relationship between Becker's Labeling Theory and this study's results was addressed. However, little attention has been given to the other major parts of the analytic framework, the current nationwide movement towards the use of tougher promotion standards and the Wake County Public School System's implementation of its new eighth grade promotion policy. Nonetheless, both of these parts of the analytic framework predicted a decline in the total 2000-2001 eighth grade promotion rate, in comparison to the total 1999-2000 eighth grade promotion rate, due to the implementation of tougher requirements to be met for an eighth grade student to be promoted to grade nine.

Examinations of the data using Sub-question #1's methodology identified a decrease in the total eighth grade promotion rate from .9830 during the 1999-2000 school year to .9641 at the end of the 2000-2001 academic campaign. In addition, this decrease was

determined to be statistically significant. Hence, these parts of the analytic framework, despite their lack of a true theoretical nature, were accurate in terms of the predictions often associated with attempts to increase educational standards like the ones associated with the nationwide and Wake County Public School System actions.

In conclusion, Becker's Labeling Theory accurately predicted the 2000-2001 promotion rates associated with the student demographic characteristics in terms of the sub-groups with the highest and lowest values. Labeling Theory also provided accurate predictions of the results of Sub-question #2's analyses with regard to differences in promotion rates between groups of students. Nonetheless, despite Labeling Theory's help with some parts of the study, it was not very useful in relation to predictions associated with Sub-question #1, Sub-question #3, and Sub-question #4. Furthermore, Becker's Labeling Theory was unable to use the promoted and retained labels to accurately predict results for different parts of this study. In fact, those two labels probably would be more beneficial to an analysis involving the promotion/retention results of this study's participants over subsequent years.

Now that the theoretical implications of this study have been presented, the next section of this paper will focus on the new Wake County Public School System eighth grade promotion standard. More specifically, the relationship between this policy and the study's results will be described. Hence, the ability of the study's results to support the policy's original intention will be defined.

### **III. Policy Implications of this Study**

The new Wake County Public School System eighth grade promotion standard was

implemented to accomplish two primary goals. One of these goals was to increase the quality of education in Wake County's middle schools, particularly grade eight. In addition, the leaders of this school system wanted the policy to eliminate the use of social promotion as a means for moving eighth graders to grade nine at the conclusion of a school year.

With regard to the new eighth grade promotion policy's goals, the results from Sub-question #1's analyses provided the most insight. However, the conclusions generated by this Sub-question primarily pertained to the policy's goal of increasing the quality of education at the eighth grade level. Furthermore, these assertions were based on the premise that raising the quality of education would lead to a decrease in the annual promotion rates at that level of school.

Sub-question #1's high value pertaining to the new promotion policy's goals resulted from its use of data prior to the 2000-2001 school year. In fact, it was the only part of the study that included annual promotion rates prior to the implementation of the new Wake County Public School System eighth grade promotion standard. Nonetheless, in order to understand any conclusions associated with Sub-question #1, the use of a decrease in promotion rates as the primary indicator of raising the quality of education had to be identified.

The total eighth grade promotion rate associated with the students included in this study was .9830 during the 1999-2000 school year. However, at the conclusion of the 2000-2001 academic campaign, this figure was determined to be .9641. Thus, a decrease in the eighth grade promotion rate was identified when comparing the 1999-2000 and 2000-2001

school years. Furthermore, the one sample t-test determined the difference between the promotion rates of those two years to be statistically significant.

This decrease in the number of students promoted to grade nine at the conclusion of the 2000-2001 school year, in comparison to the 1999-2000 academic campaign, identified the implementation of tougher requirements associated with this new policy. In other words, under the new promotion standard, it was more difficult to be promoted to grade nine. As a result, during the 2000-2001 school year, students had to perform at higher achievement levels than in the past to be promoted. Thus, based on the use of a decrease in the number of eighth graders promoted to grade nine as an indicator of an increase in the quality of education, the study's results supported part of the new policy's original intention. To be more specific, an increase in the quality of education due to the implementation of the new eighth grade promotion standard in Wake County was identified by Sub-question #1's results and analyses.

Despite Sub-question #1's determination that the new promotion standard increased the overall quality of education for Wake County eighth graders, all of these conclusions were based on year-end results. Thus, assertions about increases in the quality of education at the classroom level were not supported. As a result, no conclusions were formed regarding issues such as students' level of preparation for standardized tests or their test-taking skills. Furthermore, issues such as the quality of instructional materials and teachers, the nature of the learning environment, and the influence of class size were not factored into assertions associated with the ability of the new eighth grade promotion standard to satisfy its original goals. Nonetheless, issues of this nature, as well as many other occurrences

observed at the classroom level, are capable of influencing increases or decreases in the overall quality of a child's education.

Overall, the year-end results used with Sub-question #1 indicated students' positive and negative encounters with end-of-grade standardized tests due to these activities' close association with the new promotion policy. In addition, their successes or failures with coursework in terms of a final grade were revealed. Nonetheless, the study's data set failed to provide an avenue for other valuable parts of an eighth grade educational program to be included in the interpretations of this Sub-question's results.

As alluded to in a previous paragraph, Sub-question #1's results provided little support for conclusions with regard to the new promotion standard's goal of eliminating the use of social promotion. The primary reason for this situation was the data set's failure to include the number of socially-promoted eighth graders during the 1999-2000 and 2000-2001 school years. Thus, the statistically significant difference between the 1999-2000 and 2000-2001 total eighth grade promotion rates could have been caused by a decrease in the number of socially-promoted eighth graders at the end of the second school year in comparison to the same statistic associated with the first academic campaign. However, the absence of a difference between the number of socially-promoted eighth graders associated with each school year also was a possibility. This assertion is supported by the fact that, under the new promotion policy, principals still have the opportunity to make the final decision regarding a student's placement in grade nine in the case of a child's failure to meet the testing and/or coursework requirements. As a result, an eighth grader promoted by his or her principal under this part of the policy at the conclusion of the 2000-2001 school year would have

moved to grade nine in the same manner as a child promoted socially after the 1999-2000 academic campaign.

Despite the failure of Sub-question #1's results to directly reveal the elimination of the use of social promotion, a very rational conclusion would have been to attribute the decrease in the promotion rate for the 2000-2001 school year to the ability of the new promotion policy's testing requirements to bring an end to the use of this method. To be more specific, prior to the policy's implementation, promotion to grade nine in the Wake County Public School System was based solely on teachers' evaluations of student performance in the classroom. In addition, the teachers had a direct, and possibly subjective, influence on the academic challenges that confronted children, particularly with regard to the level of difficulty associated with classroom assignments and tests. However, with the implementation of the new Wake County Public School System eighth grade promotion standard, standardized tests assumed a role in the movement of eighth graders to the ninth grade. These tests were created outside the classroom and independent from teachers' control in terms of content.

The standardized tests gave school officials firm parameters to use in promotion/retention decisions that could not be bent or adjusted in favor of students in the same manner as teacher-made tests and assignments. Thus, under this new promotion policy, classroom teachers no longer had total control of eighth graders' promotion or retention. As a result, types of eighth graders socially promoted in the past may have been retained under this new policy.

In summary, according to this line of reasoning, the new eighth grade promotion policy eliminated the use of social promotion. Nonetheless, as previously described, the nature of the study's data set failed to provide enough information for the findings to support this conclusion with any more certainty than the converse, the survival of social promotion in K-12 public schools.

In addition to Sub-question #1's results, the other parts of the study also exposed important implications with regard to the new Wake County Public School System eighth grade promotion standard. Some ideas were directly related to the goals of the policy. However, other ones forecasted issues in need of attention in the immediate future for the goals of this policy to be attained. For example, Sub-question #2's results did not generate specific conclusions with regard to the success or failure of the new promotion policy to raise the quality of education and end the use of social promotion. Nonetheless, the results were valuable due to the preliminary ideas suggested by them.

As previously presented, one goal of the new Wake County Public School System eighth grade promotion standard was to improve the quality of education at that level of school. Sub-question #2's results did not indicate whether or not this situation occurred in the policy's first year of use. Nonetheless, the findings provided school leaders with insight regarding groups of students in need of special attention to be successful with this new standard. More specifically, potential achievement gap issues were identified that must be corrected for improvement in the quality of education to occur at the grade eight level.

In all cases involving a comparison between the promotion rate of a demographic

sub-group and the promotion rate of the students not belonging to it, a statistically significant difference was identified. Furthermore, the negatively labeled sub-group in each comparison had the lower promotion rate. For example, the minority sub-group's promotion rate was lower than the one associated with the non-minority students. Nonetheless, despite these results' ability to identify achievement gap issues, Sub-question #2's comparisons between the total 2000-2001 eighth grade promotion rate and each demographic sub-group's promotion rate provided more clarity with regard to this topic.

The promotion rates of the following four demographic sub-groups differed from the total 2000-2001 eighth grade promotion rate in a statistically significant manner:

academically gifted, free/reduced lunch, minority, and special education. However, academically gifted's promotion rate was the only one of the four to exceed the total 2000-2001 eighth grade promotion rate. Thus, in terms of basic quality, the educational program for the academically gifted students was determined to be sufficient to meet the requirements of the new eighth grade promotion standard in the Wake County Public School System.

Despite the positive findings associated with the academically gifted cohort, Sub-question #2's results indicated deficiencies with regard to the effectiveness of the educational programs provided for children in the free/reduced lunch, minority, and special education sub-groups in relation to fostering student success with the new eighth grade promotion policy. In addition, these children are labeled as at-risk in many educational circles at the present time through analyses of sub-groups' academic achievement levels. As a result, Sub-question #2's findings indicated that groups of at-risk students fared worse with

this promotion standard. Hence, achievement gap issues were identified by interpretations of this Sub-question's results.

In summary, Sub-question #2's results identified an issue in need of attention from the leaders of the Wake County Public School System in their attempts to improve the quality of eighth grade education in their middle schools, the achievement gap between demographic sub-groups of students. As a result, school leaders must find ways to promote success with the new promotion standard for students in all sub-groups. Nonetheless, the free/reduced lunch, minority, and special education children need the most attention due to their possession of the lowest success rates with regard to the initial effort to increase the standards associated with the promotion of eighth graders to grade nine. Thus, despite Sub-question #2's failure to provide concrete conclusions in terms of the promotion policy's achievement of its original goals, a key issue to be addressed by Wake County school officials was forecasted.

Sub-question #3's results also did not provide concrete conclusions regarding the ability of the new eighth grade promotion standard to increase the quality of education or end the use of social promotion. Instead, Sub-question #3's value merely pertained to its ability to give Wake County school leaders direction regarding the development of school improvement actions geared towards improving the quality of eighth grade education in their middle schools. To be more specific, the results of this part of the study direct school leaders' attention to the special education sub-group. According to these findings, the provision of special services for these students also could help the other three lowest-performing sub-groups in relation to the new promotion policy: free/reduced lunch, male,

and minority. This situation is due to the special education subgroup's overlap with the other three sub-groups in terms of student membership.

Overall, this overlap with regard to student membership indicates the presence of some children in more than one subgroup. Thus, efforts to improve the academic performance of special education students could simultaneously help other sub-groups. As a result, improvement in the quality of one part of the educational program would positively impact another area. Furthermore, a development of this type would serve as a means to eventually raise the total quality of eighth grade education in Wake County. Nonetheless, despite this line of reasoning, the analyses of Sub-question #3's results did not specifically identify the actual attainment of the new promotion policy's goals.

Like Sub-question #2, Sub-question #4's results and analyses highlighted achievement gap issues. More specifically, this part of the study identified three sub-groups of students associated with negative issues in relation to the new promotion standard: non-academically gifted, minority, and special education. All three sub-groups had a negative relationship in terms of success with the new promotion standard. This conclusion was derived through the designation of promotion as the indicator of student success as well as the binary coding system, displayed in Appendix 3, used with Sub-question #4's logit regression.

In summary, specific details of the findings of Sub-question #4's analyses will be presented in the final section of this chapter. Nonetheless, despite some negative issues surrounding non-academically gifted students, the minority and special education sub-groups should be the top priority of school leaders. To be more specific, attention must be given to

the educational programs associated with both sub-groups for improvement in the total quality of eighth grade education to occur in Wake County's middle schools. Still, like Sub-question #2 and Sub-question #3, this part of the study did not generate any concrete conclusions regarding the new promotion standard's ability to raise the quality of eighth grade education or end the use of social promotion.

The previous two sections of this chapter focused on the theoretical and policy implications of this study's results. More specifically, the relationship between Howard Becker's Labeling Theory, the labels used in the study, and the results generated by the analyses associated with each Sub-question has been described. In addition, the level of support provided by the study's results with regard to the original goals of the new Wake County Public School System eighth grade promotion standard has been revealed. The final section of this chapter will include explanations regarding the significance of the study's results in relation to the Wake County Public School System.

#### **IV. Implications of this Study in Relation to the Wake County Public School System**

The results from Sub-question #1's analyses revealed a statistically significant decrease in the total eighth grade promotion rate for the 2000-2001 school year in comparison to the 1999-2000 academic campaign. More specifically, as described earlier, the total promotion rate was .9830 during the 1999-2000 school year; however, the 2000-2001 figure was .9641. This decrease in the eighth grade promotion rate during the 2000-2001 school year provided leaders of the Wake County Public School System with concrete reassurance that administrators and teachers actually implemented the new policy and evaluated students according to its requirements. Without the implementation of this new

standard, a decrease in the eighth grade promotion rate may have occurred over the course of one year. However, in most cases, a policy with stringent requirements, such as the new eighth grade promotion standard, is needed to cause a statistically significant change like the decrease in annual promotion rates discovered by Sub-question #1's analyses.

This decrease in the eighth grade promotion rate also revealed the ability of the policy to limit the promotion of eighth graders to grade nine in a significant way. Thus, under this new policy, students will not be moving between grades eight and nine at the same rate in the future without some changes to the current educational program. Hence, the challenge for Wake County school leaders is to identify the cause of the lower promotion rate. In other words, they need to determine if the local requirements, in terms of passing coursework, or the testing stipulations, with regard to end-of-grade examinations, associated with the new eighth grade promotion standard caused problems for students.

Information from investigations to determine the source of students' problems in terms of meeting the requirements of the new promotion standard could force teachers and administrators to alter their methods of instruction and evaluation in classrooms to better meet the needs of all children. This situation will be more likely if the promotion problems resulted from students' lack of success with the coursework requirements of the new policy. Furthermore, building-level staff changes and the need for administrators, principals and assistant principals, to adopt new methods for evaluating teachers in terms of effectiveness could arise from this result. Nonetheless, if end-of-grade tests posed the greatest problems for retained students, teachers and administrators will need to make efforts to better prepare children for these tasks in terms of content knowledge and general test-taking strategies.

This preparation could be handled at the classroom level by conducting mock tests at various points throughout the school year to assess students' levels of comprehension of standard course of study material. In addition, teachers and guidance counselors could integrate activities focusing on test-taking strategies in the daily curriculum on multiple occasions throughout the school year.

Overall, Sub-question #1's results indicated that the new eighth grade promotion policy had an adverse impact on the movement of students to grade nine at the end of the 2000-2001 school year in comparison to the 1999-2000 results. Nonetheless, in addition to the previously described implications, these results created the need for Wake County school leaders to take a few additional types of action. To begin with, due to the increase in the number of retained eighth graders, Wake County central office administrators must provide the middle schools with additional resources in comparison to previous years. More specifically, allotments for individual schools with regard to the number of staff members and the amount of resources, such as money to be spent on instructional supplies, are based on projections of school size. Hence, if the trend with the new eighth grade promotion standard continues, the Wake County central office administrators will have to make plans to provide resources for larger eighth grade populations at individual schools in the future.

This situation is complicated by the fact that most school systems make allotments of resources, especially the number of staff members, in the late Spring for the following school year. Such action is taken to help building-level principals plan for the upcoming school year. However, the final promotion/retention decisions for some eighth grade students do not

occur until the end of June due to summer school and re-testing options associated with the promotion standard.

As a result, due to the initial adverse impact of this new policy as evidenced by increased retention numbers, Wake County school leaders will have to develop a more accurate way to project eighth grade population sizes at their middle schools. Action of this type will be needed to insure school-level staff members' receipt of adequate resources to promote academic success for eighth graders in terms of promotion to grade nine. Nonetheless, these efforts also must include accurate projections in terms of the number of anticipated retainees in grade eight. Hence, the attainment of input from teachers and principals during the Spring of each year with regard to eighth graders likely to be retained will be critical.

Despite the urgency to address the negative issues presented by the study's results regarding resource allocations and student population projections at the grade eight level, school leaders also must be careful to prevent sacrificing the educational programs at other grade levels. Thus, Wake County school leaders should pursue additional financial resources from the state legislature and county commissioners to address areas of need at the grade eight level. This money could be used to hire additional personnel to reduce class size or provide remediation for low-performing students. It also may be used to recruit and hire highly-qualified, experienced teachers through the development of a more lucrative local supplement salary schedule. Another option would be to use this money to purchase special instructional supplies such as manipulatives and other hands-on materials that are typically more effective in terms of instruction with low-performing students. Nonetheless, the

expansion of resources for grade eight students, while not lowering the quality of education at other levels of the K-12 program, will be difficult to accomplish without additional funding from the state and county governments.

The final implication of Sub-question #1's results is the need for Wake County school leaders to educate the parents of middle school students about the parameters of this new promotion policy. At the same time, these school leaders should reveal the results of the first year of this policy's use. In other words, school leaders need to be proactive. They should not wait until large numbers of students are retained in grade eight over the course of several years to start this educational process. Parents need to know that the intent of the new policy is to raise the quality of education in grade eight and end the use of social promotion. Furthermore, they should be made aware of this policy's denial of promotion to grade nine for many students during the first year of its implementation.

Some parents may never pay attention to the school leaders' efforts to explain the new eighth grade promotion policy and the possibilities associated with it in terms of the retention of students. Nonetheless, a large number of parents hopefully will respond to this situation and provide support for their children at home. As a result, a partnership between students' homes and Wake County's middle schools can be formed. Thus, the efforts to improve the quality of eighth grade education and end the use of social promotion will be stronger due to the increase in the number of stakeholders actively involved in the overall process. In the end, a partnership of this nature will foster student success with the new eighth grade promotion standard. However, without the efforts of school leaders to educate parents, it may never evolve.

Unlike Sub-question #1's concentration on annual total eighth grade promotion rates, Sub-question #2 provided more specific analyses by focusing on six sub-groups of students (academically gifted, free/reduced lunch, female, male, minority, and special education). These analyses identified statistically significant differences between each sub-group's 2000-2001 promotion rate and the 2000-2001 promotion rate of students not in a particular sub-group. Furthermore, the promotion rates of the academically gifted, free/reduced lunch, minority, and special education sub-groups differed in a statistically significant manner from the total 2000-2001 eighth grade promotion rate. In other words, as described in a previous section of this paper, Sub-question #2 revealed the presence of achievement gap issues associated with demographic sub-groups of students regarding their levels of success with the new Wake County Public School System eighth grade promotion standard.

The presence of achievement gap issues during the new promotion standard's first year of implementation should be given immediate attention by Wake County school leaders. More specifically, these results magnify the need for educators in this school system to examine annual eighth grade promotion rates beyond the total numbers. Without analyses associated with particular sub-groups of students, children in need of special attention or services may never be identified and continue to experience failure with the new eighth grade promotion standard.

Sub-question #2's results gave priority to three sub-groups in terms of needing special attention to be successful with the new eighth grade promotion standard: free/reduced lunch, minority, and special education. Basically, these sub-groups of students appeared to be at-risk the most due to having the lowest 2000-2001 promotion rates. In addition, their

promotion rates were less than the total 2000-2001 eighth grade promotion rate in a statistically significant manner. Furthermore, each one had a promotion rate that was significantly less than the figure associated with students not belonging to that particular sub-group. Thus, the majority of the students in these three sub-groups need additional academic assistance, beyond basic classroom instruction, geared towards meeting the requirements of the new eighth grade promotion standard. Hence, Wake County school leaders should develop a program to accomplish this task. Otherwise, the free/reduced lunch, minority, and special education sub-groups may never have the same levels of success with the new promotion standard experienced by other students.

In spite of the achievement gap problems, one demographic sub-group, academically gifted, did not have difficulty in terms of meeting the requirements of the new promotion standard even though its promotion rate differed from the total 2000-2001 eighth grade promotion rate in a statistically significant manner. To be more specific, this sub-group's promotion rate was significantly greater than the one associated with the students not labeled as academically gifted. Furthermore, the promotion rate of the academically gifted sub-group exceeded the total 2000-2001 eighth grade promotion rate. Both situations illustrated the new promotion standard's intention of focusing on the general competencies for the average student rather than higher order skills associated with accelerated children. In other words, the new promotion policy was not designed to challenge the academically gifted students due to their above-average intellectual abilities. As a result, children at the lowest ability levels face the biggest challenges in terms of satisfying its requirements.

As a result of the academically gifted students' success with the new promotion policy, enrichment opportunities to stretch their academic competencies and insure the maximum use of instructional time could be provided during the periods reserved for additional work with the free/reduced lunch, minority, and special education sub-groups. Nonetheless, due to their academic performances, it should be noted that some students in the at-risk sub-groups may not need the additional basic instruction. Hence, they can be included in the enrichment activities. In addition, some children in the academically gifted sub-group may need the special instructional sessions provided for the at-risk students.

Overall, this plan's successful provision of special instruction for at-risk and academically gifted students will depend on the analyses of annual promotion results in relation to sub-groups formed by demographic characteristics. Nonetheless, input from classroom teachers throughout the school year also will be a necessity to insure the at-risk students' receipt of the appropriate services. Furthermore, teachers must be given the ability to add students to the groups receiving additional help upon the detection of needs throughout the school year.

This plan's success also will depend on the Wake County school leaders' ability to accurately analyze the eighth grade populations of all of their middle schools. As a result, additional resources, such as locally-funded teachers to reduce class size and instructional materials, can be allocated in the greatest amounts to schools with the highest percentages of free/reduced lunch, minority, and special education students. In other words, additional resources to address these problems should not be distributed evenly among all middle schools. Instead, their distribution should be based on the needs of individual middle schools

relative to their partners in the district. Through this type of action, the entire school system hopefully will be equipped to address its areas of need in terms of success with the new eighth grade promotion policy to the greatest possible extent.

The final implication of Sub-question #2's results is the need for Wake County school leaders to prepare to defend their policy against complaints from special interest groups, especially parents of the three lowest-performing sub-groups of students. As with Sub-question #1's results, administrators and teachers need to inform members of the public about the possible negative results associated with this new promotion standard. Hence, Wake County officials should not hide the problems experienced by the free/reduced lunch, minority, and special education sub-groups during the 2000-2001 school year. Instead, they should share these negative issues with the media as a means for communicating them to the public and asking for help in finding their resolutions. Hopefully, the presentation of these results will motivate at-risk students' parents and other adults to help the schools work with eighth grade children to prevent the achievement gap from increasing in the future.

Parents working with these at-risk groups of children at home to address academic needs hopefully will foster success for students in terms of the new eighth grade promotion policy. The same idea is true in relation to community members' willingness to volunteer time to serve as tutors/mentors for these at-risk students in the school environment.

However, without Wake County school leaders' willingness to share the findings of this study with the public and educate them about these needs, future groups of at-risk eighth graders will continue to experience academic failure. Thus, despite its short history, educators in the Wake County Public School System should act quickly on these results to

form partnerships between the schools and the community focused on helping eighth graders in all sub-groups of the student population attain promotion to grade nine at a high success rate.

Overall, as with Sub-question #1, the implications for the Wake County Public School System generated by Sub-question #2's analyses were descriptive in nature. To be more specific, both Sub-questions' results led to the derivation of several qualitative implications. Nonetheless, the interpretations of the final parts of the study, Sub-question #3 and Sub-question #4, involved more concrete conclusions with regard to courses of action for Wake County school leaders to take in fostering success with the new eighth grade promotion standard. This goal of success will pertain to the overall school system as well as demographic sub-groups.

As previously noted, Sub-question #3's analyses identified thirteen statistically significant correlational relationships between the variables included in this study. Furthermore, all of the predictions/interpretations associated with these correlational relationships will pertain to the group level. This situation results from the r-values of each statistically significant correlational relationship being too small to make predictions/interpretations involving individual students. In other words, the fact that these correlations were only moderately strong prevented a focus on individual students. This point was not made in previous sections of the paper due to their failure to include direct recommendations for Wake County school leaders in relation to Sub-question #3 like the ones to be presented in the upcoming paragraphs.

The following statistically significant correlational relationships provided Wake County school leaders with insight regarding ways to increase their total eighth grade promotion rate:

1. total 2000-2001 eighth grade promotion rate and academically gifted
2. total 2000-2001 eighth grade promotion rate and free/reduced lunch
3. total 2000-2001 eighth grade promotion rate and gender
4. total 2000-2001 eighth grade promotion rate and minority
5. total 2000-2001 eighth grade promotion rate and special education.

To be more specific, through the use of the binary coding system in Appendix 2, five sub-groups of students were found to be positively correlated with promotion: academically gifted, non-free/reduced lunch, female, non-minority, and non-special education. Thus, increases in the number of students in these categories will be associated with a larger total eighth grade promotion rate.

Several negative correlations between promotion and demographic sub-groups also were identified using the binary coding system associated with Sub-question #3. These sub-groups were non-academically gifted, free/reduced lunch, male, minority, and special education. As a result, increases in the number of students in these sub-groups will accompany a lower total eighth grade promotion rate for the Wake County Public School System.

Overall, these positive and negative correlations support several conclusions regarding Wake County school leaders' attempts to increase their level of success, defined by the total eighth grade promotion rate, with this new promotion policy. First, to raise the total

eighth grade promotion rate, school leaders should work to increase the number of students in each sub-group positively correlated with promotion. At the same time, efforts should be made to keep the student count in the sub-groups negatively correlated with promotion to the lowest possible level. Nonetheless, despite their efforts to monitor the sizes of these different sub-groups, Wake County school officials also must be careful to retain the students having labels positively correlated to promotion. In other words, schools can not afford to lose large numbers of students in the academically gifted, non-free/reduced lunch, female, non-minority, and non-special education sub-groups. A situation of this type would result in a lower total eighth grade promotion rate.

In addition to the conclusions regarding relationships between the sub-groups' sizes and the total eighth grade promotion rate, the remainder of the statistically significant correlational relationships identified by this study provided insight with regard to prioritizing the provision of special help to foster student success in relation to the new eighth grade promotion standard. The following statistically significant correlational relationships provided the initial information to be used with this process:

1. academically gifted and free/reduced lunch
2. academically gifted and gender
3. academically gifted and minority
4. academically gifted and special education.

More specifically, a positive correlation between the academically gifted and female sub-groups was discovered. Thus, due to those two sub-groups' possession of the highest promotion rates among the demographic characteristics, neither of them should receive a

great deal of additional services or resources. Instead, the primary focus of Wake County school leaders should be the three at-risk sub-groups identified in an earlier part of this chapter due to their possession of the lowest promotion rates: free/reduced lunch, minority, and special education.

These three at-risk sub-groups were not positively correlated with the academically gifted students in these statistically significant correlational relationships. Thus, the promotion results of free/reduced lunch, minority, and special education students are not heavily influenced by the success of the academically gifted sub-group. This conclusion is based on the minimal number of, or lack of, academically gifted students in the free/reduced lunch, minority, and special education sub-groups. In addition, due to the female sub-group's positive correlation with the academically gifted variable, it does not affect the free/reduced lunch, minority, and special education students' success to a great extent. To be more specific, the female sub-groups' amount of overlap with the three at-risk sub-groups in terms of group membership is not very large. Thus, female students' academic performances will have little impact on the at-risk sub-groups' success levels with the new promotion policy. As a result, school leaders' provision of additional help or services for these three at-risk sub-groups will have the greatest impact on the most needy students.

Despite the direction provided by the previously presented correlations with regard to the provision of special help for demographic sub-groups, the remaining four statistically significant correlational relationships narrowed the field in terms of actions to be taken by Wake County school leaders:

1. free/reduced lunch and minority

2. free/reduced lunch and special education
3. gender and special education
4. minority and special education.

More specifically, these results indicated a positive correlation between the special education sub-group and the following three variables in terms of student membership: free/reduced lunch, male, and minority. Excluding special education, these three sub-groups had the lowest promotion rates. Additionally, in terms of student membership, special education had the most overlap, in comparison to the study's other variables, with these lowest-performing sub-groups.

These final statistically significant correlational relationships give Wake County school leaders a starting point in terms of identifying the student sub-group in need of the most help. To be more specific, teachers and administrators should focus the majority of their efforts to improve student success with the new eighth grade promotion policy on the special education sub-group. Efforts to help this sub-group will have the most influence on the other lowest-performing students, especially the sub-groups identified as at-risk in previous parts of this paper. This assertion is based on the high level of overlap, positive correlation, between special education and the free/reduced lunch, male, and minority sub-groups in terms of student membership. In other words, increased success for special education students also will have a positive influence on the free/reduced lunch, male, and minority sub-groups with regard to the new promotion policy. Nonetheless, these efforts should not be taken at the expense of the success associated with the academically gifted and

female sub-groups due to their ability to carry the total eighth grade promotion rate at the group level.

Sub-question #4's analyses identified the following three sub-groups as having statistically significant, negative partial correlations with promotion: special education, minority, and non-academically gifted. In fact, according to this study, special education students had a 201.56% greater chance of being retained than individuals in the non-special education sub-group during the 2000-2001 school year. Likewise, minority students had 60.46% greater chance of retention than their non-minority counterparts. Finally, the odds ratio data denoted that non-academically gifted students had a 3.59% greater chance of retention than academically gifted children. Thus, the odds ratio associated with each comparison using logit regression provided insight for Wake County school leaders to use in making and prioritizing plans involving the provision of special help for sub-groups not experiencing success with the new promotion policy.

Based on these interpretations, teachers and administrators should focus the majority of their additional efforts on the special education sub-group. Furthermore, the total promotion rate could be improved by increasing the number of non-special education students in Wake County middle schools at the grade eight level. However, the academic skills of non-special education students would have to be improved for this tactic to be successful. Nonetheless, a reduction in the number of eighth grade special education students in the schools also could generate higher levels of success in relation to this new policy.

After their primary efforts to help special education students, Wake County school leaders need to make the minority sub-group their priority in terms of focused intervention aimed at generating success for all eighth graders with regard to the new promotion policy. Success in this area could be enjoyed by increasing the number of non-minority eighth grade students as well as their academic skills. On the other hand, a reduction in the number of minority students in grade eight also would raise the school system's promotion rate in relation to this new policy.

The non-academically gifted sub-group was the third priority identified by Sub-question #4's results in terms of needing special attention to foster additional success for eighth graders with regard to the new promotion policy. This success could be attained by decreasing the number of non-academically gifted students in the eighth grades of Wake County's middle schools. Likewise, increasing the number of academically gifted students and their academic skills would lead to positive results.

Overall, Sub-question #4's results identified three sub-groups needing special attention due to their statistically significant, negative partial correlations with promotion. However, as in Sub-question #3, the special education students were identified as the target group needing the most additional efforts to promote success with the new promotion policy. Furthermore, the minority sub-group, an area of concern in relation to Sub-question #3's results, was identified as the second priority. Thus, the results of Sub-question #3 and Sub-question #4 were consistent in terms of prescribed focal points of school improvement efforts geared towards fostering future success with this new promotion standard. Nonetheless, the negative issue surrounding the non-academically gifted students, their 3.59% greater chance

of retention than academically gifted children, will be addressed to a certain degree through the provision of additional help for the special education and minority sub-groups. This assertion is derived from Sub-question #3's identification of statistically significant, positive correlational relationships between the non-academically gifted and special education sub-groups as well as the non-academically gifted and minority sub-groups with regard to student membership.

Despite the previously stated conclusions associated with Sub-question #4's results, two additional analyses were conducted with the aid of logit regression due to an r-value generated by the use of the Pearson Product-Moment Correlation Coefficient in Sub-question #3. To be more specific, the r-value associated with the comparison of the free/reduced lunch and minority sub-groups was  $-.506$ . This r-value did not fall in the range used to indicate strong correlations in this study,  $-1.00 \leq r \leq -0.6$  and  $0.6 \leq r \leq 1.00$ . Nonetheless, it indicated a moderately strong correlational relationship between the two sub-groups in terms of group membership. As a result, the need to address multi-collinearity issues arose in this part of the study.

Initially, this situation was examined by running logit regression involving all sub-groups included in this study, except for the free/reduced lunch category of students. The results of this action were consistent with the original logit regression analysis. To be more specific, as with the first logit regression analysis, the following three sub-groups were identified as having statistically significant, negative partial correlations with promotion: special education, minority, and non-academically gifted.

The interpretations from the odds ratios in the second application of logit regression also were consistent with the first analysis involving this methodology in terms of giving priority to the special education students. More specifically, these results directed Wake County school leaders' to focus their primary efforts to provide additional academic help for students on the special education sub-group in order to increase the total promotion rate. Also, based on these results, the minority sub-group was given priority over the non-academically gifted students with regard to the receipt of these efforts from school leaders.

Based on these results, the removal of the free/reduced lunch sub-group from the application of logit regression did not generate major differences with regard to findings in comparison to the ones associated with the initial use of this methodology. However, this methodology's third application identified some new findings. The following paragraphs will summarize these results.

The third application of logit regression did not include the minority sub-group. As a result, the sub-groups identified as having statistically significant, negative partial correlations with promotion differed from the other two applications of logit regression. More specifically, this analysis detected statistically significant, negative partial correlations between promotion and the following three sub-groups: special education, free/reduced lunch, and non-academically gifted. Furthermore, through interpretations of the odds ratios, the free/reduced lunch sub-group was determined to be the main priority in terms of Wake County school leaders' additional efforts to increase the total promotion rate. Nonetheless, the special education sub-group remained a much greater priority than the non-academically gifted students with regard to these special actions by Wake County school leaders.

For the most part, the results from the additional applications of logit regression generated some key findings in relation to this study's data set. To begin with, both of the sub-groups in the moderately strong correlational relationship under investigation, minority and free/reduced lunch, were determined to be very significant. Thus, each sub-group's role in the study's conclusions was important. Nonetheless, the most valuable finding was the logit regression methodology's revelation of the high amount of overlap between the minority and free/reduced lunch sub-groups in terms of student membership. In fact, these additional applications of logit regression confirmed the idea predicted by the analyses involving the Pearson Product-Moment Correlation Coefficient: the large number of students with membership in both sub-groups.

In summary, the interpretations of the results from all parts of this study provide valuable insight for Wake County school leaders to use to foster future success for eighth graders in relation to this new promotion policy. The initial interpretations are more descriptive in nature due to the types of Sub-questions and analyses associated with them. Nonetheless, the interpretations generated by the correlational relationships and logit regression provide Wake County school leaders with a more direct course of action, especially with regard to the identification of target groups to receive special services and resources.

## **V. Summary Comments**

As presented earlier in this chapter, the results of this study generated theoretical implications in relation to its analytic framework in several ways. For example, Howard Becker's Labeling Theory accurately predicted the 2000-2001 promotion rates, with regard

to their rank order from least to greatest, associated with the student demographic characteristics identified as positive or negative in Chapter Three. In addition, the other part of the analytic framework, the nationwide and Wake County Public School System movements to implement higher standards, was accurate in terms of its prediction of the results generated by Sub-question #1. More specifically, a customary pattern associated with the implementation of tougher standards, a decrease in the total eighth grade promotion rate, was found when comparing 1999-2000 and 2000-2001 numbers.

Becker's Labeling Theory also accurately predicted the statistically significant results of Sub-question #2's analyses. To be more specific, all of the independent samples t-tests and one sample t-tests that identified statistically significant differences between the promotion rates of pairs of variables resulted in one of two possibilities. One result was the association of the highest promotion rate in each pair with a positive label, if that type of label existed. On the other hand, a negative label was involved in all comparisons of variables having statistically significant differences yet no positive label. This type of situation resulted in the association of the lowest promotion rate with the negatively labeled variable. Hence, Becker's ideas regarding the positive and negative influence of labeling were consistent with the results of Sub-question #2's analyses.

Overall, Becker's Labeling Theory and the other parts of the analytic framework played important roles in terms of predicting the results generated by Sub-question #1 and Sub-question #2. However, the same idea was not true for the study's final two Sub-questions. Thus, these concepts were not able to predict the results of Sub-question #3 and Sub-question #4 in a very accurate manner.

In addition to the theoretical implications associated with this study, numerous ideas related to the new eighth grade promotion policy were identified. Nonetheless, the highlights of these policy implications were generated by Sub-question #1 and Sub-question #2. More specifically, Sub-question #1's analyses revealed an overall increase in the quality of education at the eighth grade level during the first year of the new promotion policy's implementation. This assertion was based on the ability of the tougher standard to limit the number of students promoted to eighth grade at the end of the 2000-2001 school year. However, conclusions regarding increases in quality at the classroom level were not generated by the study's results. Furthermore, Sub-question #1 failed to determine whether or not the number of socially-promoted eighth graders decreased during the 2000-2001 school year, despite the new policy's goal to end social promotion.

The other highlight of the study's policy implications was Sub-question #2's identification of achievement gap issues. Thus, as with other parts of the educational program, Wake County school leaders must address achievement gap issues associated with its new eighth grade promotion policy. Nonetheless, despite the focus on specific sub-groups of students, these efforts by teachers and administrators will help improve the overall quality of the total eighth grade educational program in their middle schools.

Numerous implications for the Wake County Public School System in relation to the new promotion policy also were described in the previous parts of this chapter. For example, Sub-question #1's identification of a statistically significant decrease in the number of eighth grade promotions, when comparing 1999-2000 and 2000-2001 results, implied that the new promotion policy was actually implemented by leaders of Wake County middle schools.

Another key implication was the need for school leaders in Wake County to identify the cause of this decrease in promotion numbers. These efforts may lead to changes in the processes used by them to project student numbers for grade eight, allocate resources, and educate parents about the parameters of this new policy.

The final three Sub-questions also identified several key implications for the Wake County Public School System. These ideas focused on the identification of at-risk students and the need for more detailed analyses of some sub-groups regarding their success and/or failure with the new promotion policy. For example, the study's results directed the administrators and teachers of this school system to provide additional assistance for the following negatively labeled sub-groups: free/reduced lunch, minority, and special education. Nonetheless, in the end, the top priority was assigned to the special education sub-group in terms of Wake County school leaders' provision of additional services and resources for students likely to encounter difficulty with regard to satisfying the requirements of the new promotion standard.

Overall, this study generated some valuable results for Wake County school leaders to use in the future. Nonetheless, after completing this study, several recommendations should be considered for future investigations of the new Wake County Public School System eighth grade promotion standard. Thus, the remaining paragraphs of this paper will identify some suggestions for researchers interested in this topic.

The first recommendation pertains to researchers' use of multiple grade levels of data. More specifically, a good future study would involve analyses of the influence of students' academic performances in grades K-7 on their promotion or retention status upon the

conclusion of grade eight. Furthermore, the results of the promotion/retention decisions in grade eight could be analyzed to determine their effects on the future academic success or failure of these students in grades 9-12.

Another recommendation involves the analysis of eighth grade promotion rates in terms of year-round and traditional calendar schools. At the present time, a great deal of debate surrounds the merits of both types of school calendars. Hence, feedback regarding the influence of the type of school calendar, if any exists, on the eighth grade promotion rates would be useful for Wake County school leaders during their efforts to plan for the future.

The following sub-groups of students involved in this study are the source of the final recommendation: academically gifted, minority, and special education. To be more specific, this study evaluated the promotion/retention data using total sub-groups. However, in the future, the value of the results of a study of this nature would be increased by analyzing these sub-groups in greater detail. This task could be accomplished by dividing the academically gifted and special education sub-groups into smaller groups based on their specific special needs related to academics. Furthermore, separate categories of minority students based on their unique ethnic characteristics or nationalities could be formed.

Analyses involving these new categories would increase the specificity of the results generated by the study. As a result, Wake County school leaders could focus their efforts on specific sub-groups in a more effective and efficient manner capable of increasing the success rates for all students with regard to the new eighth grade promotion standard. In other words, this study's results focused on six sub-groups of students; however, the academically gifted, minority, and special education categories need to be stratified to a

greater extent to insure the identification of all potential problems experienced by eighth graders with these demographic characteristics.

## Works Cited

- Apple, Michael W. EDUCATING THE "RIGHT" WAY. New York: RoutledgeFalmer, 2001.
- Balitewicz, Thomas F. "The Long-term Effects of Grade Retention." ERIC, 1998. ED 424616.
- Banks, Karen. *Estimating the Impact of the New Promotion / Intervention Policy*. Raleigh, NC: WCPSS Print Shop, 2000.
- Barnett, Katherine P., et al. "Grade Retention Among Students with Learning Disabilities." Psychology in the Schools 33.4 (1996): 285.
- Becker's Theory*. <http://www.harlingen.tstc.edu/pages/soci/c05prsnt/tsld031.htm>.
- Colby, Susan S. "Retention and Its Effects on Low Level Readers." ERIC, 1998. ED 417382.
- Collins, Sally. "Stages of Development." Ravenscroft School.
- Darling-Hammond, Linda. "Alternatives to Grade Retention." The School Administrator 55.7 (1998): 18-20.
- Darling-Hammond, Linda. "Avoiding Both Grade Retention And Social Promotion." The Education Digest 64.3 (1998): 48-49.
- Educational and Curricular Restructuring and the Neo-liberal and Neo-conservative Agendas: Interview with Michael Apple*. [www.curriculosemfronteiras.org](http://www.curriculosemfronteiras.org).
- Edwin M. Schur. <http://www.criminology.fsu.edu/crimtheory/schur/htm>.
- Fagar, Jennifer, and Rae Richen. "When Students Don't Succeed: Shedding Light on Grade Retention. By Request Series." ERIC, 1999. ED 431865.

Foster, Janet E. "Reviews of Research: Retaining Children in Grade." Childhood Education 70.1 (1993): 38-40.

George, Catherine. "Beyond Retention. A Study of Retention Rates. Practices, and Successful Alternatives in California. Summary Report." ERIC, 1993. ED 365005.

Grant, Jim. "Time on Their Side." American School Board Journal 184.1 (1997): 33-35.

Guttek, Gerald L. EDUCATION IN THE UNITED STATES: AN HISTORICAL PERSPECTIVE. Needham Heights, MA: Allyn and Bacon, 1991.

Hair, J. F., et al. Multivariate Data Analysis. New Jersey: Prentice Hall, 1998.

Harrington-Lucker, Donna. "Retention vs. Social Promotion." The School Administrator 55.7 (1998): 7-12.

Howard Becker. <http://www.harlingen.tstc.edu/pages/soci/c05prsnt/tsld030.htm>.

Howard Becker's Labeling Theory. <http://www.criminology.fsu.edu/crimtheory/becker.htm>.

James, Rhonda, and Deidre Powell. "The Social Promotion Epidemic." ERIC, 1997. ED 430281.

Jimerson, Shane R. "On the Failure of Failure: Examining the Association between Early Grade Retention and Education and Employment Outcomes During Late Adolescence." Journal of School Psychology 37.3 (1999): 245-247.

Johnson, Eugene R., et al. "The Effects of Early Grade Retention on the Academic Achievement of Fourth-Grade Students." Psychology in the Schools 27.4 (1990): 333.

Kaczala, Caroline. "Grade Retention: A Longitudinal Study of School Correlates of Rates of Retention." ERIC, 1991. ED 337532.

*Key Assumptions of Labeling Theory.*

<http://www.nwmissouri.edu/nwcourses/martin/deviance/labeling/sld005.htm>.

Kliebard, Herbert M. "The Drive for Curriculum Change in the United States, 1890-1920.

Part I-The Ideological Roots of Curriculum as a Field of Specialization." Journal of Curriculum Studies. 11.3 (1979): 191-202.

*Labeling Theory: Becker.* <http://www.harlingen.tstc.edu/pages/soci/c05prsnt/tsld029.htm>.

*Labeling Theory Lecture.* Calvin College Criminal Justice Program.

<http://www.calvin.edu/academic/crijus/courses/label.htm>.

Lenarduzzi, Grant P. and T.F. McLaughlin. "The Effects of Nonpromotion in Junior High School on Academic Achievement and Scholastic Effort." ERIC, 1990. EJ 417980.

Levine, Daniel U., and Allan C. Ornstein. Foundations of Education. Boston: Houghton Mifflin Company, 1989.

*Log-Linear, Logit, and Probit Models.* <http://www2.chass.ncsu.edu/garson/pa765/logit.htm>.

Martinez, Barbara, and Judith A. Vandergrift. "Failing Students- Is It Worth the Cost? Issue Paper # 3." ERIC, 1991. ED 359666.

McCoy, Ann R., and Arthur J. Reynolds. "Grade Retention and School Performance: An Extended Investigation." Journal of School Psychology 37.3 (1999): 274.

Meisels, Samuel J., and Fong-ruey Liaw. "Failure in Grade: Do Retained Students Catch Up?" Journal of Educational Research 87.2 (1993): 69-76.

Natriello, Gary. "Failing Grades for Retention." The School Administrator 55.7 (1998): 14-15.

North Carolina Department of Public Instruction (NCDPI). *Minutes of April 1, 1999*

- Meeting*. Raleigh, N.C.: NCDPI Print Shop, 1999.
- North Carolina Department of Public Instruction (NCDPI). *Draft 10-Proposed Stateside Student Accountability Standards*. Raleigh, N.C.: NCDPI Print Shop, 1999.
- North Carolina Statewide Student Accountability Standards- A Glance*. North Carolina Department of Public Instruction.
- [http://www.ncpublicschools.org/student\\_promotion/glance.html](http://www.ncpublicschools.org/student_promotion/glance.html).
- Norton, M. Scott. "Practical Alternatives to Student Retention." Contemporary Education 61.4 (1990): 204-206.
- Olson, Carl O. "Is a Ban on Social Promotion Necessary?" The School Administrator 56.11 (1999): 48.
- "Passing on Failure: District Promotion Policies and Practices." ERIC, 1997. ED 421560.
- Pedhazur, Elazar J. Multiple Regression in Behavioral Research: Explanation and Prediction. New York: Harcourt Brace College Publishers, 1997.
- Pierson, Louisa H., and James P. Connell. "Effect of Grade Retention on Self-System Processes, School Engagement, and Academic Performance." Journal of Educational Psychology 84.3 (1992): 300-306.
- Pipho, Chris. "The Stings of High-Stakes Testing And Accountability." Phi Delta Kappan 81.9 (2000): 645.
- Pipho, Chris. "Summer School: RX For Low Performance?" Phi Delta Kappan 81.1 (1999): 7-8.
- Reynolds, Arthur J. "Grade Retention and School Adjustment: An Explanatory Analysis."

- Educational Evaluation and Policy Analysis 14.2 (1992): 101-102.
- Reynolds, Barbara/Alamance-Burlington School System (ABSS). *Grade 8*, Burlington, N.C.: ABSS Print Shop, 2000.
- Robertson, Anne S. "When Retention Is Recommended, What Should Parents Do? ERIC Digest." ERIC, 1997. ED 408102.
- Rodney, Laxley W., et al. "Variables Contributing to Grade Retention Among African American Adolescent Males." Journal of Educational Research 92.3 (1999): 185-188.
- Rothstein, Richard. "Where Is Lake Wobegone Anyway? The Controversy Surrounding Social Promotion." Phi Delta Kappan 80.3 (1998): 195-197.
- Santrock, John W. Adolescence: An Introduction. Madison, Wisconsin: Brown & Benchmark Publishers, 1993.
- Setencich, Jill. "The Impact of Early Grade Retention on the Academic Achievement and Self-Esteem of Seventh and Eighth Grade Students." ERIC, 1994. ED 393026.
- Shepard, Lorrie A., and Mary Lee Smith. "Synthesis of Research on Grade Retention." Educational Leadership 47.8 (1990): 84-87.
- Skills for Adolescence. Granville, Ohio: Quest International, 1992.
- Student Accountability Standards What the..., and How They Will Affect Eighth Graders*. North Carolina Department of Public Instruction.
- [http://www.ncpublicschools.org/student\\_promotion/sas8th.html](http://www.ncpublicschools.org/student_promotion/sas8th.html).

“Teachers Favor Standards, Consequences...and a Helping Hand.” American Educator 20.1 (1996): 19.

Thomas, Amanda McCombs, et al. “Early Retention: Are There Long-Term Beneficial Effects?” Psychology in the Schools 29.4 (1992): 342.

Tozar, Steven E., et al. School and Society. Boston, MA: McGraw Hill Inc., 1998.

Wake County Public School System (WCPSS). *Promotion and Intervention*. Raleigh, N.C.: WCPSS Print Shop, 2000.

Wake County Public School System (WCPSS). *Promotion and Intervention Policy*. Raleigh, N.C.: WCPSS Print Shop, 2000.

Wake County Public School System (WCPSS). *Promotion and Retention of Students*. Raleigh, N.C.: WCPSS Print Shop, 1995.

Wake County Public School System (WCPSS). *Retention: Criteria and Procedures*. Raleigh, N.C.: WCPSS Print Shop, 1992.

Walters, Deneen M., and Sherry B. Borgers. “Student Retention: Is It Effective?” School Counselor 42.4 (1995): 308.

*WCPSS Overview*. Wake County Public School System.

<http://www.wcpss.net/overview.html>.

*WCPSS School Policies*. Wake County Public School System. [www.wcpss.net](http://www.wcpss.net).

Wellford, Charles F., and Ruth A. Triplett. *The Future of Labeling Theory: Foundations and Promises*. <http://www.criminology.fsu.edu/crimtheory/blomberg/thefuture.html>.

Williams, Robert E. “A Once-Skeptical Administrator Finds Favor in Retention.” The School Administrator 55.7 (1998): 28.

Appendix 1

Descriptions of Individual Schools in Terms of 2000-2001 Eighth Grade Promotion Rates

| School                                | 1   | 2   | 3   | 4   | 5   | 6   | 7   | 8   | 9   | 10  | 11  | 12  |
|---------------------------------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| <b>academically gifted # promoted</b> | 16  | 29  | 21  | 51  | 81  | 67  | 138 | 148 | 86  | 113 | 106 | 68  |
| <b>academically gifted % promoted</b> | 100 | 100 | 100 | 100 | 99  | 100 | 100 | 99  | 100 | 100 | 100 | 100 |
| <b>female # promoted</b>              | 139 | 125 | 85  | 109 | 143 | 130 | 128 | 208 | 200 | 190 | 165 | 158 |
| <b>female % promoted</b>              | 95  | 91  | 98  | 93  | 97  | 97  | 100 | 99  | 98  | 99  | 98  | 99  |
| <b>free/reduced lunch # promoted</b>  | 94  | 68  | 49  | 55  | 80  | 53  | 43  | 55  | 20  | 38  | 38  | 38  |
| <b>free/reduced lunch % promoted</b>  | 93  | 85  | 91  | 89  | 99  | 95  | 96  | 95  | 77  | 95  | 95  | 93  |
| <b>male # promoted</b>                | 127 | 105 | 110 | 133 | 142 | 128 | 132 | 186 | 178 | 227 | 181 | 175 |
| <b>male % promoted</b>                | 91  | 88  | 95  | 92  | 99  | 98  | 97  | 98  | 95  | 97  | 98  | 97  |
| <b>minority # promoted</b>            | 136 | 95  | 87  | 101 | 112 | 87  | 126 | 147 | 81  | 102 | 86  | 98  |
| <b>minority % promoted</b>            | 91  | 87  | 96  | 89  | 97  | 96  | 98  | 98  | 89  | 96  | 97  | 96  |
| <b>special education # promoted</b>   | 65  | 45  | 36  | 45  | 42  | 34  | 36  | 73  | 46  | 61  | 38  | 30  |
| <b>special education % promoted</b>   | 94  | 88  | 88  | 85  | 95  | 92  | 92  | 99  | 85  | 95  | 86  | 94  |

Source: Wake County Public School System, Evaluation and Research Department.

<sup>a</sup> All students included in these figures were either promoted or retained at the conclusion of the 2000-2001 school year.

## Appendix 2

## Binary Coding System Used to Analyze Correlational Relationships in Sub-question #3

| <b>Variable</b>            | <b>Coded Value</b> |
|----------------------------|--------------------|
| promoted                   | 1                  |
| retained                   | 0                  |
| free/reduced lunch         | 1                  |
| non-free/reduced<br>lunch  | 0                  |
| non-minority               | 1                  |
| minority                   | 0                  |
| male                       | 1                  |
| female                     | 0                  |
| academically gifted        | 1                  |
| non-academically<br>gifted | 0                  |
| special education          | 1                  |
| non-special<br>education   | 0                  |

## Appendix 3

## Binary Coding System Used to Analyze Results of Logit Regression in Sub-question #4

| <b>Variable</b>            | <b>Coded Value</b> |
|----------------------------|--------------------|
| promoted                   | 1                  |
| retained                   | 0                  |
| non-free/reduced<br>lunch  | 1                  |
| free/reduced lunch         | 0                  |
| minority                   | 1                  |
| non-minority               | 0                  |
| female                     | 1                  |
| male                       | 0                  |
| non-academically<br>gifted | 1                  |
| academically gifted        | 0                  |
| non-special<br>education   | 1                  |
| special education          | 0                  |