NINTH GRADE STUDENT SUCCESS: AN ANALYSIS OF A CREDIT RECOVERY PROGRAM

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The purpose of the study was to determine the extent to which a credit recovery program improved the academic success for high school freshmen. For the purpose of this study, academic success was defined as whether or not the student advanced from 9th to 10th grade. A total of 255 students from two junior high schools and one comprehensive high school were included in the study. Independent variables included program, gender, ethnicity, socioeconomic status, TAKS Reading/Language Arts results, and TAKS Mathematics results. A review of related literature provided background information regarding the issues surrounding high school freshmen, dropouts, grade retention, and effective intervention programs. This quantitative study utilized descriptive statistics and logistic regression to analyze the relationship between the independent variables and student success as measured by whether or not the student advanced from ninth to tenth grade. In addition, the study examined the odds of success if participating in the credit recovery program. Sources of data included Incomplete and Failure Listing, Ninth Grade Advisor Listing, Tenth Grade Advisory Listing, and the Student Roster-Fall Collection. The Ninth Grade Success Initiative Program Evaluation for Cycles 6, 7, and 9 provided the individual student results of participation in the program. Levels of significance were set at the .05 level. The findings of this study indicated that no statistically significant relationship existed between participation in the credit recovery program, gender, ethnicity,
socioeconomic status, TAKS Reading/Language Arts results, TAKS Mathematics results, and advancing from 9th to 10th grade. It was concluded that further study would be needed to determine the most effective means for providing academic assistance to ninth grade students.
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CHAPTER 1
INTRODUCTION

The academic success that students experienced in the freshman year of high school was of critical importance to their future. Research suggested that dropping out of school was a process rather than a single event, with no single harbinger to blame. A negative school experience influenced many students to leave before they received a diploma and was caused by one or multiple factors (Harvard, n.d.). The challenge for the educational system was how to keep students in school while preparing them for graduation, regardless of their economic status, race, parents, or educational background. Nationally, one in five children came from a household headed by an immigrant; nearly one-fifth of American children live in poverty (Olson, 2000). Five out of every 100 young adults enrolled in high school in October 1999 left school before October 2000 without successfully completing a high school program (NCES, 2001).

Maintaining a healthy balance between decreasing the dropout rate and increasing educational excellence standards continued to baffle educators as they struggled with increased accountability standards both at the state level and national level. High-stakes tests such as the Texas Assessment of Academic Skills (TAAS) were cited as a major contributing factor to the retention of more students in 9th grade, making it more likely that they will drop out of school (Haney, 2001). In spite of increased accountability standards, in 2000-2001 the number of dropouts in grades 7 through 12 from Texas Public Schools decreased by 25.1%, to 14,563, down from 23,457 in 1999-2000. In 2000-2001, the largest number of dropouts (4,957) was from 9th grade, down from 7,630 in 1999-2000. This decrease accounted for the largest
percentage point decrease of all grades (TEA, 2002).

After recognizing the critical nature of the completion rate of high school students, the Texas Legislature approved funding under the Basic Skills Program for High School Students, also known as the Ninth Grade Success Initiative grant program in 1999. The legislature appropriated a total of $42.5 million in each year of the biennium - $85 million over the two-year period - to be distributed to school districts through a competitive grant process (TEA, 2001d). The purpose of the program was to increase graduation rates in Texas public schools by reducing the number of students who were retained in the ninth grade or dropped out of school. In order to qualify, a student must have been in jeopardy of not earning enough credits to advance to 10th grade, have been retained in junior high school, or have accumulated excessive absences (TEA, 2000). Money, without sound proven programs, cannot solve a problem that has been an enigma for decades. An important, unanswered question for school districts, administrators, and teachers concerned the extent to which future student achievement was affected by a credit recovery program.

Prior to the implementation of programs such as the Ninth Grade Success Initiative, grade retention was readily used for students who failed to demonstrate academic success. Retention was not the answer to academic weaknesses experienced by students. Retaining a child in the same grade for a second year was neither academically nor economically justified, according to a report from the University of Maine College of Education and Human Development (“The impact,” 1997). There was a strong association between grade retention and dropping out of school. As a remediation strategy, retention does not appear to improve school performance
(Roderick, 1995). The stigma of failure and its affects far outweighed the benefits, and only increased the likelihood of the student dropping out of school (NCES, 1995a). The National Educational Longitudinal Survey of 1988 found that one-fifth of eighth graders had repeated at least one grade, with the proportion climbing to one out of three eighth graders from low income families (NCES, 1995b). TEA records showed that 52,709 students or 17.6% of the 9th grade class were retained in 1997-1998. That year, 7,750 9th grade students dropped out of school accounting for the largest number of dropouts for any grade level (TEA, 1999b).

The Texas Education Agency enlisted the aide of the Texas Center for Educational Research in compiling a report on the state results of the program from spring 2000 to summer 2001 (TCER, 2002). The report included the results of the actual implementation of the program each semester. Missing from the reported data was the evidence of the students’ future success on Texas Assessment of Academic Skills (TAAS) and credit accrual in mathematics and English language arts courses in the years following the program. A complete study that would examine the components and characteristics of a credit recovery program funded by the Ninth Grade Success Initiative (NGSI) grant program would aide educators in identifying new strategies and in improving existing strategies for 9th grade at-risk students.

Statement of the Problem

The problem of the study was to determine if students who received concentrated instruction in a credit recovery program during their 9th grade year demonstrated increased academic success enabling them to advance to the 10th grade the following school year.
Purpose of the Study

The purpose of the study was to determine the extent to which a credit recovery program funded through the Ninth Grade Success Initiative grant program improved the academic achievement for 9th grade students, therefore leading to future success as measured by advancing to 10th grade. The academic performances of eligible students who chose to participate, as well as eligible students who choose not to participate in a credit recovery program were examined.

There was substantial literature that indicates that grade retention showed few positive benefits to the student and in fact, produced negative social implications such as poor attendance and dropping out of school (Hauser, 1999; Roderick, 1995; Shepard & Smith, 1987). A more limited body of research existed that highlighted the positive effects of grade retention, mostly in early primary grades. Studies had shown significant academic gains in first and second-grade students in the year following retention (Alexander, Entwisle, & Dauber, 1994; Jimerson & Schuder, 1996; Lorence, Dworkin, Toenjes, & Hill, 2002). Interventions to course failure and retention provided through the funding of the Ninth Grade Success Initiative grant were intended to provide students with an accessible, free means of recovering credits so that they earned the credits needed to be promoted to tenth grade. Archived student demographic data as well as student data reported at the end of each session of the credit recovery program were utilized in the analysis. The study examined the likelihood of a student being successful as related to participation in the NGSI credit recovery program, gender, ethnicity, socioeconomic status, TAKS Reading/Language Arts results, and TAKS Mathematics results.
Research Question

To carry out the purpose of this study, the following research question was examined:

What was the relationship between participation in the Ninth Grade Success Initiative credit recovery program, gender, ethnicity, socioeconomic status, TAKS Reading/Language Arts results, TAKS Mathematics results, to academic success?

Definitions and Terms

1. **Academic Excellence Indicator System (AEIS):** The statewide system used to report state, local district and individual campus performance. The AEIS report is produced by the Texas Education Agency (TEA) through the Division of Performance Reporting, Office of Policy Planning and Research. Data reported included Texas Assessment of Academic Skills (TAAS) scores, revenue, expenditures, student demographics, and staff make-up. This system also reported the dropout data and attendance information. The data was disaggregated by student groups and by test objectives and indicators. In addition, the AEIS provided descriptive information for the state on finances, programs, and staff.

2. **Academic Success:** Defined as a student advancing from 9th to 10th grade at the end of the ninth grade year.

3. **At-Risk Students** in Texas, as defined by Senate Bill 702, included each student who is under 21 years of age and who:
   - Was in grade 7, 8, 9, 10, 11, or 12 and did not maintain an average equivalent to 70 on a scale of 100 in two or more subjects in the foundation curriculum during
a semester in the preceding or current school year or was not maintaining such an average in two or more subjects in the foundation curriculum in the current semester;

- Was not advanced one grade level to the next for two or more school years;
- Did not perform satisfactorily on an assessment instrument administered to the student under Subchapter B, Chapter 39, and who had not in the previous or current school year subsequently performed on that instrument or another appropriate instrument at a level equal to at least 110 percent of the level of satisfactory performance on that instrument;
- Was pregnant or was a parent;
- Had been placed in an alternative education program in accordance with Section 37.006 during the preceding or current school year;
- Had been expelled in accordance with Section 37.007 during the preceding or current school year;
- Was currently on parole, probation, deferred prosecution, or other conditional release;
- Was previously reported through the Public Education Information Management System (PEIMS) to have dropped out of school;
- Was a student of limited English proficiency, as defined by Section 29.052;
- Was in the custody or care of the Department of Protective and Regulatory Services or has during the current school year, been referred to the department by a school official, officer of the juvenile court, or law enforcement official;
- Was homeless, as defined by 42 U.S.C. section 11302, and its subsequent
amendments; or

- Resided in the preceding school year or resides in the current school year in a residential placement facility in the district, including a detention facility, substance abuse treatment facility, emergency shelter, psychiatric hospital, halfway house, or foster group home.

4. **Attrition:** Referred to the percent of students lost from public high school enrollment prior to graduation.

5. **Annual Dropout Rate:** In Texas was calculated by dividing the number of dropouts by the cumulative enrollment in grades 7-12.

6. **Cohort:** In Texas was defined as a group of students who entered grade 9 in the same year.

7. **Completers:** In Texas high schools included those entering ninth graders who had graduated, earned a GED certificate, or were still enrolled toward completion in the fall after their expected graduation year.

8. **Dropout:** For 1999-2000 in Texas was defined as a student from grades 7-12 reported to have left school for any of the following reasons:

   - a student who was absent without an approved excuse or documented transfer and did not return to school by fall of the following year;
   - a student who completed the school year but failed to re-enroll the following year;
   - student who left school to pursue a job or enter the military;
   - a student who left school for reasons related to academic performance;
   - a student who left school because of pregnancy or marriage;
   - a student from a special education, ungraded, or alternative education program
who left school;

- a student who left school and entered a program not qualifying as an elementary/secondary school (e.g., cosmetology school); or
- a student enrolled as a migrant whose whereabouts were unknown.

9. **Economically Disadvantaged Students:** In a sub-population known as "Economically Disadvantaged" if they were eligible for the free or reduced lunch program based on family income. In addition, these students were placed in a separate sub-population in the PEIMS reports, TAAS data, and dropout information.

10. **Grade retention:** The term used for keeping a student in the same grade for the next school year.

11. **Junior High School:** In the study is a school where students enrolled were in grades 7, 8, and 9.

12. **Longitudinal Completion/Student Status Rate:** Tracked students beginning with grade 9. Students who transferred into the district over the years are added to the original class as it progresses through the grade levels; students who transferred out are subtracted from the class. The rate had four components: high school graduates, General Equivalency Development (GED) certificate recipients, continuing students and dropouts. Students were classified based on their status the fall following their expected graduation date. The longitudinal rate was based on the same definition of dropouts used in the TEA dropout rate.

13. **Public Education Information Management System (PEIMS):** Included information on students including social security number, demographic
information, attendance, and TAAS scores.

14. **Retention**: The term used for keeping a student in the same grade for the next school year.

15. **Texas Assessment of Academic Skills (TAAS)**: The mandatory, statewide test of Texas public school students in reading, writing, mathematics, science, and social studies used until spring 2003.

16. **Texas Assessment of Knowledge and Skills (TAKS)**: The name for the statewide, mandatory test of public school students that was implemented in the spring of 2003 to replace TAAS.

**Limitations**

The proposed study was conducted using 9th grade students who had previously or were currently failing at least one core subject in the fall or spring. The sample was limited to approximately 570 students who qualified for the NGSI credit recovery program based on failing grades. A total of 255 students for which complete data were available were included in the analysis. Due to the qualifying guidelines, the researcher was not able to establish random sampling groups to control for socioeconomic status, gender, or ethnicity. Self-selection bias, the choice of the student to participate or not, was also a limitation in this study.

The current study did not explore the specific methods, materials, or instructional strategies utilized in the credit recovery program. Additionally, the program data included information for student from three different campuses that may, or may not, have used identical methods, materials, strategies, or activities for delivery of the courses.
Delimitations

The proposed study was deliberately limited to a credit recovery program conducted with 9th grade students who had failed one or more core subjects in the fall or spring semesters in a suburban school district.

Significance of the Problem

This study focused on the student outcome of a credit recovery program in a suburban school district. The study determined to what extent participation in the program contributed to future academic success as defined as advancing to tenth grade. Researchers and educators were baffled when attempting to determine the characteristics of the typical dropout (NCES, 1995b; Slavin, Karweit, & Madden, 1989). Although race was only one contributing factor, educators in the United States, and especially Texas, must carefully consider the impact that race, compounded by the parents' low socioeconomic level, can have on the likelihood that students will complete high school. Hispanic students were more likely to drop out than African Americans were with nearly 40% dropping out before the eighth grade (Schwartz, 1995). Asian American and white students were less likely to drop out than either Hispanic or African American students. Nearly one in three Hispanic students failed to graduate from high school (School Practices, 2000; Slavin & Calderon, 2001). According to the Population Reference Bureau (2000), 51% of minorities were concentrated in five states, one of which was Texas. By the year 2020, more than 20% of the children and youth in the United States were projected to be Hispanic (Garcia, 2001). In a study of retention rates for Texas students the Texas Education Agency (1999b) found that Hispanic and African American students were retained at average rates over twice that of white
students. With about 5 out of 10 students enrolled in Texas public schools being either Hispanic or African American, clearly it was time to explore the effectiveness of possible programs that support academic achievement for all students (TEA, 1999b).

The study was significant in that it provided descriptive data necessary to determine the impact of the Ninth Grade Success Initiative credit recovery program on students’ academic success. In addition, the study contributed to the knowledge base relative to students who are at risk of dropping out of high school.

Organization of the Dissertation

This dissertation was organized in five chapters. Chapter 1 provided an introduction, statement of the problem, definition of terms, limitations and delimitations, purpose of the study, research questions, and significance of the problem. Chapter 2 reviewed the relevant literature. Chapter 3 explained the materials and methods used in the research. Chapter 4 included the presentation of the results with an analysis of the data. Chapter 5 provided the conclusions of the study and recommendations for further study.
CHAPTER 2
REVIEW OF THE LITERATURE

The educational system was faced with the challenge of providing the academic support necessary to assure that ninth grade students experience success in school, with high school graduation as the ultimate goal. Recognizing the critical issues surrounding a student during the 9th grade year, the legislature of Texas created the Ninth Grade Success Initiative (NGSI) grant program, also known as the Basic Skills Program for High School Students. The purpose of the program was to provide funding to Texas school districts to implement programs designed to reduce the number of students who are retained in the 9th grade or who drop out.

This study examined the contributing issues surrounding 9th grade students who were likely to experience academic failure, retention, or drop out of school as related to the support programs provided through the Ninth Grade Success Initiative. Organized into five sections, this chapter reported the literature relevant to the research purposes of this study. These sections included: review of the literature, effects of grade retention on student success, defining the issue of dropouts, characteristics of effective programs for at-risk students, and Texas dropout information as related to the purpose of the Ninth Grade Success Initiative grant program.

Background of the Study

A National Dilemma

The issue of the academic failure of students was certainly not a new problem, but more critical than ever before due to rising attrition and retention rates. Since the publication of A Nation at Risk (U.S. Department of Education, 1983), the issues of the
quality of education in the United States had been at the forefront in the minds of Americans. That report, and the research it inspired, laid the foundation for efforts to improve the quality of education in public schools across the nation. It was after the release of *A Nation at Risk* and the report's condemnation of schools as mediocre, that educators and advocates pointed to the problem of children and their families using the term "at-risk" to describe children and their home situations (Brandt, 1992-1993).

In 2000, there were 3.8 million 16- through 24-year-olds who, although not enrolled in school, had not yet completed a high school program. Overall, 10.9% of the 34.6 million 16- through 24-year-olds in the United States were dropouts (Kaufman, Alt, & Chapman, 2001). In the 1970s, when the parents of today's high school students entered the workforce, a high school education still served as an entryway to a number of promising career paths. Thirty years later, technological advances in the workplace have increased demand for a skilled labor force to the point where a high school education serves more as a minimum requirement for entry into the labor force (Kaufman et al., 2001).

In 1990, at the Education Summit in Charlottesville, Virginia, the second goal adopted aimed at increasing the high school graduation rate to 90% by the year 2000 (Howley & Huang, 1991). Although most estimates on the dropout rate in the United States have run about 86 to 90%, a 2001 report from the Harvard Graduate School of Education estimated that between 70 and 75 percent of students graduate from U.S. schools (Farah, 2001). In Texas, the problem of school-age children dropping out of school was a serious one. In 1999-2000 the number of dropouts in grades 7-12 from Texas public schools was 23,457. In 2000, 85.5% of the grade 9 cohort of 1996-1997
graduated or received a General Educational Development (GED) certificate. An additional 7.3% continued in school the following year (TEA, 2001b).

Impact of Failure

Grade retention had been utilized for decades for students who do not meet the standards for promotion, although the majority of the research showed that retention has serious negative effects on students. Students retained and retaught the same material for another year, using the same instructional practices usually do not catch up with students in the same grade who are promoted to the next grade. (U.S. Department of Education, 1999a). The majority of research on the benefits of grade retention is limited to studies involving students in the early primary grades with benefits that are few and primarily short-term (Alexander, Entwisle, & Dauber, 1994; Gottfredson, Fink, and Graham, 1994; Lorence, Dworkin, Toenjes, & Hill, 2002). In 1998-1999 in Texas, a total of 170,534 students in kindergarten through grade 12 were retained in grade, for an overall retention rate of 4.7%. Across all grades, grade 9 had the highest retention rate at 18.8%. That accounted for one in five ninth graders repeating the grade (TEA, 2001b). Research indicated that retention has negative social implications for students. (Owings & Magliaro, 1998; Roderick, 1995; Rumberger, 1987; Shepard & Smith, 1990). The permanency of retention effected self-esteem and school attachment that may override short-term benefits (Roderick, 1995). Rumberger (1987) suggested that retention contributes to permanent disengagement from school.

Some educationally challenged students chose leaving school over being retained. Dropping out of school was not only risky for the teen, the family, and the community as a whole, but was also an indication of need for improvement in the
schools (TEA, 1999a). The definition of "dropout" varied from state-to-state, and the mobility of students made counting dropouts accurately nearly impossible. It was important, however, to use the same set of criteria for identifying potential dropouts so that effective prevention strategies could be replicated (Asher, 1987a). In addition to grade retention, factors such as socioeconomic status, family composition, race, attendance record, disciplinary record, and poor academic performance were associated with students who dropout of school (Frase, 1987; Schwartz, 1995; TEA, 1999a). Although a number of factors were correlated with dropping out, it did not necessarily mean that these factors cause individuals to dropout (Finn, 1987). In Texas, of the 15,798 students who were identified by school districts for leaving school in 1997, 55.5% listed a school-related concern, such as poor attendance or failing grades; 12.4% listed a job-related concern, such as finding a job or joining the military; 8.2% listed a family-related concern, such as pregnancy or marriage; and 23.9% listed other concerns, such as drug or alcohol abuse problems, homelessness, or enrollment in a non-state-approved alternative program (TEA, 1999a).

Accountability, in particular, high-stakes testing linked to promotion and graduation for the nation's schools, districts, educators, and students was a potential contributing dropout factor. The political ramifications of widespread student failures were evident as states toughen academic standards for all students and implement high-stakes testing (Steinberg, 1999). Viewed by policy makers as a way to improve the quality of schools, opponents contend high-stakes tests alienated students, contributed to the dropout rate, and impacted blacks, Latino, English-language learners, students with disabilities, and low socioeconomic students at a high rate (Heubert, 2000). In a
comprehensive study under the direction of the National Center for Education Statistics, Lillard and DeCicca (2000), found that an average increase in stricter high school graduation requirements resulted in a 3 to 7% jump in the high school dropout rate. The researchers recommended that states look for more ways to identify students at-risk and consider instituting or adapting existing programs to support students before they drop out. As suggested by the research of Thompson and Cunningham (2000), both retention and social promotion, if not accompanied by effective programmatic intervention, failed to provide long-term benefits for low-performing students.

Educational prevention programs must be tailored to fit the needs of those students identified as at-risk of dropping out of school. Identification of these factors in the early years of schooling, however, aided educators in compiling available data on students in order to determine who were potentially at-risk of dropping out of school. Once students had been identified, appropriate interventions measures could be implemented. Levin (1987) asserted that schools should accelerate their instruction for students, regardless of supposed abilities. He argued that all students should be challenged with the same demanding curriculum as the "gifted and talented" student. Similarly, Darling-Hammond (1998) and Weelock (1998) supported the development of alternative approaches that provide high-achieving environments as well as support and assistance for students. Early identification and intervention of at-risk students had been identified as a critical tool for dropout prevention (Presson & Bottoms, 1992; Slavin, Karweit, & Wasic, 1992-93; U.S. Department of Education, 1999). Programs encompassing one-on-one tutoring, before and after school tutoring, mandatory summer school, and pull-out programs were among the intervention strategies utilized.
by schools in an effort to deter dropouts (James, 1995).

Effects of Grade Retention on High School Completion

Since the 1970s, grade retention policies have fluctuated from one extreme to the other. During the 1970s, the prevailing philosophy was that social promotion was most beneficial to youths (Rose, 1983). With the 1980s and the publication of *A Nation at Risk*, policies of social promotion came under heavy scrutiny. This report, with declining student achievement test scores as evidence, claimed that lenient social promotion policies had caused a decline in the quality of American education (Roderick, 1995). In response, many school systems answered with the implementation of strict promotion policies tied to scores on skills-based tests. In 1997, President Clinton, in his State of the Union Address, called for an end to what he called "social promotion" and the movement for higher standards. He issued a presidential directive based on lessons from research and practice in 1998 to the Secretary of Education, Richard W. Riley, in which he called for the production and wide dissemination of guidelines for educators and policymakers on effective approaches to ending social promotion. In addition, states and school districts were to be given help in using federal education resources to implement effective practices (U.S. Department of Education, 1999).

Multiple studies conducted over the last few decades suggested that retaining students did more harm than good (TEA, 1993; Grissom & Shepard, 1989; Holmes, 1989; Roderick, 1999a; Shepard & Smith, 1990). C. Thomas Holmes' (1989), in his meta-analysis of 63 empirical studies, indicated that in 54 of the studies, retained students actually performed lower on tests of achievement than promoted students in the year after retention occurred. Holmes noted that retention harmed students'
achievement, attendance record, personal adjustment in school and attitude toward school. When Holmes specifically compared first grade retainees to those who were promoted, he found that students who were retained did not do as well as those who moved on. A year later, when the retainees had finished second grade, they still fell short of the second grade performance of their promoted peers.

In three large-scale studies, involving 20,000 to 80,000 students each, Grissom and Shepard (1989) examined the retention-dropout relation after controlling for achievement. They found that with equally poor achievement and controlling for other background characteristics associated with dropping out, students who repeated a year were 20 to 30% more likely to drop out of school. Shepard and Smith (1990) reported that dropouts were five times more likely to have repeated a grade than were high school graduates. They estimated that by 9th grade approximately half of all students in the United States had flunked at least one grade or were no longer in school.

In Texas, the research regarding the issue of the achievement gap between high- and low-performing students was synthesized in Closing the Gap: Acceleration vs Remediation and The Impact of Retention in Grade on Student Achievement (1993), a document prepared by the Texas Education Agency’s Division of Exemplary Instruction. The authors concluded that, "…no other topic of educational research has generated a conclusion so unanimous as that generated by this (effects of retention) burgeoning body of evidence."

Since 1997, the Chicago Public School System had held back third, sixth, and eighth graders who did not meet a promotional test-score cut off after attending summer school to make up their scores. Evidence from a comprehensive study of the first two
years of the program found that the program did not work for either the students retained or the students promoted, and that the students retained achieved less than similar students who were promoted. The study found that only half of students marked for failure in the spring received passing grades after attending summer school. Retention was even less effective. Only a small minority of students retained was able to meet promotion standards at the end of the retained year (Roderick, 1999a).

The 1995 Current Population Survey (CPS) data (NCES, 1995c) confirmed earlier findings that students who were retained were at higher risk of dropping out of school. Twenty-four percent of retained youths aged 16-24 were status dropouts by 1995, compared to only about 10% of the young adults who were never retained. CPS data confirmed that youths whose last retention occurred in their early elementary grades were less at risk of dropping out than those retained in the later grades. However, youths that were retained in the early grades were more likely to drop out than their peers who were never retained. Transitions were peak times for retention with students most commonly retained at the end of the year after the transition into elementary school, into middle or junior high school, and into high school (Thompson & Cunningham, 2000).

While much was known about the negative effects of grade retention, a limited body of research found positive outcomes for specific programs that included grade retention. Since 1994, at least three major studies suggested that grade retention is not always detrimental to the student and could actually produce academic and social benefits.

In the Beginning School Study, Alexander, Entwisle, and Dauber (1994) tracked
800 students from the Baltimore City Public School System who began 1st grade in 1982. Students were randomly selected from 20 schools within the Baltimore system and followed for eight years. Retained students' academic performances, pre- and post-retention, were evaluated by using test scores and report card grades. Retainees' post-retention performances also were evaluated against their performance before retention, the performance of academically similar students who were promoted, the performance of all never-retained students, and the performance of students who were promoted but retained at a later grade level. The Johns Hopkins University research team determined that grade repeaters did better both during the retention year and for several years afterward. They concluded that retention appeared to be a reasonably effective practice, however, spending two years in a grade did not bring repeaters up to acceptable levels of performance. They found that most students who were held back did much better the second time through a grade, and for several years afterward they continued to show improvement over their standing before retention. Although the postretention academic performance of retained students remained lower than that of both the same-age and same-grade comparison groups, the performance gap between retained and nonretained students narrowed considerably from preretention levels up to the eighth year of school. This was especially the case for students retained in the second and third grades. A major finding in the study was that the retained students continued to show improvements in their level of self-regard and in their attitudes toward school, especially during the failed year.

In a study conducted in a school system that served predominantly African American students, Gottfredson, Fink, and Graham (1994) compared school attachment
and attitudes of retained sixth- and seventh-grade students to a matched sample of promoted students. Their study compared retained and promoted students with comparable academic achievement on the math and reading sections of the district's spring 1988 standardized achievement tests. Furthermore, at the end of each academic quarter teachers were asked to rate the disruption level and level of student attendance to work. The study revealed that retained students showed a greater attachment toward school and exhibited fewer negative school behaviors than similar achieving students who had been promoted do. They further argued that the retention of high-risk students could lead to a reduction of negative behaviors and a delay of behavioral problems. Additionally, while retained elementary school students experienced a difference in how their peers treated them, there was no evidence that the difference was harmful or negative. In fact, their research suggested that retained students enjoyed higher status than non-retained students did because it placed these students among younger students.

In Texas, the debate over the issue of retaining students who do not meet the standards for promotion prompted the Texas Education Agency, at the direction of the state legislature, to fund the study undertaken by Lorence, Dworkin, Toenjes, and Hill (2002) at the University of Houston's Sociology of Education Research Group. Since 1994, the researchers tracked the success rate of third grade students who were retained after failing the reading portion of the Texas Assessment of Academic Skills (TAAS) test. Lorence and his colleagues studied 10.2 million TAAS tests and found that in 1994, 20% of Texas third graders failed the reading section, yet only 1.2% of students were retained. The group found that over time the academic performance of these
students revealed that students retained in the third grade increased scores by approximately 20 points on the next year’s TAAS reading test. Those who were socially promoted showed little improvement. According to the researchers’ findings, not only did the retained student surpass the scores of the socially promoted in the following year, but also the retained students continued to out-perform the socially promoted in the next four years. Many of the socially promoted students continued to fail the TAAS until they were eventually retained in a later grade. Their research implied that both grade retention and social promotion practices resulted in improved academic achievement if low-achieving students were provided access to additional instructional resources.

Although some recent addition to the retention literature was less condemning of the practice, the positive long-term results of retention were still in question. What some researchers claimed as benefits, critics of grade retention viewed as neither particularly helpful nor harmful. Grade retention, with concentrated special programs, could help to narrow the achievement gap between retained students and those who were socially promoted. Schools and students would be better served to devote time and financial resources to early identification and intervention strategies in order to assist those students who lag behind (James, 1995; Presson & Bottoms, 1992; Slavin et al, 1992-93; U.S. Department of Education, 1999).

Defining the Issue of Dropouts

Despite the increased importance of a high school education, the high school completion rate for the nation increased only slightly over the last three decades. Dropout rates remained disturbingly high among certain populations, in certain parts of the country, and particularly in major cities (Johnston, 2001). The National Center for
Education Statistics (2001), the primary federal entity for collecting, analyzing, and reporting data related to education in the United States, reported that between 1972 and 1985 high school completion rates climbed by 2.6 percentage points. Since 1985, the rate had shown no consistent trend and fluctuated between 85 and 87%. This net increase of about 3 percentage points over 29 years represented slow progress toward improving the national high school completion rate (NCES, 2001). Overall, calculating an accurate dropout rate was nearly impossible due to variances in how dropouts are reported among states, districts, and even among schools within the same district (Gaustad, 1991).

In Texas, a student in grades 7 through 12, was defined as a dropout if the individual was absent without an approved excuse or documented transfer and did not return to school by the fall of the following year, or if he or she completed the school year but failed to reenroll the following school year (TEA, 2000). In other states, some institutions count as dropouts students who transferred to other schools, were hospitalized, took longer than four years to graduate, or admitted to college early. Some districts did not count students who left to get married, who attended for four full years, or who exceed the compulsory attendance age but had not fulfilled graduation requirements (Barber & McClellan, 1987). Without a clear, consistent method for identifying and classifying dropouts nationally, efforts to reduce the number of students who left school prior to graduation would be futile. Montecel (2000) reported that over the years Texas had simply reduced the dropout rate reported by changing the definition of a dropout rather than actually decreasing the number of dropouts. During the 1998-99 school year Texas reported that 59.7% of the students who left school
simply transferred to another school in Texas and 15.2% transferred to a school out-of-State (TEA, 2001a). Johnson (2000) established that district withdrawal records indicated only the student's intention to enroll, but enrollment records were not verified with the receiving school district. He maintained that the students never enrolled at another school but dropped out of school. According to Johnson (2000), contrary to Texas Education Agency figures, the attrition rate in Texas public schools had increased by 9 percentage points in 12 years from 33 percent in 1985-1986 to 42%t in 1997-1998. Some of these students may have entered private schools or passed the General Education Development tests (GED) but were not reported on PEIMS records.

A seminal study conducted by the National Center for Education Statistics, the National Education Longitudinal Study of 1988 (NCES, 1995b), provided much of the background for later studies. This longitudinal study provided national data on the characteristics of 8th grade students who dropped out prior to 10th grade. The study found the following eight characteristics to be consistently associated with school-leaving: gender, socioeconomic status, race/ethnicity, family composition, standardized achievement test scores, age and grade retention, days absent from school, having or expecting a child (James, 1995; NCES, 1995a).

**Gender**

Males were reported to have dropped out at a slightly higher rate than females (NCES, 1995a). However, this appeared to be a reversal of the pattern of earlier years. Until the late 1970s, the dropout rate for females exceeded the rate for males. A rise in the dropout rate for males through the early 1980s, coupled with a steady decline in the dropout rate for females, produced lower dropout rates for females (SEDL, 2001). In
Texas, males dropped out at a slightly high rate than females. More than twice as many males then females reported leaving school to pursue a job (TEA, 1999a). Males were more likely to be retained in each grade, ethnic group, and year. In 1998-1999 in Texas male students made up 61% of all students retained (TEA, 2001a).

Race/Ethnicity

Nationally, trends in high school completion rates for each racial/ethnic group had remained stable over the past twenty years. Completion rates for White students climbed from 86% in the early 1970s to about 90% in 1990. A relatively low percentage of Hispanic young adults completed high school programs. For example, in 2000, 64.1% of all Hispanic 18- through 24 year olds had completed secondary schooling. This compared with 91.8% of White, 83.7% of African American, and 94.6% of Asian young adults (NCES, 2001). Longitudinal completion/student status rates for Texas Public Schools in 1998-1999 showed that Hispanic students had the highest dropout rate at 13.1%, accounting for 79,538 students. African American students followed at 11.6% accounting for 3,436 students (TEA, 1999a).

Socioeconomic Status (SES)

SES was negatively related to the likelihood of leaving school early (NCES, 1995a). Eighth grades students in the lowest SES quartile were nine times more likely than students in the highest SES quartile and three to four times more likely than students in the middle two quartiles to drop out of school prior to graduation (NECS, 1995a). In 1996, youths from families with the lowest incomes were nearly eight times more likely to be dropouts than those from families with the highest incomes (Cardenas, 1998). In 1995, the Hispanic Dropout Project found that the dropout rate for Hispanic
students was highest for low-income students. In addition, two in five Hispanic children lived in poverty - twice the poverty rate for all children (Cardenas, 1998). In 1997-1998, 36 percent of Texas dropouts were considered economically disadvantaged (TEA, 1999b).

*Family Composition*

Eighth graders who came from two-parent, "mother and father" families, "father and female guardian" families, and "father only" families were less likely than classmates who came from "other adult" families to have dropped out of school by 10th grade. Students from father and female guardian families were less likely than students from mother and male guardian families to drop out (NCES, 1995a). Eighth graders who came from single-parent families and two-parent, mother and male guardian families were found to be at greater risk of dropping out of school than two-parent, mother and father families (Druian & Butler, 1997; NCES, 1995a).

*Region and State*

Young adults in the Northeast and Midwest United States had higher completion rates than their contemporaries living in the South and West. Approximately 89% of young adults in the Northwest and Midwest had completed high school compared with 84.4% in the South and 85.5% in the West (NCES, 2001). The dropout rate in large urban districts remained high, although it had slightly decreased in the last few years. In 1992-1993 one out of four districts had a four-year dropout rate greater than 35% (Schwartz, 1995).

*Standardized Achievement Test Scores*

Poor school performance, as measured by standardized achievement tests or
course grades, was consistently found related to school dropout. Promotion testing was likely to increase the number of students who suffered the serious consequences of dropping out according to Heubert (2000). The dropout rate among 1988 8th graders who scored in the lowest quartile on the base year cognitive test was 26 times greater than the incidence of dropping out of school for students within the highest test quartile (NCES, 1995a).

**Age and Grade Retention**

The single strongest predictor of whether students will drop out of school was whether they had been retained in grade (Heubert, 2000). Grade retention took children off the normal schedule of grade progressions, making repeaters more self-conscious and possibly complicating their interactions with peers. Middle school grades at ages 12-14 were typically difficult grades where students struggled to "fit in" socially (Alexander, Entwisle, & Kabbani, 2001). In a longitudinal study of children from 20 Baltimore schools conducted from 1982 to 1994, Alexander, Entwisle, and Kabbani (2001) determined that students who were behind at the time of the middle school to high school transitions were particularly at risk of leaving school prior to completion. Those students who were behind due to earlier retentions had odds of dropping out approximately five times those of non-repeating ninth graders. Research conducted by Grissom and Shepard (1989) obtained similar results. They concluded that retention was the most significant predictor for high school dropout and noted that retention between the 7th and 12th grades significantly increased the risk of later school dropout.

**Days Absent From School**

Frase (1989) reported that the student's attendance record during the first four
months of 10th grade was a predictor for dropping out. Students who reported that they had missed 16 or more days during the first semester of the 1989-1990 academic year were more than 10 times as likely to drop out of school than students who were never absent during this same time period (NCES, 1995a).

**Having or Expecting a Child**

In 1992, about one-fifth of the dropouts from the NCES study were married, living as married, or divorced, with females more likely than males to be married. Nearly 40% had a child or were expecting one. Nearly one-third of the females who dropped out cited pregnancy as the reason. Although pregnancy was not necessarily the cause of students leaving school, pregnancy and childbirth were variables likely to be influenced by many of the same personal and environmental characteristics that affected educational outcomes, including dropping out (Barro & Kolstad, 1987).

School districts in Texas were required to identify students in grades 7 through 12 as at risk of school failure or of dropping out (TEC §29.081) based on an established definition of the at-risk student (TEA, 1999b). In 1999-2000, 41.3% of all dropouts were identified as at-risk (TEA, 2001b). Additionally, other research concluded that additional demographic, social, and academic characteristics such as residing in a large city, living in a high-growth state, having low academic skills, having parents that are not high school graduates, speaking English as a second language, or having negative self-perceptions increase the likelihood of dropping out (Druian and Butler, 1997).

The characteristics of a dropout, combined with the social, familial, and environmental variables, made it impossible to identify all potential dropouts. Therefore, it was critical that school districts, administrators, and teachers rely on empirical
research studies when determining how to best meet the needs of all learners. Through the use of sound, research-based programs, the at-risk student will experience success in school.

Characteristics of Effective Intervention Strategies for At-Risk Students

In response to the serious challenge of preventing students from dropping out of school, parents and schools were searching for ways to increase the academic competence of students. With the increase in academic standards, the implementation of high-stakes testing, and the increase in the compulsory attendance age, students and educators were under more pressure than ever to succeed. A variety of programs and intervention strategies with similar characteristics had proven to be effective in the prevention of student dropouts. To be effective, the support must be available when students need it, tied to the work they are doing, and offered on a routine basis; it also must come from someone who understands the content and the students' problems (Darling-Hammond, 1998).

Early identification of students who eventually may dropout was imperative. Although students were thought to be dropouts during their last years of high school, many are lost long before that. Hodgkinson (1985) revealed that schools oftentimes intervene too late in the course of a student’s development. In a study of a credit recovery program designed specifically for high school freshman, Ellis (2002) found that participating students earned an average of one credit more than eligible non-participating students. Ellis purported that these modest effects could have been improved by earlier identification of students at-risk of failure. With certain parts of the profile of a dropout-prone student visible as early as 3rd grade, the best, most cost-
effective remedial program was one that prevented students from falling behind in the first place (Alexander et al., 1994). It was crucial that young students be provided with a firm academic foundation, particularly in reading. Longitudinal studies found that disadvantaged third graders who failed one or more grades and were reading below grade level were extremely unlikely to complete high school (Lloyd 1978; Kelly et al., 1964). Additionally, further serious academic problems appeared as early as third grade, and some middle school children, particularly Hispanics, leave school long before the onset of traditional dropout prevention programs (Ascher, 1987b; Slavin et al, 1989).

The Success for All (SFA), a school-wide research-based reform model developed by Robert Slavin and his associates at Johns Hopkins University, was based on the premise that all students can and must succeed in the early grades. According to Slavin, success in the early grades did not guarantee success throughout the school year and beyond, but failure in the early grades virtually guaranteed failure in later schooling. In the belief that reading is fundamental to other skill areas, the program targeted student in lower elementary school grades. The assumption at the root of the SFA program design was that preventing the occurrence of early learning problems, with immediate comprehensive intervention, was more effective than later remediation of academic difficulties. Integral to the SFA program was individual tutoring for students who were having difficulty keeping up with their reading groups. Tutoring in SFA was one-to-one and directly integrated with the reading curriculum, unlike some traditional pull-out reading programs (Ross, Smith, Slavin, & Madden, 1997). The largest study to evaluate achievement outcomes of SFA was conducted by Hurley, Chamberlain, Slavin,
and Madden (2001). Using data available on the Internet, Hurley et al. compared every school that ever used SFA in the state of Texas during the 1994-1998 period (n=111 schools) with the state of Texas as a whole. For each group of SFA schools, gains in the percentage of students passing the Texas Assessment of academic skills (TAAS) reading measures for grades 3-5 from the year before implementation to 1998 were compared with gains in the state as a whole. The SFA schools experienced significantly greater gains than the rest of the state. Gains were greatest for African American and Hispanic students compared with similar students in the rest of Texas. The gains increased with years of participation in the SFA program. By year four, the SFA schools had an 18.8% increase over the previous year, while the rest of the state showed an 11.1% increase over the year before.

Restructuring schools to create a positive school environment of trust, respect, mutual obligation, and belonging decreased alienation of the high school student (Ascher, 1987a). The findings of Klonsky (1995) confirmed the benefits of small size for student attitudes, attendance, participation, and satisfaction. Wehlege (1983) analyzed several programs that successfully involved marginal students in school work and tried to keep them in school. He noted that successful programs allowed for small class size and frequent face-to-face interactions and monitoring. According to Darling-Hammond (1998), teachers were more effective when they knew students well, when they understood how their students learn, and when they had spent enough time with students to accomplish their goals. For example, extended class periods allowed students to spend more time with the same students and the same teacher, allowing teachers a greater opportunity to get to know the students, to share information, and to
develop strategies for helping them succeed (Ascher, 1987a; Rudolph, 1999). At the elementary level this concept was demonstrated through the use of multiage grouping in which children of different ages are group in a single classroom, or looping in which a teacher stayed with a class of children for two or more grade levels (Wheelock, 1998). Thought to be the first secondary school in the United States to experiment with looping, the Battle Creek Central Academy in Michigan incorporated looping into the career academy with block scheduling. Students were grouped in one hall along with their five teachers with whom they had classes for the first three of four blocks each day. In the second year of the program, the students were taking junior-level core classes with the same teachers. Academy teachers felt that looping strengthened teacher-student relationships. They also found that looping saved instructional time because they knew the strengths and weaknesses of their students and the students were familiar with the expectations of the teacher (ASCD, 2000). Another strategy for extending learning time at the secondary level was block scheduling. With the block schedule, the traditional class period of 50 to 60 minutes was extended into what is known as a "block" of time, usually 90 minutes. Block scheduling offered flexibility for schools to meet the unique needs of learners, not only by providing extend opportunities for teachers to work with students, but also time for ongoing professional development for staff (NCREL, n.d). The primary characteristic of successful programs for at-risk youth was found to be a strong, intense, level of commitment on the part of the instructional staff with high expectations for all learners (Levin, 1987). The assumption was that at-risk students needed a career-oriented education focused generally on nonprofessional occupations (Druian & Butler, 1987). Despite some improvements and a growing acceptance of the
idea that prevention and early intervention were preferable to remediation, programs and funding for at-risk students overwhelmingly emphasized remediation (Slavin et al., 1992-1993).

As at-risk students prepared to enter the workforce of the 21st century, they must experience the same challenging, relevant, high quality curriculum provided to all learners. Levin (1987), with his Accelerated School program (ASP), suggested that an effective approach to educating disadvantaged students must be characterized by high expectations, deadlines by which they will be performing at grade level, and stimulating instructional programs, planning by the staff who will offer the program, and the use of all available parental and community resources. He suggested that schools should accelerate the instruction of disadvantaged children so they can catch up with their more advantaged peers. It must be designed to close the achievement gap after a period of time of intervention so that students can benefit from regular instruction. Rather than focusing on what the students cannot do, the various adults in an accelerated school classroom tried to build on students' strengths shifting the focus from the weaknesses of the student. The goal of the accelerated curriculum was to bring all children up to grade level narrowing the gap of academic achievement and the need for "remedial" strategies. ASP accelerated learning so the students were able to close the achievement gap and perform at grade level by the time they leave sixth grade. Levin asserted that any strategy for improving the educational situation of disadvantaged students must begin at the elementary level, and it must be dedicated to preparing children to do high quality work in secondary school. Students must be prepared to meet the increasing standards of accountability not only in the current grade level, but
also in the years following. Used as a model of total school reform, the ASP involved commitment from all members of the school community participating in the design and operation of the program (Weisman, 1994).

Effective intervention strategies included extended learning programs offering additional instruction before and after school, or on Saturdays (U.S. Department of Education, 1999). Quality after-school programs had far-reaching benefits. Especially effective for disadvantaged students, after-school programs provided time for independent assignments or homework, nutritional snacks, opportunities for physical activity, and positive social interaction with peers (NWREL, 1999). Since many of the students in schools today were "latch-key" children, the extension of the school day was likely to be attractive to parents (Levin, 1987). Hock, Deshler, and Schumaker (2000) examined the strategic tutoring model that teaches students strategies for learning how to learn and perform while they also receive help from trained teachers with class assignments. In several studies using the strategic tutoring model, students who attended the tutoring sessions and their classes regularly showed improvement in grades and test scores.

The key to the success of any effective intervention activity was the quality and frequency of the interactions between the student and teacher/adult. Wehlage (1983) found that successful programs were small instructional arrangements where teachers had lots of personal contact and showed concern for student progress. In a study conducted by the Southern Regional Education Board (SREB) (1988), nine key practices focused on creating a learning environment for potential dropouts to encourage them to master the essential content needed for graduating from high
school. The practices centered on high involvement on the part of teachers, counselors, and administrators. The sites with notable change reported that teachers devoted more time preparing assignments to assist potential dropouts in math, science, and reading. Concentrated time was also spent in planning and training prior to the beginning of school. Staff development focused on improving students' basic skills, applied instructional techniques, learning styles, and understanding the needs and problems of potential dropouts. Teachers and other staff members spent time each week tracking the academic progress and attendance of the students (Presson & Bottoms, 1992).

In a study conducted by Lee and Burkam (2000), they explored how the structure and organization of high schools influenced students' decisions about whether to stay in school until graduation or drop out. Using data from the National Educational Longitudinal Study (NELS: 88) they studied a sample of 3,840 students in 190 urban and suburban high schools focusing on schools effects on dropping out. Their study centered on three features of the secondary school: curriculum, school size, and social relations. They determined that students attending schools with more positive student-teacher relations were less likely to drop out than those who attend schools with less positive student-teacher relations. Their study revealed than an increase in the quality of student-teacher relations led to an 86% decrease in the odds of dropping out. While their findings were contingent on school structure, both school size and school sector (public or private), the impact of student-teacher relations on dropping out was among the most important findings of this study.

Croninger and Lee (2001) also utilized data from the NELS: 88 to examine whether social capital reduces the likelihood of dropping out between the 10th and 12th
grades for a cohort of 11,000 adolescents who attended public and private high schools between 1990 and 1992. Social capital was measured in two ways: (a) students' beliefs about how much their 10th grade teachers support their efforts to succeed in school and (b) teachers' reports about whether individual 10th grade students received guidance from them about school or personal matters. Their study revealed that students with low social capital had a higher probability of dropping out than students with high social capital. Across all populations examined, the combined effects of high levels of social capital, which was, student-teacher relations and talks, reduced the probability of dropping out by nearly half for students with no other risk. The study found that the greater the students' access to teacher-based social capital, the greater the probability that they would complete high school. The benefits were especially true for socially at-risk students who entered high school with low educational expectations and a history of school-related problems.

Although there was no "quick fix" for reducing the dropout rate and keeping students in school, research supported the use of a variety of proven strategies for boosting students' academic achievement. The keys to the success of intervention strategies were early identification of students who need extra help, a caring staff committed to students, and the utilization of multiple opportunities for students to receive support. The one-size-fits-all version of education must be abandoned for a school experience that promotes a commitment to helping all students reach high standards.

Ninth Grade Success Initiative Grant Program

The ninth grade year was particularly difficult for students who are at-risk. They were
both at a critical stage of adolescence, and facing a new, impersonal, and more academically difficult school (Ascher & Swartz, 1987b). Students most likely to drop out before completing the ninth grade were those who had attendance, discipline, and academic problems in the past, possibly from the beginning of their school careers (Ascher, 1987). The 1995-1996 Report on Grade Level Retention of Texas Students prepared by TEA indicated that during the three-year period between 1993 and 1996, the number of students in all grades retained increased from approximately 126,000 (4%) to 145,000 (4.3%). The report identified common factors associated with retention and dropouts. Male students had higher retention rates than female students as every grade level and population. The highest rates of retention were found in the ninth grade, with one in six students repeating the grade for each of three years. Students who were over age of their grade level were also identified as likely to drop out of school. The 2000 State Academic Excellence Indicator System (AEIS) showed retentions of 9% in ninth grade (TEA, 2001d). In 1999-2000, TEA (2001b) reported that the largest number of students (7,630) dropped out of the 9th grade.

In response to the problem plaguing the state, funding became available in 1999 for the Ninth Grade Success Initiative grant program under the Basic Skills Program for High School Students created by the 76th Texas Legislature and continued by the 77th Legislature. The legislature appropriated a total of $42.5 million in each year of the biennium, $85 million over the two-year period, to be distributed to school districts through a competitive grant application process. TEA awarded grants to 226 school districts and 5 consortia, representing 12 school districts. In fall 2000, TEA provided funding for an additional nine school districts (TEA, 2001c). The Ninth Grade Success
Initiative was designed to help districts address both the retention and dropout problems by giving school districts the opportunity to plan and implement a program that addressed both the ability to attain and demonstrate basic skills as reflected in the AEIS and TAAS data as well as to pass courses required for state and local graduation. Data gathered in the reporting of the use of funds were used to determine the most effective strategies for serving at-risk youth (TEA, 2001b).

Under the Ninth Grade Success Initiative grant program, students who had not earned sufficient credit to advance to tenth grade or those who had been retained in ninth grade for a second or third year were eligible for the program. A program funded through this initiative was required to serve ninth grade students or eighth grade students who were promoted to ninth grade but who were considered at-risk academically. The program emphasized basic skills and offered students the opportunity to increase credits required for high school graduation. The program also included an action plan to provide continuing support services, funded by other sources, aimed at continuing the progress made by these students. The grants assisted school districts by expanding or enhancing programs or creating new programs that attempted to increase academic performance, improve attendance rates, and reduce dropout rates. Four components of need were considered in the awarding of grants: (a) the number of 9th grade at-risk students as identified in a district's PEIMS report; (b) the number of the district’s 9th grade dropouts; (c) the district's rate of economically disadvantaged students; and (d) the district's passing rate on the 8th grade TAAS exams. The source documents for the required data were the PEIMS reports and the most recent Campus/District AEIS Report Cards or Campus/District Snapshots (TEA,
As part of the grant’s requirements, districts submitted program evaluation reports following each semester of the initiative. These reports requested district-level data on students served and program activities. The districts submitting these program evaluations reported serving between 15,000 and 58,000 9th grade students each semester.

In March 2002, TEA released a preliminary report prepared by the Texas Center for Educational Research (TCER, 2002). Data showed that in the 2001 spring semester 59% of the targeted students in the program earned enough credits to be promoted. That figure rose to 63% in the summer of 2001 (TEA, 2002). In reaction to the report, Texas Governor Rick Perry lauded the NGSI program and called for an expansion of the existing program to include younger students in other grades (Frazier, Deller, Caballero, & Mendoza, 2002, March 28). The program data provided by the participating districts was compiled for comparison and evaluation. The majority of NGSI districts adapted existing curricula to better meet the needs of targeted ninth-grade students through the introduction of self-paced computer software and the creation of individualized academic plans. The majority of the districts used the grant funds to support English and Algebra I courses. Similar percentages of districts used funds to offer biology and integrated physics and chemistry (IPC) courses. In addition, NGSI programs implemented instructional reconfiguration to more extensively change instruction, using approaches such as extended day activities, teacher teaming, school-within-a-school, and block scheduling. Overall, the NGSI programs served a high proportion of minority students, with Hispanic students participating in the NGSI activities more frequently than students from other groups (TCER, 2002).
Individualized academic assistance was offered by a number of the NGSI programs for students needing additional academic support. These activities included tutoring, mentoring, homework assistance, and reading programs or courses. Tutorials provided additional assistance to students on an individual or small-group basis. Slightly more than half of the NGSI programs offered tutorials for targeted ninth graders either during or outside scheduled classes. Approximately one-third of the NGSI districts offered mentoring programs. Community volunteers, parents, high school and college students, and teachers served as mentors in the various programs. Sixty-three grantees offered reading programs for targeted ninth graders. Reading programs included reading labs or stations, reading styles programs, computer-based reading assistance and scheduled time during class for silent reading or reading aloud. Only 4% of districts used homework assistance programs. Some created homework hotlines that students telephoned when in need of assistance. Others offered homework labs staff by teachers, professional staff members, or high school and college students (TCER, 2002).

The majority of NGSI districts adapted existing curricula to better meet the need of targeted ninth grade students. These curricular adaptations included the introduction of self-paced computer software and the creation of individualized academic plans. More than 70% of the programs reported using self-paced software programs for skill remediation and credit recovery. Individualized academic plans were developed to determine the strengths, weaknesses, and interests of targeted ninth grade students (TCER, 2002).

Classroom instructional enhancement activities including professional
development, integration of technology, and field trips were utilized to improve instruction in the existing classroom contest. More than half of the districts offered professional development training in teaching strategies, student assessment, and student learning styles. In addition to self-paced computer software, other aspects of technology including laptops, graphing calculators, and Internet access were integral to 28% of the districts. Field trips were integrated into the programming of 11% of the NGSI districts (TCER, 2002).

NGSI programs also implemented reconfiguration to more extensively change instructional approaches. Instructional reconfiguration activities included extended day activities, teacher teaming, school-within-a-school, and block scheduling. Extended-day programming, such as offering a "zero" period before regular school hours, evening classes, or Saturday school was available in 40% of the NGSI districts. The most common extended-day programming configuration was before- and after-school activities. Programs were usually provided in learning environments with lower student-to-teacher ratios than the regular classroom settings. Students had the opportunity to develop basic skills and, although not as frequently, to earn course credit. Teacher teaming was a feature in 18% of the NGSI districts. Through teaming, a group of teachers shared a cadre of targeted students and assumed joint responsibility for their academic success. The school-within-in-a-school arrangement was used in 12% of the NGSI districts as a method for clustering targeted students. Each cluster of students rotated through the core curricular areas as a group and often, core classes were located in close proximity to one another, creating a smaller area within the high school. Eight grantees implemented block scheduling to serve targeted 9th grade students.
Finally, NGSI districts also provided modified coursework and course opportunities for targeted ninth graders. Forty-nine districts offered alternative courses designed to provide ninth graders with opportunities to gain credit in elective courses such as Career and Technology Education, Introduction to Horticulture, Applied Art, and Psychology. Thirty-six districts implemented courses such as career exploration or leadership classes. Nineteen grantees offered Career Connections, a course in which students investigated career opportunities and explored the relationship between classroom learning and career skills and expectations. Thirty districts used accelerated courses to serve targeted ninth graders. Accelerated courses provided extended instructional time in core courses for students needing additional support for success. Algebra I was the most commonly offered accelerated course. Trailer courses provided students who failed the initial semester of a core course the opportunity to repeat that semester during the following semester or summer session to gain course credit. Three districts offered the students the opportunity to enroll in flexible entry/exit courses. These courses provided an alternative means of learning and gaining class credit in non-sequential courses that did not teach skills that build upon each other (TCER, 2002).

Although many programs implemented successful activities, programs also reported experiencing challenges in both planning and implementation of NGSI activities. Approximately 25% of programs reported difficulties with staffing, both in securing qualified teachers and support staff and in dealing with teacher and administrator turnover. Staffing difficulties also affected programming, causing some
programs to be unable to provide all NGSI activities as planned (TCER, 2002).

Participating districts stressed the importance of communication and collaboration among all stakeholders during program implementation. Increased communication and collaboration, according to 40% of the districts, resulted in staff buy-in and successful implementation and monitoring of program activities (TCER, 2002).

Student participation and attendance were cited as a challenge for 11% to 23% of districts each semester. Districts reported having difficulty convincing students that it was a positive, unique opportunity, due to the initial perceived stigma attached to being selected to participate. Approximately 25% of district identified attendance as a major challenge for their programs. Attendance at extend-day activities was particularly difficulty with some programs stating that students did not want to stay after school for NGSI activities. Almost 50% of participating districts stressed the need to communicate with parents, inform them of student progress, and involve them in program activities. To encourage parent involvement, programs suggested the implementation of personal contact, orientation meetings, parent contract, home visits, parent workshops, and volunteer opportunities in the NGSI activities.

In their initial proposals, districts projected the number of at-risk ninth graders that would be served each semester. Comparing original projections to program evaluation and activity report data, districts served significantly fewer students than expected. In the fall and spring semesters, between 10% and 21% of districts met or exceeded their projections, while only 6% to 8% met these in the summer terms. Districts emphasized developing and promptly implementing a method for identifying targeted 9th grade in an effort to involve them in activities as soon as they begin to
struggle (TCER, 2002).

Overall, the Ninth Grade Success Initiative grant program provided districts with the opportunity to implement activities and programs that otherwise would not have been financially possible through traditional means of funding. Through a wide variety of activities participating school districts were able to provide students with unique and personalized opportunities for learning and gaining course credit.

Summary

The literature reviewed in this chapter revealed extensive research on the relationship between factors such as grade retention, high-stakes testing, gender, socioeconomic status, race, family composition, poor attendance, and pregnancy or parenting and the likelihood of students leaving school prior to graduation. Far less research existed to support the practice of grade retention to boost academic achievement. The issue of school dropouts occupied a prominent place on our national educational policy agenda today. Public schools were faced with pressure from the business community to produce capable workers and the government to produce students who could compete in the world economy. Although priorities differed, graduation from high school was a universal measurement of success. Special attention must be focused on the factors that contribute to academic failure of students in the ninth grade. Schools must continually explore funding sources, intervention strategies, and effective programs for at-risk students. This study provided information that will be helpful to educators and policy makers as they seek effective alternative solutions to students dropping out of high school.
CHAPTER 3
RESEARCH METHODOLOGY AND PROCEDURES

Efforts to improve the high school completion rates over the past decade had shown slow progress toward improvement of the national high school completion rate (NCES, 2001). The percentage of students dropping out of school each year had decreased slightly between 1972 through 1985. High school completion rates climbed by a mere 2.6% from 82.8% in 1972 to 85.4% in 1985 (NCES, 2001). According to the Texas Education Agency, 85.5% of the students in Texas who entered 9th grade in 1996-97 graduated or received a General Educational Development (GED) certificate by the spring of 2000. An additional 7.3% of these students remained in school in 2001 and 7.2% dropped out. This figure represented a substantial decrease from the longitudinal dropout rate of 8.5% for the graduating class of 1999 (TEA, 2001b).

Although Texas reported a lowering of the dropout rate in 1999-00, the greatest number of dropouts left the ninth grade (TEA, 2001b).

Utilizing funds made available through the Ninth Grade Success Initiative grant program, school districts in Texas were providing learning opportunities for students who had not experienced academic success, causing them to fall behind other students in the same grade. This study included data gathered from the results of the credit recovery program implemented utilizing funds from the Ninth Grade Success Initiative grant program in a suburban school district, as well as student failure reports, grade reports, and student demographic information.

The purpose of this study was to determine the relationship between participation in the credit recovery program, gender, ethnicity, socioeconomic status, TAKS Reading/Language Arts results, TAKS Mathematics results, and academic success as
measured by whether or not the student advanced from 9th grade to 10th grade.

Chapter 3 provided an explanation of the research methods and procedures used for the study. The chapter was divided into the following seven sections: research design, hypothesis statement, population, data collection, statistical procedures, and summary.

Research Design

A statistical investigation of the relationship between the factors that include participation in the credit recovery program, gender, ethnicity, socioeconomic status, TAKS Reading/Language Arts results, TAKS Mathematics results, and academic success will be conducted. For the purpose of this study, academic success was measured by whether or not students advanced from 9th grade to 10th grade.

Additionally, the study examined what happens to the odds of a student being successful if participating in the program. The sample group in this study was limited to those students who met the criteria for the credit recovery program as stated in Chapter 2. This descriptive, non-experimental study was limited to students in a suburban school district approximately 25 miles from a metropolitan area. Due to the qualifying criteria for the program, it was not possible to have a proportional representation of population subgroups such as gender, ethnicity, or socioeconomic status.

Hypothesis Statement

The following hypothesis was tested in the study:

What is the relationship between students’ participation in the Ninth Grade Success Initiative credit recovery program, gender, ethnicity, socioeconomic status, TAKS Reading/Language Arts results, TAKS Mathematics results, and advancing from 9th grade to 10th grade?
Hypothesis 1: There is no significant relationship between students' participation in the Ninth Grade Success Initiative credit recovery program, gender, ethnicity, socioeconomic status, TAKS Reading/Language Arts results, TAKS Mathematics results, and advancing from 9th grade to 10th grade.

Population

The population was selected from a suburban school district with an enrollment of approximately 7,000 students that included one comprehensive high school, one academic alternative high school, seven elementary schools, and two junior high schools composed of grades 7-9. The participants in this study were classified as ninth grade students in either of two junior high schools or the high school who had, or were currently failing, one or more core courses for fall 2001, spring 2002 or fall 2002 semesters. Based on the guidelines of the Ninth Grade Success Initiative grant program, a total population of 570 students was eligible to participate in the credit recovery program. Cases with missing variable data were excluded from the study. Included in the analysis were 255 cases for which complete data was available.

Data Collection

Participating students were provided individualized computer-aided and one-on-one instruction in Algebra I, geometry, integrated physics and chemistry, biology, English I, English II, world geography, and world history in the credit recovery program. Students had the opportunity to attend the session from one to three days per week, for a total of 18 hours of instruction. Certified teachers were paid $18.00 per hour to deliver the instruction. Upon entering the program, students were administered a diagnostic test to determine the weakness areas. The instruction, lessons, and assignments were
selected for each individual student based on test results. Upon completion of the prepared course of study and review of the subject matter, a test was administered to determine the participants’ final grade for the credit recovery course. Students had the opportunity to earn a maximum of two credits in the program.

Data used in the study were collected utilizing information available through Public Education Information Management System (PEIMS) from fall 2001 through fall 2003 which included the Incomplete and Failure Listing, Ninth Grade Advisor Listing, Tenth Grade Advisor Listing, and the Student Roster - Fall Collection. In addition, the Ninth Grade Success Initiative Program Evaluation for Cycles 6, 7, and 9 provided the individual student results of participation in the program. Eligibility for the program was based on either the students’ final semester grades for the course or the current academic status in the course. A roster of the students who failed one or more courses for the semester was generated utilizing PEIMS. Each participating junior high school and high school extended the opportunity for participation to the eligible students by contacting the parents of the students and speaking with the students individually. Student participation in the program was optional. Upon completion of the course, the PASS/FAIL status of the participating students was available from the NGSI Program Evaluation. Student demographic information utilized in the study was obtained from PEIMS.

Statistical Procedures

The statistical procedures utilized in this study were descriptive statistics and logistic regression. Descriptive statistics were used to summarize and organize the data (Gall, Borg, & Gall, 1996). Descriptive statistics were concerned primarily with reporting the condition of existing phenomenon and were used to reduce and organize the
student data. The descriptive statistics included in the study were size of data set and percentages.

Logistic regression, like other types of regression, specified the effect that a particular independent variable(s) had on the dependent variable while controlling for other independent variables (Huck, 2000). Multiple regression allowed for an assessment of all the independent variables working together to influence the dependent variable (Borg & Gall, 1989), while logistic regression allowed for the same but was appropriate for research models utilizing a dependent variable that was dichotomous in nature (Huck, 2000). In this study, the dependent variable, advancing from ninth grade to tenth grade, was dichotomous - "yes" the student earned enough credits to advance from ninth grade to tenth grade, or "no" the student did not earn enough credits to advance from ninth grade to tenth grade. Therefore, logistic regression was the most appropriate statistical procedure. The overall model of logistic regression included various statistics that were reported. The Omnibus tests of model coefficients revealed the observed chi-square value. The effect size $R^2$, degrees of freedom, number of observations, and significance level were also included in the logistic regression model. The observed Wald chi-square value was used to test the statistical significance of each coefficient in the model. The odds ratio reflected the odds of success for each independent variable.

The independent variables included in the study were coded to reflect the dichotomous nature of each. A coding of 1 indicated the presence of the attribute and a coding of 0 indicated the absence of the attribute for the following independent variables:
**Program:** The program variable included both the students who elected to participate in the NGSI credit recovery program and those students who chose not to participate in the credit recovery program. Participation was coded with the value of 1 and non-participation was coded with the value of 0.

**Gender:** For the purpose of this study, gender was coded as a two-level variable using the value of 1 to indicate male and the value of 0 to indicate female.

**Ethnicity:** Ethnicity was defined as white and other, which included African American, Hispanic, Asian, and Pacific Islander. Other was coded with the value of 1 and White was coded with the value of 0.

**Socioeconomic status:** Socioeconomic status was determined by whether or not a student qualified for free or reduced school meals. "Eligible" was coded with the value of 1 and "not eligible" was coded with the value of 0.

**Texas Assessment of Knowledge and Skills (TAKS) Reading/Language Arts**
TAKS Reading/Language Arts was coded with a value of 1 if the student passed the test and the value of 0 if the student failed the test.

**Texas Assessment of Knowledge and Skills (TAKS) Mathematics:** TAKS Mathematics was coded with a value of 1 if the student passed the test and the value of 0 if the student failed the test.

Logistic regression was used to calculate the probability of success over the probability of failure when participating in the credit recovery program. Logistic regression also provided knowledge of the relationships and strengths among the variables. After all computations were made, the data were displayed in table form for ease of reporting, interpreting, and analyzing.
Summary

With more students repeating the 9th grade than any other grade, the issue of failure during the freshman year was critical to the future success of students and the likelihood that they would graduate from high school. The intent of the Ninth Grade Success Initiative grant program was that districts would implement direct services that would increase the number of graduation credits earned by 9th grade students, decrease the dropout rate and the retention rate of 9th grade students. In this chapter, the purpose of the study was reviewed and the research design discussed. The population and sample were described; the independent and dependent variables were identified. The data collection method and related documents were discussed. Finally, the statistical procedures were reported. Chapter 4 contained the analysis of the collected data and the hypothesis testing needed to determine statistical significance of the differences in the findings.
CHAPTER 4
PRESENTATION AND ANALYSIS OF DATA

Introduction

The purpose of this study was to determine the relationship between participation in the Ninth Grade Success Initiative credit recovery program, gender, ethnicity, socioeconomic status, TAKS Reading/Language Arts results, TAKS Mathematics results, and academic success. For the purpose of this study, academic success was defined as whether or not the student advanced from 9th grade to 10th grade based on graduation credits earned. Specifically, the study examined the odds of a student being successful if participating in the NSGI credit recovery program. Statistical methods of analysis utilized in this study measured the predictive capability of the six independent variables as they related to the dependent variable, advancing from ninth grade to tenth grade. In this chapter the results are presented and the findings are discussed.

Collection and Coding of Data

The categorical student data for the study were gathered from archived student records at the school district level. In addition, the student records for the NGSI credit recovery program for fall 2001, spring 2002, and fall 2002 were combined into one data set and organized in spreadsheet format. Demographic information was compiled and included in the descriptive statistics.

Descriptive Statistics

All 9th grade students who had failed one or more core courses for the semester or who were currently failing the courses formed the student populations from which the samples were taken. The eligible students were enrolled at one of the two junior high
schools or the comprehensive high school. Data in Table 1 showed the descriptive statistics for the total population of students who met the eligibility criteria for participation in the credit recovery program. Between fall 2001 and fall 2002 a total population of 570 students qualified for participation based on failing grades in core academic courses. Of the eligible students, 68% elected not to participate in the credit recovery program, while 32% participated. Most of the students who qualified were male (65%). A total of 431 students (77%) were White and 128 students (23%) were categorized as "Other" ethnicities that included African American, Hispanic, Asian, and Pacific Islander. The majority of students (61%) were not eligible for free or reduced meals based on family income. The data in the table indicated that a majority of students passed the TAKS Reading/Language Arts test as well as the TAKS Mathematics test.

Table 1
Attributes of Total Population That Met Eligibility Criteria (N=570)

<table>
<thead>
<tr>
<th>Independent Variable</th>
<th>N</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Program</td>
<td></td>
<td></td>
</tr>
<tr>
<td>In Credit Recovery</td>
<td>151</td>
<td>32</td>
</tr>
<tr>
<td>No Credit Recovery</td>
<td>319</td>
<td>68</td>
</tr>
<tr>
<td>Gender</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Males</td>
<td>370</td>
<td>65</td>
</tr>
<tr>
<td>Females</td>
<td>200</td>
<td>35</td>
</tr>
<tr>
<td>Ethnicity</td>
<td></td>
<td></td>
</tr>
<tr>
<td>White</td>
<td>431</td>
<td>77</td>
</tr>
<tr>
<td>Other</td>
<td>128</td>
<td>23</td>
</tr>
<tr>
<td>Socioeconomic Status</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Eligible free/reduced</td>
<td>219</td>
<td>39</td>
</tr>
<tr>
<td>No free/reduced</td>
<td>337</td>
<td>61</td>
</tr>
<tr>
<td>TAKS Reading/Lang. Arts</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Passed</td>
<td>196</td>
<td>62</td>
</tr>
<tr>
<td>Failed</td>
<td>119</td>
<td>38</td>
</tr>
<tr>
<td>TAKS Mathematics</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Passed</td>
<td>169</td>
<td>52</td>
</tr>
<tr>
<td>Failed</td>
<td>156</td>
<td>48</td>
</tr>
</tbody>
</table>

Note. Numbers were not equal between variables due to missing data.
Table 2 data showed the number of eligible students included in the analysis. Of the 570 ninth grade students who met eligibility criteria for participation, complete data for each variable were available for 255 students. Due to missing data for one or more variables, 315 students were not included in the study. Missing data were attributed to the fact that students withdrew from the district prior to completion of the semester; specific student demographic information was unobtainable; or the student left the credit recovery program prior to completion of the course. As shown in the table, the majority of eligible students were White males. In addition, most students were not eligible for free or reduced meals based on family income. The majority of students passed both TAKS Reading/Language Arts and Mathematics tests.

Table 2

<table>
<thead>
<tr>
<th>Independent Variable</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td>Program</td>
<td></td>
</tr>
<tr>
<td>In Credit Recovery</td>
<td>102</td>
</tr>
<tr>
<td>No Credit Recovery</td>
<td>153</td>
</tr>
<tr>
<td>Gender</td>
<td></td>
</tr>
<tr>
<td>Males</td>
<td>164</td>
</tr>
<tr>
<td>Females</td>
<td>91</td>
</tr>
<tr>
<td>Ethnicity</td>
<td></td>
</tr>
<tr>
<td>White</td>
<td>208</td>
</tr>
<tr>
<td>Other</td>
<td>47</td>
</tr>
<tr>
<td>Socioeconomic Status</td>
<td></td>
</tr>
<tr>
<td>Eligible free/reduced</td>
<td>96</td>
</tr>
<tr>
<td>No free/reduced</td>
<td>159</td>
</tr>
<tr>
<td>TAKS Reading/Lang. Arts</td>
<td></td>
</tr>
<tr>
<td>Passed</td>
<td>154</td>
</tr>
<tr>
<td>Failed</td>
<td>101</td>
</tr>
<tr>
<td>TAKS Mathematics</td>
<td></td>
</tr>
<tr>
<td>Passed</td>
<td>138</td>
</tr>
<tr>
<td>Failed</td>
<td>117</td>
</tr>
</tbody>
</table>

Data in Table 3 indicated the number of students and the percentage for each variable utilized in the study. For comparison, data was included for those students who
participated in the credit recovery program and those who did not participate in credit recovery activities. Although the majority of students who qualified for the credit recovery program were male ($N=164$), only slightly more males ($N=54$) than females ($N=48$) participated in the program. The majority of qualifying students passed both the TAKS Reading/Language Arts and the TAKS Mathematics tests. The promotion rate for students in the credit recovery program was slightly greater than that of the students who did not participate in the program. Of the 102 students who participated in the credit recovery program, 81 (79%) advanced from 9th to 10th grade while 118 (77%) of the students who did not participate in the program ($N=153$) advanced from 9th to 10th grade. The percentage of students who were not promoted after participation in the credit recovery program (21%) was slightly less than that for students who were not in the program (23%).

Table 3
Total Students Included in the Study for Which Complete Data Available ($N=255$)

<table>
<thead>
<tr>
<th>Independent Variable</th>
<th>In Credit Recovery</th>
<th>%</th>
<th>No Credit Recovery</th>
<th>%</th>
<th>Total</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Gender</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>54</td>
<td>53</td>
<td>110</td>
<td>72</td>
<td>164</td>
<td>64</td>
</tr>
<tr>
<td>Female</td>
<td>48</td>
<td>47</td>
<td>43</td>
<td>28</td>
<td>91</td>
<td>36</td>
</tr>
<tr>
<td><strong>Ethnicity</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>White</td>
<td>84</td>
<td>82</td>
<td>124</td>
<td>81</td>
<td>208</td>
<td>82</td>
</tr>
<tr>
<td>Other</td>
<td>18</td>
<td>18</td>
<td>29</td>
<td>19</td>
<td>47</td>
<td>18</td>
</tr>
<tr>
<td><strong>SES</strong></td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Eligible</td>
<td>48</td>
<td>47</td>
<td>48</td>
<td>31</td>
<td>96</td>
<td>38</td>
</tr>
<tr>
<td>Free/Reduced</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>No Free/Reduced</td>
<td>54</td>
<td>53</td>
<td>105</td>
<td>69</td>
<td>159</td>
<td>62</td>
</tr>
<tr>
<td><strong>TAKS Reading/LA</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Passed</td>
<td>66</td>
<td>65</td>
<td>88</td>
<td>58</td>
<td>154</td>
<td>60</td>
</tr>
<tr>
<td>Failed</td>
<td>36</td>
<td>35</td>
<td>65</td>
<td>42</td>
<td>101</td>
<td>40</td>
</tr>
<tr>
<td><strong>TAKS Mathematics</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Passed</td>
<td>58</td>
<td>57</td>
<td>80</td>
<td>52</td>
<td>138</td>
<td>54</td>
</tr>
<tr>
<td>Failed</td>
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<td>43</td>
<td>73</td>
<td>48</td>
<td>117</td>
<td>46</td>
</tr>
<tr>
<td><strong>Promotion Status</strong></td>
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<td></td>
</tr>
<tr>
<td>Promoted</td>
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<td>79</td>
<td>118</td>
<td>77</td>
<td>199</td>
<td>78</td>
</tr>
<tr>
<td>Not Promoted</td>
<td>21</td>
<td>21</td>
<td>35</td>
<td>23</td>
<td>56</td>
<td>22</td>
</tr>
</tbody>
</table>
Method of Analysis

Based on the binary nature of the dependent variable, or the outcome variable, logistic regression was employed to predict the probability of a student being successful by being advanced from 9th grade to 10th grade while participating in the NCSI credit recovery program. For the purposes of this study, logistic regression analysis was employed to predict the probability that a student would be successful based on participation in the Ninth Grade Success Initiative credit recovery program. The relationship between the independent variables which included participation in the credit recovery program, gender, ethnicity, socioeconomic status, TAKS Reading/Language Arts, TAKS Mathematics and the odds of the student being promoted from 9th to 10th grade or not being promoted from 9th to 10th grade was examined.

The logistic regression model showed data for the logistic regression coefficient, standard error, Wald test, level of significance, and odds ratio for each of the predictors, or independent variables (See Table 4). Employing a .05 level of statistical significance, none of the independent variables had statistically significant results. In the presence of all other variables, none significantly changed the odds of a student being advanced from 9th grade to 10th grade; therefore, the null hypothesis could not be rejected at the .05 level of significance.

An increase in the odds of a student being successful was indicated by an odds ratio greater than 1.0. An odds ratio less than 1.0 indicated a decrease in the odds of a student being successful in relationship to the independent variable (See Table 4). The model revealed that the odds for a student being successful after participation in the credit recovery program were 4% greater than the odds for students who were not in the
program. The odds of a success of a male student went down by 40% if a participant in the credit recovery program. This does not necessarily indicate that the program harmed male participants, but that the likelihood of success was lower for males than females. The odds of success for students who were members of the "Other" ethnic group went down by 19% after participation in the program compared with members of the White group. Whether or not a student qualified for free/reduced meals was another indicator of student success in the credit recovery program. Students who were not eligible for free/reduced meals were 9% more likely to experience success after participation in the program than students who were eligible for free/reduced meals.

TAKS results on the Reading/Language Arts and Mathematics tests were used to predict success in the credit recovery program. Students who passed the TAKS Reading/Language Arts test were 40% less likely to be successful after participation in the credit recovery program than students who failed the TAKS Reading/Language Arts test. The odds of success for students who passed the TAKS Mathematics test were 38% greater than the odds of success for those of students who failed the TAKS Mathematics test.

The logistic regression coefficient indicated whether there was a positive or negative relationship between the independent variables and the odds of success. The independent variables of gender, ethnicity, and TAKS Reading/Language Arts were negatively related to success. A positive relationship existed between participation in the NGSI credit recovery program, socioeconomic status, and TAKS Mathematics (See Table 4).

Given the results of the logistic regression model using the six independent
variables, it was possible to determine that there was not a relationship between participation in the Ninth Grade Credit Recovery program, gender, ethnicity, socioeconomic status, TAKS Reading/Language Arts results, TAKS Mathematics results, and academic success.

Table 4

Analysis for Variables Predicting Promotion from 9th to 10th Grade

<table>
<thead>
<tr>
<th>Variable</th>
<th>β</th>
<th>SE</th>
<th>Wald X²</th>
<th>p</th>
<th>Odds Ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td>Program</td>
<td>.04</td>
<td>.33</td>
<td>.01</td>
<td>.91</td>
<td>1.04</td>
</tr>
<tr>
<td>Gender</td>
<td>-.50</td>
<td>.35</td>
<td>2.12</td>
<td>.15</td>
<td>.60</td>
</tr>
<tr>
<td>Ethnicity</td>
<td>-.21</td>
<td>.42</td>
<td>.26</td>
<td>.61</td>
<td>.81</td>
</tr>
<tr>
<td>SES</td>
<td>.10</td>
<td>.34</td>
<td>.07</td>
<td>.80</td>
<td>1.09</td>
</tr>
<tr>
<td>Pass R/LA</td>
<td>-.52</td>
<td>.34</td>
<td>2.32</td>
<td>.13</td>
<td>.60</td>
</tr>
<tr>
<td>Pass Math</td>
<td>.50</td>
<td>.32</td>
<td>2.20</td>
<td>.14</td>
<td>1.62</td>
</tr>
</tbody>
</table>

Summary

This chapter presented research findings of this study that showed no relationship between participation in the Ninth Grade Success Initiative credit recovery program, gender, ethnicity, socioeconomic status, TAKS Reading/Language results, TAKS Mathematics results, and academic success. Prediction of student success attributed to the NGSI credit recovery program was not possible utilizing the six variables included in this study. The null hypothesis could not be rejected.

Chapter 5 includes a review of the problem and the methodology used. A summary of the findings, followed by an analysis of the results, builds on the research findings presented. The discussion section includes conclusions and recommendations for further research in this area.
CHAPTER 5
SUMMARY AND DISCUSSION

Introduction

The purpose of the study was to determine the relationship between participation in the Ninth Grade Success Initiative credit recovery program, gender, ethnicity, socioeconomic status, TAKS Reading/Language Arts results, TAKS Mathematics results, and academic success. For the purpose of this study academic success was defined as whether or not the student advanced from 9th grade to 10th grade after participation in the credit recovery program.

A total population of 570 9th grade students who attended one of two junior high schools or the comprehensive high school in a suburban school district between fall 2001 and fall 2002 was eligible to participate in the credit recovery program. Eligible students included those who had not earned sufficient credit to advance to 10th grade, or who were currently failing one or more core courses for the semester. A total of 255 students for which complete data was available was included in the analysis.

Descriptive statistics and the logistic regression model were used to analyze the student data. The descriptive statistics provided the attributes and number of students in the study. Logistic regression provided a method for examining the predictive capability of the six independent variables when added to the model simultaneously. The study examined the odds of a student being advanced from 9th to 10th grade if participating in the NGSI credit recovery program. Levels of significance were determined at the .05 level.

The review of the literature focused on the issues surrounding the academic failure
of high school freshmen. Specifically, the effects of grade retention, the issues and characteristics of a dropout, characteristics of effective intervention strategies for at-risk students, and a description of the Ninth Grade Success Initiative grant program were explored in the review of the literature.

Extensive research was found regarding the long-lasting, harmful effects of grade retention on students of all ages. Most of the studies focused on students in the early elementary grades where retention has been used for decades when students did not meet teacher or state expectations for progress. The research found that retaining a student in the same grade actually yielded a lower performance during the retained year. The harmful effects were reflected in the student's attendance record, attitude towards school, and self-esteem. Longitudinal studies conducted with retained students found that students who repeated a grade were more likely to dropout than students who were never retained. A limited body of research was found regarding the positive effects of grade retention. Several studies suggested that grade retention, especially in the early elementary grades, could actually improve students' attitudes toward school, self-esteem, and academic performance. No studies were found concerning the positive effects of retaining students in middle school or high school.

The conclusions drawn from research conducted on the topic of school dropouts throughout the past three decades had varied slightly. A seminal study conducted by the National Center for Educational Statistics was used as a foundation for studies that followed. The NCES (1995a) identified eight characteristics consistently associated with dropping out of school prior to graduation. Other research, in addition to the NCES findings, determined that being retained in any grade was a significant predictor to
dropping out of school. NCES discovered a reversal of the pattern in the 1970s when dropout rate for females exceeded that of males concluding that males drop out at a higher rate than females. In addition, evidence suggested factors such as ethnicity, socioeconomic status, family issues, geographic region, standardized test scores, age/grade retention, absenteeism, and having or expecting a child influenced whether or not a student remained in school until graduation. Additionally, transition periods such as moving from elementary school to middle school or middle school to high school proved to be particularly difficult for students.

With increased national, state, and local expectations for student academic performance, research is centered on intervention strategies to bolster the achievement of at-risk students. Most of the research focused on early identification of students who possessed the attributes of a potential dropout with intervention measures specifically designed to meet their needs. Lack of reading skills, particularly in the early grades, was found to be a precursor to later academic failure (Slavin, et al., 1992-1993). The research supported strategies designed to accelerate the students' learning in order to close the gaps. Methods that utilized one-on-one tutoring and that were directly integrated with the curriculum seemed to benefit students the most. The research supported the notion of restructuring schools in order to provide a positive, personalized environment with smaller classes and extended blocks of learning time.

Student/Teacher interactions were found to have an impact on how students viewed their educational experience. Students who attended schools with more positive student/teacher relations were less likely to drop-out than those who attended schools with less positive interactions (Lee and Burkam, 2000). Although more difficult to
quantitatively identify the benefits, students’ attitudes and emotional well being seemed to influence their attachment to school.

The state legislature of Texas recognized the enormity of the issue of school dropouts by funding the Ninth Grade Success Initiative grant program to aid school districts in preventing the retention and dropout rate. Results, in a report prepared by the Texas Center for Educational Research (2002), noted that the majority of students in the program benefited and earned enough credits to be advanced to 10th grade, meeting the goal of the program. Report results indicated that districts used a variety of methods, programs, and strategies to boost the achievement of failing 9th grade students. Many districts utilized accelerated learning opportunities designed to "catch the student up" to the next course in the sequence. Most districts reported that they did not serve as many students as originally projected. Some reported difficulties with staffing and teacher and administrator turnover. Still in question was how districts will continue to provide programs to support at-risk students without the aid of grant programs such as the NGSI grant program.

Conclusions and Implications

Based on the criteria for eligibility for student participation in the Ninth Grade Success Initiative grant credit recovery program, the study shows that while a large number of students qualified for participation in the program only a small percentage of students actually took advantage of the opportunity to regain credits lost. This finding is consistent with the review of the literature regarding the NGSI program in other school districts across the state of Texas. The lack of participation may be due to the fact that students sometimes become disengaged from school long before 9th grade if they have
not previously experienced academic success. With this in mind, school districts must initiate multiple efforts to reconnect at-risk students with school by offering a variety of programs targeted at offering support at the first signs of struggle. A one-size-fits-all method for determining curriculum offerings, programs, and support cannot adequately meet the needs of all learners. This supports prior research that advocates early identification of at-risk students with the implementation of immediate intervention strategies specifically designed to meet the needs of at-risk students.

The study also reveals that while almost twice as many males as females qualified for the program, only four more males than females actually took part in the credit recovery program. Although the program is designed to equally meet the needs of males and females, the odds of success are lower for male students than female students in the credit recovery program. These findings are consistent with previous research regarding males and the likelihood of dropping out of school prior to graduation (NCES, 1995a; SEDL, 2001; TEA, 1999a). As a result of this study, and what earlier research reveals about the high risk of male students, there is a need to explore educational opportunities focused specifically on meeting the needs of male students.

Most of the students identified in this study as eligible for the credit recovery program are not eligible for free/reduced meals. In addition, most of the eligible students are White. Both factors are inconsistent with previous research citing low socioeconomic status and being a member of a minority group as identifying characteristics of the typical dropout. These inconsistencies demonstrate the possibility that additional programs or support systems are in place to serve low socioeconomic
students who are more likely to be a minority than White (Cardenas, 1998). Another possibility is that teachers are aware of the risks associated with being a poor student from a minority population and are focusing their efforts on those students while the White students from average-income households are expected to perform without any extra support. Other results of the study support prior research. The study reveals that the odds of success for eligible students in the Other ethnicity group are lower than those of White students. Additionally, students who did not qualify for free/reduced meals are more likely to be successful after participation in the credit recovery program than students who qualify for free/reduced meals.

Most of the students who participate in the NGSI credit recovery program in the district of study experience success by earning enough credits to be advanced to 10th grade. The study reveals that the odds of success are slightly greater for those students who take part in the program than for those who do not participate in the credit recovery classes. The success of the program may be attributed to the fact that the credit recovery classes utilize strategies proven to be effective for at-risk students. The classes are offered on a routine, scheduled basis and tied directly to the curriculum. In addition, the classes are small and provide for one-on-one tutoring by a certified teacher. Accelerated instruction affords students the opportunity to regain credits in a relatively short period of time for the purpose of catching up to the next courses in the sequence. These elements of the program are consistent with effective intervention strategies for at-risk students.

In previous research, high-stakes testing linked to promotion and graduation is cited as a potential contributing dropout factor (Steinberg, 1999; Heubert, 1999; Lillard &
DeCicco, 2001). In the current study, however, the majority of students who qualify for the credit recovery program due to failing grades are successful on the TAKS examinations, the high-stakes tests implemented in Texas in spring 2003. While the TAKS tests are administered after participation in the credit recovery program, success on TAKS cannot be attributed to participation in the program. Most eligible students do not participate in the credit recovery program yet are successful on TAKS. However, a higher percentage of students who are in the credit recovery program than not in the program pass both TAKS tests. There is the possibility that students in the credit recovery program bridge the gap in skills needed to pass the tests, or students who take advantage of the program are already more motivated learners.

**Recommendations**

Further study is needed to determine the impact of intervention programs designed to improve the academic success of students. Since only the short-term academic success of students who participated in the Ninth Grade Success Initiative credit recovery program is included in this study, a longitudinal study should be conducted with a cohort group of 9th grade students who takes part in the NGSI credit recovery program. Student interviews, in addition to academic data, should be utilized in the study to ascertain which, if any, elements of the credit recovery program have an impact on student success. The purpose of the study is to determine whether or not participation in the NGSI program contributes to the long-term success, and ultimately graduation from high school.

A large population of 9th grade students qualifies for the NGSI credit recovery program in the study. There is no way to determine at exactly what grade level in their
academic careers these students experience academic failure or disengagement from school. Since future academic failure is oftentimes detected in the early elementary years, there is a need for school districts to evaluate existing curriculum at each grade level in order to determine whether or not it is designed to meet the needs of a diverse population of learners. Included in the districts’ evaluations should be the curriculum content, level of difficulty, and relevance to the child’s world. With the increased federal and state mandates of high-stakes testing, school district curriculum should be reflective of the skills that all students need in order to be successful.

There is a need to implement strategies that prevent students from falling behind their peers in school thereby reducing the need for intervention programs. Further study will determine how the effective intervention strategies utilized in this study can be adapted for use as prevention strategies for the general student population. The focus should be on how to build a firm foundation of support for all students, not only those identified as at-risk, prior to academic failure or disengagement from school.

Summary

Prior research conducted in the realm of "best practices" for supporting the at-risk student can aid educators in the development of successful programs. While there is no typical dropout, there are common characteristics that serve as signals to the possibility of future academic struggle. If school districts have proactive measures to meet the needs of at-risk students, the need for intervention programs should be minimal. Schools would better serve all students by utilizing research-based instructional strategies, methods, and materials designed to meet the needs of all learners in an effort to prevent the need for intervention measures.
APPENDIX A

DISTRICT CONSENT LETTER
December 20, 2002

Dr. Peter Shillingsburg, Chair
Institutional Review Board
Office of Research Services
Room 1060, Administration Building
University of North Texas
Denton, Texas 76203

Dear Dr. Shillingsburg:

Fredelyn Christian, Principal of the PASS Alternative High School in the Weatherford Independent School, is currently pursuing doctoral studies at the University of North Texas. She has my permission to conduct research using student achievement data from our district for her dissertation.

She has assured me that no student score will be individually identified, and appropriate analysis tools will be used. If you have any questions, please call me at 817-598-2808.

Sincerely,

Deborah Cron, Ph.D.
Superintendent
APPENDIX B

INSTITUTIONAL REVIEW BOARD APPROVAL LETTER
March 31, 2003

Fredelyn Christian

RE: Human Subjects Application No. 03-026

Dear Ms. Christian:

On February 28, 2003, the University of North Texas Institutional Review Board reviewed your project titled "A Study of the Impact of a Ninth Grade Credit Recovery Program." The Board agrees that the risks inherent in this research are minimal, and the potential benefits to the subjects outweigh those risks. Your study is hereby approved for the use of human subjects. Federal policy 45 CFR 46.109(e) stipulates that IRB approval is for one year only. Approval date for this study is March 31, 2003 through March 30, 2004.

U.S. Department of Health and Human Services regulations require that you submit annual and terminal progress reports to the UNT Institutional Review Board. Further, the UNT IRB must re-review this project annually and/or prior to any modifications you make in the approved project. Please contact me if you wish to make such changes or need additional information.

Sincerely,

[Signature]

Peter L. Shillingsburg
Chair
Institutional Review Board

PS:ab
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