A LONGITUDINAL STUDY OF GRADUATION, RETENTION, 
AND SCHOOL DROPOUT FOR STUDENTS IN 
REGULAR AND SPECIAL EDUCATION 

DISSERTATION 

Presented to the Graduate Council of the 
University of North Texas in Partial 
Fulfillment of the Requirements 

For the Degree of 

DOCTOR OF PHILOSOPHY 

By 

Karen S. Smith, B.A., M.Ed. 
Denton, Texas 
May, 1998
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This study examined differences in retention, graduation, and dropout between students in grades 9-12 in special education and regular education in the state of Texas for school years 1992-93 through 1995-96. The purpose was to gather information regarding the possible adverse effects of increased academic standards and mandatory testing on students with disabilities. The results indicate that when compared to students in regular education, students with disabilities are significantly more likely to be retained and are not experiencing the same decline in dropout rates as regular students. There is no indication that students with disabilities have been adversely affected by school reform but the size of the school district may play a significant role in whether or not students with disabilities dropout of school.
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CHAPTER 1

INTRODUCTION

Rationale for the Study

The crisis in public education in America has been the topic of every credible educational organization in the past fourteen years. Whether or not this crisis has passed remains a debatable question. The Presidential Commission’s report (A Nation at Risk, 1983), studies by the Carnegie Foundation, the National Science Foundation, the National Governor’s Conference, as well as feature editorials in Forbes, U. S. News & World Report, and Newsweek, all testify that something appears urgently and irreparably wrong with the nation’s public school system (Cook, 1992). No one can argue against or disparage the unparalleled accomplishments of public education in the United States. Public education is responsible for bringing Americans to the highest standard of living ever achieved by any nation at any time. It has been the means by which millions of citizens have achieved dignity, fulfillment, and personal freedom.

A plethora of reform movements engulfs our country at this time and these reforms are loudly heralded by the current presidential administration, state governors, and state legislatures. Texas launched an era of school reform in 1984 when the Legislature enacted House Bill 72, one of the most sweeping and prescriptive reform efforts undertaken in the country. Texas has initiated comprehensive information and accountability systems, improved conditions in schools, enhanced professional
development for educators and administrators, improved state and local school
governance, and created greater diversity in the schools and teacher education. In May of
1997 with the passage of House Bill 1800 and Senate Bill 1, the legislature set the
requirements for the adoption of appropriate criterion-referenced assessment instruments
designed to assess competencies in reading, writing, mathematics, social studies, and
science. In addition, it sets the guidelines for administering an appropriate criterion-
referenced assessment instrument to each student in a special education program. These
guidelines specify very clear goals: (1) the performance of students in special education
under an assessment system (TAAS) will be included in the academic excellence
indicator system no later than the 1998-1999 school year; (2) the development of
alternate assessment instruments will begin no later than September 1, 1997, and
administered no later than the 2000-2001 school year; (3) beginning in 2002-2003 the
results of these assessments will be a part of the indicator system. The cost for
developing the alternate assessment instrument for special education students is estimated
to be approximately $4.5 million and complies with the new 1997 federal guidelines
(Texas Education Agency, 1997c).

The Individuals with Disabilities Education Act (IDEA) Amendments of 1997
sets guidelines for the states’ responsibilities for assessing students with disabilities.
State educational agencies are charged with providing reports to the public with the same
frequency and in the same detail as non-disabled children. The information in the reports
will also include the number of children with disabilities participating in regular
assessments beginning in July 1998 and the number of those children participating in alternate assessments no later than July 1, 2000.

The areas of assessment and increased accountability have been the most controversial areas of policy development and implementation, particularly in regard to special populations (McLaughlin & Warren, 1992). Almost ten years ago Vitello (1988) reviewed the legal issues relating to minimum competency testing. These areas included: requiring students with disabilities to pass a minimum competency test as a prerequisite to receiving a diploma, exempting these students and granting a regular high school diploma upon successful completion of their IEP requirements, and the development of differential competency standards. Vitello (1988) found that failure to pass a competency test does not constitute unlawful discrimination under Section 504 of the Rehabilitation Act or the denial of a right to a free appropriate education under P. L. 94-142. Due process is not violated if students are given adequate notice to prepare for the test and reasonable accommodation is given. At the time of Vitello’s study in 1988, Florida was the only state with multiple minimum competency standards for various categories of disabling conditions. According to data from the National Center for Educational Outcomes (Elliott, Thurlow, & Ysseldyke, 1996) 43 states are developing new assessments for part of their overall assessment program. In addition, 17 states have policies linking the assessment to graduation. Although participation of students with disabilities in state and local mandated assessments is a major goal of special education policy makers, participation varies across the country and little real information has been gathered as to the effects of "high-stakes" testing on special populations. The general
consensus has been, however, that it does not bode well for special populations. Airasian
(1988) questions why these tests have been adopted in the name of reform when they
appeared out of the blue in the late 70's and have enjoyed a status far beyond any
evidence of their effectiveness. Finn's (1993) report tells us that participation in school
activities is essential in order for positive outcomes to happen and for students to identify
with school and yet many of the reform measures are exclusionary in practice. After
studying graduation policies and practices for students with disabilities in the mid to late
1980's Bodner, Clark, and Mellard (1987) concluded that the impact of education reform
and graduation requirements with a push for more academic coursework could lead to a
narrowing of the curriculum. This could result in taking the curriculum to a point where
it is inappropriate for many students in special education. Mehrens (1993) recommended
that states considering the use of high stakes testing move slowly and address
curriculum/content specifications, psychometric properties of the test, and educational,
legal, human, and financial resources needed.

The state of Texas has experienced over 12 years of school reform. During this
time little attention has been paid to the effects of reform on special education students.
Although there has been a steady decline in the number of dropouts identified over the
last seven years according to the Biennial Report (Texas Education Agency, 1997), the
number of dropouts receiving special education services during the year they dropped out
continues to increase each year. The Eighteenth Annual Report to Congress on the
Implementation of IDEA (U. S. Department of Education, 1996) reports that the number
of students served under IDEA, part B increased by 12.7 percent over the previous 5
years. (Of the 5,439,626 students reported as being served under IDEA, Part B [ages 3-21] 420,540 were from Texas). The Seventeenth Annual Report to Congress (U. S. Department of Education, 1995) reports that the graduation rate for students with disabilities as a whole remained unchanged for the previous five years. During the same period, 30% of students with disabilities who had been enrolled in grades 9-12 dropped out and an additional 8% left school before 9th grade.

There appears little evidence at this time that school reform has been of benefit to students with disabilities. In fact, it may have hindered them by denying access to the very programs that keep them in school (Snyder, 1994). In addition, the use of competency testing may encourage students to dropout or send them a a negative message regarding their abilities when they have been exempted from such tests. The increase of students in special education may be accounted for in part by the increased number of students diagnosed with attention deficit disorder and ADHD. A concern for educators is the possibility of this category being used by parents seeking to protect their children from academic standards they cannot meet.

With the recent passage of the Individuals with Disabilities Education Act (IDEA) Amendments of 1997, an entire new scenario is emerging regarding testing and its use for students with disabilities. School reform, however, is much broader than the testing of students for minimum competency. If the practices of school reform are exclusionary as some suggest they are (Snyder, 1994) then it may be that we have indeed reached full circle. The same children who failed and lost interest in school in the sixties and seventies
will do so again but in even greater numbers due to the increased standards set by the state.

In the fall of 1996 the National Commission on Teaching and America’s Future released its report “What Matters Most”. It states, “There has been no previous time in history when the success, indeed the survival of nations and people has been tied so tightly to their ability to learn. Today’s society has little room for those who cannot read, write and compute proficiently, find and use resources, frame and solve problems, and continually learn new technologies, skills and occupations” (p. 2). If we as a nation choose to have one indicator of success, and that one indicator is academic in nature, then we may have failed many students from the very outset of their education.

Purpose of the Study

Until recently students with disabilities have been ignored in school reform measures. The policies and procedures for accountability of special populations vary not only from district to district but also from campus to campus. The purpose of this study is to determine if significant differences and trends exist in graduation, retention, and school dropout for students receiving special education services in comparison with students in regular education over a four year period. This study is intended to serve as an initial investigation in an area that has had little exploration but one that is integral to the current agenda in special education.

Statement of the Problem

This study intends to provide a preliminary analysis regarding the possible effects of school reform on students receiving special education services. Current reforms may,
in reality, work against special education populations. Whether or not these unintended consequences are an area of concern is unknown at this time. For the purposes of this study, school reform actions include such legislative mandates as the “no-pass/no-play” provision, increased competency levels, and state-wide mandatory criterion-referenced assessment. Students with disabilities have historically had higher dropout rates, retention rates, and lower graduation rates than their non-disabled peers (McDonnell, McLaughlin, & Morrison, 1997). Consequently, by raising passing standards, creating a “no-pass, no-play” rule, and invoking mandatory testing for graduation, the possibility exists that the state of Texas has helped to provide even poorer outcomes for these same students through decreased graduation rates and increased retention and school dropout.

Significance

This study is significant because increasing state standards for academic performance may not be appropriate for students with disabilities. As schools, districts, and states compete for recognition based on test scores, the emphasis on education appears to focus on competition rather than individual growth. This need to compete by raising standards for passing may encourage students with disabilities to experience retention more often, dropout of school, and fail to graduate. The consequences of not graduating from high school are significant for society in terms of lost tax dollars due to unemployment, increased welfare rolls, and increased burdens on the criminal justice system (Catterall, 1988; Lewis, 1996). Texas has been in the forefront of school reform, and the possible consequences of these reforms on students with disabilities has not been
addressed. Consequently, this study will both explore and analyze data concerning graduation, retention, and school dropout in Texas over a four year period.

Definition of Terms

1. Accommodation: A change in one or more aspects of a student’s educational program. A testing accommodation is a change in how a test is administered to or responded to by the students tested. The purpose of a testing accommodation is to correct for any distortion in scores due to a disability (McDonnell, et al., 1997).

2. Correlated Language Arts: This less demanding course is offered in lieu of English I at the high school level (Texas Education Agency, 1992).

3. Criterion Referenced Assessments: These measure a student’s skill in terms of absolute levels of mastery and as such require answers to specific questions (Salvia & Ysselyke, 1988).

4. Disability: Any loss of function due to mental, physical, or emotional impairment (Ysseldyke & Algozzine, 1995). According to the Individuals with Disabilities Education Act (1990) “children with disabilities” are those children evaluated in accordance with 300.530-300.534 as having mental retardation, hearing impairments including deafness, speech or language impairments, visual impairments including blindness, serious emotional disturbance, orthopedic impairments, autism, traumatic brain injury, other health impairments, specific learning disabilities, deaf-blindness, or multiple disabilities.
5. **Fundamentals of Math**: A lower level math course for students not ready for Algebra I in high school. The 1992-93 school year was the last year students could receive state mathematics credit for this course. (Texas Education Agency, 1997a)

6. **General Educational Development (GED)**: A test given to measure an adult's ability to understand and apply information. If passed a certificate of high school equivalency is issued. GED certificates represent about 20 percent of the secondary-level credentials issued in the state of Texas each year (Texas Education Agency, 1997b).

7. **Goals 2000: Educate America Act**: P.L. 103-227 signed into law in 1994. This law provides a list of ambitious goals intended to improve education for all students and authorized federal grants to states and school districts to set high standards and carry out reforms tied to these standards (McDonnell, et al., 1997).

8. **Graduation**: Requirements for graduation may be met by successfully completing mandatory course requirements and passing exit level examinations. Students in special education programs may meet graduation requirements through their individual education plan. Both groups receive a diploma. Students in regular education who complete the necessary coursework but do not pass the Texas Assessment of Academic Skills receive a certificate of completion (Texas Education Agency, 1997b).

9. **High Stakes Testing**: An accountability measure which affects students, school and districts. Such tests may determine whether a student is promoted to the next grade or
graduates from high school. The results of these tests are often used to rank schools, districts, and states (Vitello, 1988).

10. House Bill 72: A sweeping education reform bill passed by lawmakers in 1984 which changed nearly every aspect of public education in Texas. Since its enactment many of its provisions have been eliminated, modified, implemented immediately, or implemented over time (Texas Education Agency, 1992).

11. Individualized Education Program (IEP): PL 94-142 requires an IEP be developed for each child with a disability. It must include a statement of present educational performance, instructional goals, educational services to be provided, and criteria and procedures for deciding how the student’s objectives will be met (Hallahan & Kauffman, 1997).

12. Individuals with Disabilities Act (IDEA): Legislation enacted in 1990 changed the name of the Education for All Handicapped Children Act to the IDEA upon reauthorization. It is the primary federal law that provides funding and criteria for children with disabilities (McDonnell, et al., 1997).

13. Minimum Competency Testing (MCT): Examinations designed by states to presumably measure what a student has learned in required coursework. The tests are often used as a requirement to fulfill graduation requirements and may be referred to as exit level examinations (Vitello, 1988).

14. National Longitudinal Transition Study of Special Education Students (NLTS): Funded by the Office of Special Education Programs, this study sample consists of more than 8,000 students who were receiving special education services during the
1985-86 school year and were between the ages of 15 and 21. The study sample consisted of the full range of handicapping conditions and examined educational progress during school, occupational, educational, and independent living status after leaving school or special education (Wagner, 1991).

15. Performance Standards: Concrete examples and explicit definitions of what students have to know and be able to do to demonstrate that they are proficient in the skills and knowledge framed by the content standards (P. L. 103-227, Sec 3[9]).


17. Public Education Information Management System (PEIMS): A state-wide data management system for information on public schools in Texas. One of the major goals is to improve education practices of local school districts by collecting detailed data from school districts to enhance and respond to student needs (Texas Education Agency, 1997b).

18. Retention: The practice of having students repeat a grade. Grade level retention is traditionally used as a remedy for academic failure with the goal of giving students a year to grow and master academic tasks of their current grade prior to advancing to the next level (Texas Education Agency, 1996b).

19. Section 504 of the Rehabilitation Act of 1973: This section prohibits the exclusion, based on disability from participation in any federal program or activity, or one which
receives federal financial assistance. School districts, colleges and universities are subject to the provisions of this act (Rubin & Roessler, 1995).

20. Standards-based Reform: An approach to improve student achievement by setting standards of performance in core subject areas as a way of strengthening the content of school curricula, and increasing the motivation and effort of students, teachers, and schools (McDonnell, et al., 1997).

21. Texas Assessment of Academic Skills (TAAS): These tests constitute the state’s primary assessment system and are given to students in the third through eighth grades and again in tenth grade. Students have eight opportunities to pass the TAAS between their sophomore year and the end of their senior year. A student who is not in special education but does complete all graduation requirements except for required exit-level assessment instruments may be issued a certificate of coursework completion rather than a regular high school diploma (Texas Education Agency, 1997c).

22. Texas Educational Assessment of Minimum Skills (TEAMS): House Bill 72 required that students take basic skills tests every other grade level and required passage of an exit-level examination for graduation. At the eleventh and twelfth grade levels, test were limited to mathematics and English. At the beginning of 1990-91 school year the student testing program was changed to the Texas Assessment of Academic Skills and includes an assessment of student writing skills (Texas Education Agency, 1991).
23. Validity: An important aspect of testing which refers to whether an assessment tool actually measures what it purports to measure. If a test lacks validity its usefulness is in question. (McLoughlin & Lewis, 1994).
CHAPTER II

REVIEW OF THE LITERATURE

Increased academic standards and state mandated testing are two major components of school reform. Invoking higher standards and the use of state-wide accountability measures are perceived as paramount to the success of students as they prepare to enter the 21st century. The actual benefits of these two components of school reform remain unclear for most students (McLaughlin & Warren, 1992; Airasian, 1988). For students with disabilities the benefits are even hazier and research is scarce.

The information available regarding the impact of these two school reform components on graduation, retention, and school dropout for special populations is limited but meaningful. Adequate review of the literature requires examination of state mandated or “high stakes” testing and its effect on general populations and special populations. “High stakes” testing is an accountability measure used by states affecting both students, schools, and districts. These tests may determine whether or not a student advances to the next grade or graduates. Schools and districts are ranked by how well the students score on this type of test. It is also necessary to review the impact of increased academic performance requirements in the form of grading and graduation requirements on students receiving special education services. Since so little research has been focused on this area it is also beneficial to look at synthesis reports gathered on both the state and national level.
The following review will (1) identify studies focusing on increased academic standards including state-mandated testing, graduation requirements, grading policies, and retention of students with disabilities, (2) examine the outcomes of school reform measures on the general population and at-risk students in Texas, and (3) examine synthesis reports detailing the implications of standards based reform on students in special education. Limitations of the existing research will be detailed at the conclusion of each section.

Educational Reform: Increased Academic Standards

State education agencies have responded to a perceived need based on concerns about the quality of Americans schools and students expressed by the American public (Airasian, 1988). In 1986 70% of adults in the United States felt that stricter requirements should be in place for grade advancement and high school graduation even if it meant fewer students graduated from high school (Gallup, 1986). More than one critic of school reform has outlined the danger of the ends justifying the means, even if the means do not produce the desired results (Mathison, S. 1991, Madaus, G. F., 1988, Airasian, 1988). Two principles outlined by Madaus (1988, pp. 88-98) hold particular relevance: “When test results are the sole or even partial arbiter of future educational or life choices, society tends to treat test results as the major goal of schooling rather than as a useful but fallible indicator of achievement. A high-stakes test transfers control over the curriculum to the agency which sets or controls the exam.”
State-Mandated Testing

Airasian (1988) accounts for the symbolic appeal of state-mandated high stakes testing as representative of order and control, constructs of important educational outcomes, and symbols of a distinct value of moral outlook that the public desires. Certainly, tests are socially valid and highly respected in our society, however, Airasian cautions against tests becoming a convenient and poor substitute for more meaningful methods of creating or maintaining effective schools. In addition, the public has become so enamored of test scores that it measures educational excellence by them and reads far beyond the narrow set of items they contain. The popularity of testing as a method of measuring the effectiveness of the classroom continues to grow. Researchers Corbett, Dickson, Wilson, and Bruce (1989) selected the states of Maryland and Pennsylvania to examine the potential for differences in impact on teachers and students regarding assessment. Pennsylvania’s approach reflects the traditional use of standardized tests with few if any consequences for the system as a whole. Maryland designed its test as a specific policy tool with performance attached to high school graduation. The findings of the study indicate that there are no substantial added benefits for students in either state, especially in helping teachers know more about students than before, which is a common justification for instituting the programs to begin with. Teachers mentioned several explanations for the low positive impact (Corbett, et al., p. 15) including: “Testing adds a negative image for kids who fail. It’s another way of telling someone ‘I’m dumb’. It makes it difficult to get up in the morning.” “Those who fail are second class citizens...we take them out of regular instruction for remediation.” Although the data
revealed few perceived benefits for students, more attention was paid to the results in high stakes situations, perhaps more for political reasons than anything else.

Research in New York. Mathison (1991) explored the ethical issues involved in using standardized testing within New York State in order to implement a state-level policy with regard to science program evaluation. When surveyed, 68 percent of New York’s 4th grade teachers indicated that the Elementary Science Program Evaluation Test (ESPET) clarified what was to be taught along with other data suggesting that the ESPET was beneficial to students in increasing their science knowledge. However, it also had negative consequences including increased pressure on students to do well and preparing students by teaching what was on the test in the form it was tested. This utilitarian view of testing ignores the consequences of testing for different learners and does not consider the quality of life in school for teachers and students as important, according to Mathison.

Minimum competency testing and disabilities. When Stanley Vitello (1988) examined competency testing in relation to students with disabilities Florida was the only state with multiple minimum competency standards for various categories of disabling conditions. Two other alternatives existed for students with disabilities. The first required students with disabilities to pass the minimum competency test as a prerequisite to receiving a diploma. According to litigation in the early 80’s, failure to pass such a test does not constitute unlawful discrimination under Section 504 of the Rehabilitation Act or the denial of a right to a free appropriate education under P. L. 94-142 (Board of Education of Northport-East Northport Union Free School District v. Ambach, 1981;
Brookhart v. Illinois State Board of Education, 1983). If students are given adequate notice to prepare for the test, the preparation covers the material, and reasonable accommodation is given then due process is not violated. A second alternative, and a popular option according to Vitello, allows for the exemption of students with disabilities. A regular high school diploma is granted based on the successful completion of IEP requirements. This option assumes that all of these students are incapable of passing the test and the Ambach court contended that it was stigmatizing and worked against the state’s objective of establishing criteria in the first place. Vitello reports that states can lawfully require students to pass a minimum competency test as a prerequisite to receiving a regular high school diploma. As reported by Vitello, the establishment of multiple minimum competency standards for various categories of disabilities (as set forth the in the state of Florida) allows for differences in academic ability along with meaningful measures of accountability.

Even though the legality of high stakes testing is quite clear, Sinclair (1994) reports academic standards along with attendance and grade retention policies to be exclusionary in practice. Grade retention is often used to hold back students for academic remediation and correlates highly with the rise of dropouts according to Sinclair. Repeating one grade may increase the risk of school dropout by 40-50% and repeating two grades increases the risk by 90%. School policies regarding retention, granting of diplomas, and grading are unclear for students with disabilities according to Vitello (1988), and Thurlow, Ysseldyke, and Anderson (1995).
**Graduation, Grading, and Retention**

Graduation requirements for students with disabilities vary from state to state. The implementation of state policies regarding graduation is often left to the local education agency, according to Thurlow, et al. (1995). Few policies exist for grading students in special education programs. McLeskey and Grizzle (1992) acknowledge that very little data is available regarding retention, but propose its use as a remedy for poor academic performance appears to be driven by the use of minimum competency testing. Passing such tests is often a requirement for high school graduation.

**Graduation requirements.** Thurlow, et al (1995) found that many states require students with disabilities to earn required course credits and pass an exit exam in order to receive a standard diploma. Other states either award a regular diploma based on completion of the students' IEP program or a certificate of attendance option for students with severe or profound disabilities. The option of receiving a standard diploma exists for students with disabilities in all states, but the difference lies in other requirements. Nineteen states base awarding a diploma on credits only, nine on completion of the IEP, seventeen include credits plus an exit exam (including Texas and eight other southern states), and five states have undefined requirements, leaving it to the discretion of the local education agency.

A recent study by Rylance (1997) addressed the question of whether vocational education combined with counseling facilitated keeping youth with behavioral problems in school. Using the NLTS as its data base, the results show a significantly positive association with vocational education, counseling, and staying in school for this
population of students. Interestingly, older youth in the sample were more likely to have earned a diploma than younger ones. The researcher makes a case that theoretically the current emphasis on higher standards along with inclusionary practices may have contributed to the likelihood of younger students dropping out of school. These students were more likely to experience higher standards and were in regular classrooms with demands for higher academic achievement. The emphasis on grades over emotional needs may encourage this population, known for lower academic attainment (Wagner, 1991) to leave school.

In a recent policy brief examining the role of ethnicity in special education Mitchell (1997) reports significant findings on identification, placement, and graduation. Ethnicity was found to be a significant predictor of placement in regular class settings but was not related to the rate of identification as disabled, nor to graduation by diploma or a diploma and certificate combined. However, a moderate correlation was found for a relationship between graduation by certificate and ethnicity special education populations.

Grading policies. A study by Rojewski, Pollard, and Meers (1992) examined practices and perceptions toward grading students with disabilities in vocational programs. Over 65% of the respondents indicated that an official policy existed within their school for student grading. However, almost half (46.6%) indicated that no policy existed for grading students from special populations. Over one-third used a double-standard approach, using separate criteria for students with special needs and students in regular education.
The results of a national survey of teacher report card grading practices (Bursuck, Polloway, Plante, Epstein, Jayanthi, & McConeghy, 1996) indicate that teachers at all levels find letter and number grades to be more helpful for students without disabilities, and pass-fail and checklist-type grades to be more helpful for students with disabilities. However, the overwhelming majority of school district policies on grading require letter grades (Polloway, Epstein, Bursuck Jayanthi, & Cumblad, 1994). At the same time, teachers report that basing grades on improvement or IEP objectives and effort appear to be the most helpful adaptations they can make for students with disabilities. These adaptations may at the same time have negative implications for students who are so deficient in skills and content that they cannot graduate or obtain employment. The results of the study by Bursuck, et al. are optimistic in that teachers are willing to adapt classroom grades for students with and without disabilities by changing the criteria, using supplements such as portfolios, and acknowledge the fact that grades are not necessarily beneficial to students with disabilities.

Retention policies. Reliable data on national retention is not available. However, Shepard and Smith (1989) report that in some states over 50% of all students are retained at some time during their school years. This is very troubling when there is little or no evidence to support the benefits of retention. The negative effects include lower self-concepts, poor attitudes toward school, and an increase in the dropout rate among students who are retained (Holmes & Matthews, 1984; Hahn, 1987). Grant and Sleeter (1988) argued that higher expectations created by the reform movement has led to an
increased number of students being identified with learning disabilities when students fail to meet the specified competencies.

A number of research projects on the effects of various projects, including Chapter 1, special education, and state-mandated reform initiatives, bring McGill-Franzen and Allington (1993) to argue against the use of high stakes testing as currently practiced. They argue that high stakes testing in the primary grades increases the chances of retention or special education placement for low achieving students. In addition, it is suggested that teachers and administrators use whatever policies exist to help their schools meet high-stakes test requirements. Although the primary emphasis by McGill-Franzen and Allington concerns the pollution of assessment data, they also support the premise that retention is used to maintain public approval even though these children will continue to be low achievers and many will dropout of school.

McLeskey and Grizzle (1992) examined the retention rate of students with learning disabilities in Indiana and found that 58% of the students were retained prior to identification. When compared to students without disabilities approximately twice as many students with learning disabilities were retained as students without disabilities. The results indicate that in this state retention is used as a remedial measure prior to labeling, but only delays identification by approximately one year. Additionally, the researchers found it noteworthy to mention that students who were retained and later identified as having a learning disability tended to have a lower IQ and achievement level than those identified with a learning disability but not retained. This conflicts directly
with the recommendation that students who are retained should have near average intelligence and achievement levels (Sandoval & Hughes, 1981).

Although high academic achievement is important, the findings of Benz, Yovanoff, and Doren (1997) suggest that it must be tempered with other variables that more directly influence continuing education and post school employment for all students. Work-based learning activities provide students with broad, transferable skills in the workplace, connected activities such as social skills, and higher-order thinking skills. In order to increase the likelihood that school-to-work programs are accountable for outcomes, local programs must include options for several pathways and timeframes, support services and accommodations, and relevant performance indicators (Benz, et al.). Conventional wisdom still holds true and students with disabilities who graduate and leave school with high reading, writing, and math skills are twice as likely to be competitively employed than those with low skill levels (Benz, et al.).

Summary of Literature on Increased Academic Standards

Increasing academic standards is seen as a convenient and popular method of creating and maintaining effective schools. The findings in Maryland and Pennsylvania suggest that the use of traditional standardized tests and high stakes testing provides no substantial added benefit to students or teachers and may actually have negative consequences. Corbet, et al. (1989) suggest that tests with high stakes attached are used more for political than educational reasons. In New York, Mathison (1991), found such tests bring increased pressure on students and encourage teachers to teach to the test. Mathison’s study does suggest that testing is beneficial to students in increasing
knowledge. For students with disabilities, failing to pass a state mandated test as a requirement for graduation is not discriminatory if proper procedures are followed. Rather than require such a test, many states choose to exempt particular students. In the case of Florida, the establishment of multiple minimum competency standards exists for students with disabilities. Additional requirements for graduation for these students vary from state to state.

Many states require students with disabilities to meet the same requirements as regular students to receive a regular diploma. In some instances, these students receive a regular diploma based on the completion of their IEP program. For students with severe and profound disabilities, a certificate of completion is an option. Not only do state policies differ significantly, but it is also not uncommon for the local education agency to determine graduation policies for students with disabilities. Grading practices vary even more. In some instances, no policies exist for grading students with disabilities. Although teachers favor pass-fail and checklist type grades, most school districts require letter grades which may not be beneficial to students with disabilities.

The inconsistency and lack of policies regarding graduation and grading for students with disabilities may be potentially harmful and contribute to the higher dropout rate for students with disabilities (Wagner, 1991). A small but significant link may exist to substantiate the negative effect of higher standards on students with behavioral disorders evidenced by increased school dropout for this population (Rylance, 1997). Although no reliable data is available on a national level regarding retention of students with disabilities, it appears retention is frequently used as a remedy for poor academic
performance for all students (McLesky & Grizzle, 1992). For students with disabilities, the chance of being retained is much higher than that of regular students.

**Limitations of Research on Increased Academic Standards**

This section will analyze the research on increased academic standards. The most apparent limitation is the lack of research involving students with disabilities and increased academic standards. The impact of state mandated testing on special populations is unknown. Whether or not students with disabilities were included in the studies by Corbett, et al. (1989) or Mathison (1991) is not addressed. The study by Vitello (1988) regarding the relationship between minimum competency testing and students with disabilities is not current and does not reflect state practices at this time.

The study by Rylance (1997) addresses only students with behavioral disorders and may have no significance for the special education population in general. Because of the voluntary nature of the respondents in the NLTS, this study may be compromised by sampling. Studies on grading (Bursuck, et al. 1996; Rojewski, et al., 1992) are self-report in nature and should be validated using direct observations or teacher logs. The research would be more meaningful if both students with and without disabilities across both academic and vocational courses were included.

The reliability of research on retention is questionable because the data itself is not reliable. This may be in part due to definition, reporting methods, and local policies. The study of McLeskey and Grizzle (1992) addresses only those students with learning disabilities. This leaves out a significant number of students receiving special education services, particularly at the elementary level, and may limit its usefulness.
Studies on increased academic standards are limited in number for the general population and even more limited for students who receive special education services. The lack of group comparisons in the research further limits the research on increased academic standards for students.

School Reform Outcomes in Texas

In 1985 the rules began to change for students enrolled in Texas public schools. In January of that year secondary students who chose to participate in extracurricular activities were required to pass all courses each six week period or lose their eligibility. Other significant changes in policies included attendance, a driver’s license law, and mandatory exit examinations. A number of studies took place in an effort to determine the impact of these school reform policies.

The Impact of No Pass/No Play, 1988

A great deal of controversy surrounded the no pass/no play rule. Using the Austin Independent School District as its sample, the no pass/no play rule was examined in regard to grades, enrollment in honors courses, and dropping out (Ligon, 1988). The major findings of this report show that students failed fewer courses under its influence, particularly in the fall semester. The percentage of high school failing grades declined almost 3%, and for students enrolled in extracurricular courses, the decline in failing grades was even greater. A majority of high school students (52%) in this study agreed that the no pass/no play rule encouraged them to make better grades. Another positive result of this study revealed that the percentage of students enrolled in honors courses continued to grow. In regard to the dropout rate, when followed over a three year period,
this study showed a slight decrease for students not participating in varsity sports but an increase for those students participating in varsity sports. The author also reported but did not publish the detailed analysis indicating a lower dropout rate for Black and Hispanic athletes and an overall increase for white student athletes.

At-Risk Findings, 1991

The Texas Education Agency (1991) conducted a longitudinal study of approximately 1,800 identified ninth and tenth grade at-risk students who participated in extracurricular activities in 50 school districts to ascertain the intended and unintended consequences of four school reform policies. These policies include: attendance, the Texas Educational Assessment of Minimum Skills exit level examinations (TEAMS), the no pass/no play rule, and the driver's license law. The data collected for the school years 1988-89 and 1989-90 indicated that attendance improved because students became more responsible for attending class. Parent involvement is also cited as a reason for the increase in attendance. Implementation of the attendance policy resulted in at-risk students losing course credit with ninth grade at-risk students being the most affected. Exit level examinations (TEAMS) appeared to not be a reason for students leaving school although forty-four percent of the students in the study were required to retake and pass at least one of the subtests. The combination of being over age, behind in course credits, and barred from participating in extracurricular activities appeared to have more serious effects on at-risk students in the ninth grade than other students. Using the Texas Education Agency definition of dropout, the reported dropout rate for the longitudinal study of at-risk students was 11 percent. The annual attrition rate for high schools in the
case study varied from 3 to 9 percent according the Texas Education Agency. This reflects a substantial difference in the dropout risk for different student populations.

At Risk Findings, 1992

In May of 1992 the Texas Education Agency presented the findings from the 3rd year of the four year study on the impact of educational reform on at-risk students. The Texas Education Agency examined the effect of the same four reforms – attendance policy, the no pass/no play rule, the driver’s license law, and the TEAMS/TAAS exit level examination. The majority (71%) of principals surveyed in this study felt that increased graduation requirements had no impact on the probability of regular students graduating from high school. Almost half (49%) of the principals responding felt that at-risk students were negatively affected by the increased graduation requirement because they were either unable to pass regular courses or were in Correlated Language Arts or Fundamentals of Math courses which do not adequately prepare students to master the TAAS examination. No improvement in achievement test scores, rate of earning course credits, or grade point averages occurred over time. The majority (55%) of principals reported that the TEAMS exit level examination decreased the probability of at-risk students completing high school. However, no significant difference was observed in TEAMS/TAAS scores between eventual dropouts and students still enrolled at the 9th grade. The interview data from this study suggests that increased graduation requirements have not served to engage or motivate at-risk students and may actually be pushing them even further away from graduation.
The no pass/no play rule generally had no effect on regular students’ participation in extracurricular activities but principals perceived a negative effect on at-risk students. Data revealed that although 80% of students in the sample participated in extracurricular activities, approximately 40% of these students lost eligibility at least once during the school year. In addition, interviews with campus administrators revealed a possible connection between the no pass/no play rule and gang recruitment, with a greater likelihood of recruitment when the bond of school involvement outside the classroom is broken.

In summary, the results of the 3rd year of this study suggested that students who are at-risk are negatively impacted by increased graduation requirements and the no pass/no play rule. The results indicated that students who are already at-risk for school failure become even more so as the stakes increase.

The Impact of No Pass/No Play 1994

Although the no pass/no play provision has remained a focus for discussion whether or not the dropout rate has increased under its influence is unclear according to Sabatino (1994). The dropout rate for students involved in extracurricular activities was below the overall dropout rate for students in the 1992-93 school year. The dropout rate for high school students in 1992-93 was 10% compared to 3% for students involved in extracurricular activities. For those students remaining eligible, dropout rates have declined over the years. The results of this study undertaken by the Austin Independent School District conclude that although no pass/no play may not have met the hope of some legislators it has not had the negative impacts many feared.
State Report on Students with Disabilities

In 1994 the Texas Education Agency released its report centering on state policy for educating students with disabilities. The five concepts underlying the policy include individualization, collaboration, communication, integration, and transformation with issues for each area. The background reviewed by the task force revealed that the achievement gap between students with and without disabilities increased along with higher retention rates as students progressed through school, both indicating a lack of academic success.

The success of students with disabilities in Texas is dismal at best according to the Texas Education Agency (1994). Jobs held by students with disabilities tend to be entry-level positions in service occupations, low paying, part-time, and allow little opportunity for advancement. Only 25 percent of students with disabilities attended post-secondary school within a year of graduation. This study (Texas Education Agency, 1994) also examined the academic records of students with disabilities and found that these same students had lower grades and took fewer academic classes as they progressed through secondary school. These numbers are reflective of the National Longitudinal Transition Study of Special Education Students, a six-year, national study of 8,000 youth with disabilities. This study revealed that the average IQ for secondary students with disabilities was 79. Secondary students with disabilities had lower grade point averages compared to the general population, earned approximately half the credits needed for graduation through academic classes, and two-thirds of the secondary school students failed at least one course during high school.
Approximately 10% of the school population in 1992-93 qualified for special education services in Texas (Texas Education Agency, 1994) and half of these qualified as having a learning disability. By the ninth grade, 72% of the students receiving special education services were classified as having learning disability. In this same year almost 163,000 students were retained or not advanced. Slightly over 27,000 or 17% were in special education. The highest retention rate for students with disabilities occurred in grade one and the second highest rate occurred in grade 9. The previous year (1991-92) the percentage of school dropouts who were in special education was 9.1 percent. The dropout rate for white students was the highest (11.1%), followed by African Americans (9.1%), Hispanics (7.9%), and Native Americans (6.8%).

Although students with disabilities may be exempted from the TAAS through the admission, review, and dismissal process, the number of special education students exempted ranges from 6% of the total student population at grade 4 to 4% in grade 10. The gap in scores between special education students and the general population steadily increased. By grade 10, 51% of general education students taking TAAS passed all three tests but only 15% of the participating special education students passed all three tests.

The results of the background information provided by the Texas Education Agency in 1994 on students with disabilities in the state of Texas suggests that the achievement gap between students with and without disabilities increases as students progress through school. The lack of academic success is indicated by higher retention rates for students with disabilities when compared to students not in special education.
programs. This lack of success is also indicated by the lower number of students in special education who pass TAAS.

Including Students with Disabilities in Accountability

In 1995 Ysseldyke and Thurlow served as national consultants as a statewide stakeholder group developed a document for the Texas Education Agency examining the critical issues relating to students with disabilities in the Texas assessment and accountability system and a recommended plan of action. The four major areas addressed were participation, accommodation, reporting, and implementation. High stakes accountability was perceived as the major barrier to greater participation and the purposes of high stakes testing as a barrier in implementation. The strategies in the action plan included networking, research, and development of an alternative assessment. In the area of research it is important to note that the focus group recognized that greater participation in assessments by students with disabilities will not necessarily lead to higher educational outcomes. Tracking the system for unintended consequences was recommended by the use of an annual review of grade retention, referral for special education, and school dropout. The implementation of the action plan of this focus group meets the mandate of legislation (Senate Bill 1, Texas Education Code, May, 1995) enacting the inclusion of students with disabilities in accountability measures.

Summary of School Reform Outcomes in Texas

In summary, there is no data to suggest that any of the reforms enacted by the legislature have a positive effect on students with disabilities. To the contrary, at-risk populations, who share many of the same characteristics and outcomes as students in
special education, continue to dropout of school at higher rates. The exclusion from extracurricular activities puts them at even greater risk for failure and possible gang involvement. The no-pass no-play provision appears to have no effect on students in general education but studies by the Texas Education Agency (1992, 1994) suggest that it does have a negative impact on students who are at-risk for failure and those in special education programs. Exit level examinations may also negatively impact students who are at risk or in special education. These students may not be adequately prepared for such tests because they do not take the more rigorous courses.

It appears that no single school reform policy, evidenced by retention or dropout, contributes to school failure for students with disabilities. It appears to be a combination of factors. Students who are retained are often older and lose interest in school. Lower intelligence levels may keep students in less demanding classes and they are not prepared to pass exit level examinations. The information gathered by the Texas Education Agency indicates that the gap between regular and special education students continues to grow. This gap is evidenced by higher retention and dropout rates for students in special education. As the state institutes the mandates of Senate Bill 1 and includes students with disabilities in both assessment and accountability measures it is critical to watch for unintended consequences including retention, referral to special education, and increased school dropout by students in special education programs.

**Limitation of Research on School Reform Outcomes in Texas**

This section will analyze the limitations of research on school reform in Texas. Longitudinal studies are required to determine the effectiveness of state initiated
activities and thus far special populations have not been included. At-risk populations have been included and these students share many of the characteristics of students in special education. The major limitations of the research center on the lack of generalizability, the nature of overlapping populations within the studies, and continual changes in the laws affecting educational outcomes.

Studies on no-pass no-play have generally found that it has had no effect on regular students' participation in extra-curricular activities (Ligon, 1988; Texas Education Agency, 1994). Although the data supports the fact that students involved in extracurricular activities are less likely to dropout of school, it does not address the simple fact that at-risk students are less likely to be involved in extra-curricular activities due to the no-pass no-play rule, thus increasing the likelihood of dropping out.

Caution is called for when reviewing the meager studies initiated on school reform within the state due to definitional issues and the failure to include special populations. Although the overall effects of school reform in Texas appear to pose no threat to regular students, little is mentioned of potential benefits to any students, least of all those with special needs.

Synthesis Reports on Research

Policy reports, national educational databases, and research projects provide much of the information necessary to form a clear picture of how students with disabilities fare in school. These reports provide a great deal of information that is both generic and specific in nature. The most recent report to be published comes form the work of the Committee on Goals 2000 and the Inclusion of Students with Disabilities in 1997.
Committee on Goals 2000 and Inclusion of Students with Disabilities

In the summer of 1997 the results of a study undertaken by the Committee on Goals 2000 and the Inclusion of Students with Disabilities was published (McDonnell et al., 1997). The purpose of this committee was to conduct a comprehensive study of the inclusion of children with disabilities in school reform measures associated with Goals 2000: Educate America Act (Public Law 102-227, Sec. 1015).

One area addressed by the Committee concerns post school outcomes, curriculum, and instruction. In order to improve educational outcomes the major focus by states is on academic content in language arts, mathematics, science, and other core areas. Although increased learning goals are relevant for the majority of students, many may not be useful or relevant to some students with disabilities. Employability of students with disabilities is often affected by whether or not they have a high school diploma. In states which link the receipt of a diploma to success in state content and performance standards, students with disabilities may find themselves at a disadvantage regardless of the relevant work skills they may possess. In order to qualify for a diploma students may need to increase time spent on academic learning goals which may take valuable time away from mastering more relevant skills. Success in the workplace for students with disabilities often depends on specific instruction in vocational skills, independent living skills, and general readiness skills. The necessity of this is recognized by the mandatory component of special education requiring school to work transition planning. The recognition by special education that educational outcomes go beyond academics is not reflected in state content standards so far.
Current teaching methods endorsed by reform movements may be in direct contrast to those methods research identifies as most effective for students with disabilities (McDonnell, et al., 1997). Methods which focus on individual student needs and intensive direct instruction are not a part of the reform movement. Reformists emphasize active learning and group projects. These methods may be excellent but not necessarily appropriate for students with low cognitive ability.

Test scores of students with disabilities are often excluded when states report the results of state-wide assessment programs. As a result, the effectiveness of state reform measures on special populations is, for the most part, absent. McDonnell, et al. (1997) also point out that student participation (those with disabilities) in state mandated tests may vary from school to school or even district to district. When this is the case, school and district comparisons are not valid. In some situations, accommodations are given to students with disabilities. Practically no data exists regarding the effects of accommodations on the validity of test scores. Finally, the standards in many states are relatively high. The existence of a measure of improvement for students who fall below that standard often does not exist.

Committee on Goals 2000 and the Inclusion of Students with Disabilities makes twelve recommendations, and underlying them are two principles: 1) Both educators and policy makers need to be publicly accountable for the performance of all students, and 2) All students have a right to challenging standards. One significant recommendation of the committee details the importance of policy makers monitoring the unintended consequences for students with disabilities participating in standards-based reform.
Policy Issues and School Dropout

In an attempt to clarify the dropout problem among youth with disabilities, Sinclair (1994) presented information from both an applied research project and findings from five national education databases that include dropout statistics. Among the findings, Sinclair concludes that the most common approach to explaining high dropout rates is to place the blame on the student or characteristics of students such as socio-economic status or ethnicity. The conceptual models which exist offer a means for understanding the dropout problem but do not help in reducing the number of dropouts. These same models are characterized by factors over which schools have no control.

The high risk areas for dropping out of high school appear to be the southern and western states, in addition to large urban areas. Other conditions which contribute to this phenomenon include being from low income households, non European backgrounds, single parent families, and having a disability (Sinclair, 1994).

One of the recommendations from this study relates directly to students with disabilities. According to Sinclair (1994) research indicates that youth with disabilities dropout of school at nearly twice the rate of their general education peers. This is considered inconsequential because they represent a small portion of the population. Dramatic improvement for this relatively small group would have little impact on a national basis. This attitude will serve to perpetuate the gap in graduation rates among special and regular education populations (Sinclair).
Trends for Students with Disabilities.

Youth with disabilities appear to be the group with the greatest risk for school dropout. In 1992 Wagner, D’Amico, Marder, Newman, and Blackorby found that approximately 59% of students with emotional/behavioral disabilities and 36% of students with learning disabilities dropped out of school within a two year period.

The effects of dropping out of school lead to unfavorable outcomes including unemployment, underemployment, and jail. According to the National Longitudinal Transition Study of special education students, those students with learning disabilities who dropout of school face a much greater chance of being arrested than those who do not (62% compared to 15%). The arrest rates for students with emotional/behavioral disorders is even more deplorable. According to the National Longitudinal Study, 73% of these students who have dropped out of school are arrested compared to only 15% of those who stayed in school (Valdes, 1993).

Participation in school activities is essential to positive school outcomes (Finn, 1993). Students who are actively engaged in school and identify with school related goals believe that they belong. Finn’s participation model supports the idea that most students who dropout feel alienated and this alienation or disengagement follows a period of withdrawal and unsuccessful school experiences. Poor grades, course failure, suspension, and a clash between family and school values may be primary indicators of the risk for dropping out and as such should be primary targets for prevention and reform.

The Office of Special Education Programs (1991) funded projects in Los Angeles, Minneapolis, and Seattle to develop interventions to help keep middle school students
with behavior disorders and learning disabilities in school. Intervening at this time was
deemed more appropriate because once these students reach high school typical strategies
will no longer work. The ability to keep students engaged in school until graduation can
be referred to as the holding power of school policies (Sinclair, 1994). School policies
and practices should be evaluated in terms of how they encourage students to stay in
school or heighten the school dropout phenomenon.

The question of whether or not special education services are effective was
addressed by a review published by the National Information Center for Children and
Disabilities (1991). The study concluded that based on follow up studies the outcomes
were less than satisfactory. Dropout rates and low employment rates plagued this
population. The federal government has attempted to work in close proximity with both
states and local education agencies to achieve mutually agreed upon goals and it may be
up to the federal government to provide the necessary leadership (Levitan & Gallo,
1993). Many practices in the United States' education system contribute to functional
illiteracy. These practices include promotion based on what Levitan and Gallo refer to
as seat-time, reliance on grades which can be very misleading, and acceptance into post
secondary schools regardless of achievement (as required by some states). The role of
the federal government is likely to be critical in school reform just as it is in improving
services to children with special needs. Included in this role is the funding and
preparation of curriculum, model texts, tests, equipment, and additional staff to free up
teachers for instruction (Levitan & Gallo). This is, of course, an expensive outlay but the
authors suggest that one way to advance these reform goals is to shift some of the money from categorical programs to the implementation of a reform agenda.

Summary of Research on Synthesis Reports

Information from synthesis reports suggest the academic standards for course content do not reflect the fact that outcomes for students in special education go beyond academics. State wide assessments may or may not include students in special education programs. The recommendations of the Committee on Goals 2000 and the Inclusion of Students with Disabilities (McDonnell, et al., 1997) stress accountability for all students.

Policy issues regarding dropouts generally ignore special education students because they represent a small portion of the population. These students have both the greatest rate and risk for dropping out of school (Sinclair, 1994). Dropping out of school leads to uncertain outcomes regarding employment (Wagner, et al., 1992). Emphasis needs to be placed on keeping students in school and early intervention is critical. School reform needs to concern itself with improving services to students with disabilities and increasing the holding power for all students.

Limitations of Research on Synthesis Reports

Very few studies have attempted to link state reform efforts to achievement although some small-scale studies do show coincidental improvements. However, the relationship appears to be indirect and is compounded by many other factors and conditions. In order to establish a link between state reforms and student outcomes it is necessary to examine the implementation of the reforms (Medric, et al, 1992) and how these changes affect actual practice. Even gathering straightforward information is not as
easy as it sounds. Much of the information reported in studies (Thurlow, et al, 1995) is not easily accessible and researchers may be referred across the state in attempt to gather information.

Another limitation is the lack of long term studies. The NLTS is the only study of its kind which directly addresses outcomes for students with disabilities. Furthermore, students with disabilities represent a rather small percentage of students in public school and as such play a much smaller role in the overall picture of school reform. The efforts of both state and federal government agencies have been tied to results based on the general population and have only recently called for studies representative of students with disabilities.

General Limitations of Existing Research

Limitations of the existing research are very broad due to the nature of the subject. Additionally, the categories are overlapping and rely on a causal comparative approach which may not exist in actuality. Few empirical studies exist and those that do may not generalize. The lack of generalizability for these meager studies is compounded by poor sampling methods and overall designs. Many of the references cited refer to "literature" rather than research and there is an inherent danger that this "literature" may be based on personal theory and conjecture.

Conclusions and Summary of Existing Literature

A number of issues arise from the available literature and a recurrent theme emerges. Students with disabilities have been, for the most part, completely ignored as a significant participant in school reform measures. The very nature of school reform
brings out an emotional fervor which does not require empirical proof to validate its importance and perceived value for all students. However, detractors of testing as a means of validating the effectiveness of schools provide no empirical evidence to support their beliefs either. This issue is further compounded by theoretical suppositions as to why students leave school before graduating.

Despite the limitations of the existing research, it is important to acknowledge the recurring themes and information that emerge regarding the relationship of school reform measures and students with disabilities both in the state of Texas and at a national level. The more prominent features emerging from the literature appear to include the following.

1. States continue to increase graduation requirements through the use of exit level examinations, increased course requirements, and overall higher academic standards.

2. Students with disabilities and students at-risk are negatively affected by increased graduation requirements. These students become disengaged from learning early in high school and have higher dropout and retention rates than other students.

3. The gap between students with and without disabilities increases as students progress through school.

4. A lack of consistency in graduation requirements, retention policies, and grading make it difficult to generalize from the few research studies available.
5. School accountability measures often do not include scores for students with disabilities and few states have any accountability measures in place for these students.

In terms of methodology, it appears to be important to: (a) validate self-report studies through the use of direct observation, (b) include students with and without disabilities, (c) pay particular attention to sampling pools, (d) clearly define the terms and concepts to be investigated, and (e) address in the design of the study any confounding variables that affect the observed outcomes.

Research Questions

Current research and literature regarding the impact of school reform measures on students with disabilities point to a significant lack of information in this area. This study will be conducted to investigate the possible impact of school reform measures enacted in Texas on graduation, retention, and school dropout for students with disabilities. It will be guided by the following research questions:

1. Are there differences in graduation rates for students in special education and students in regular education over a four year period following the implementation of school reform measures, including the establishment of exit level examinations, no-pass no-play, and higher academic standards?

2. Are there differences in retention rates for students in special education and students in regular education over a four year period following the implementation of school reform measures, including the establishment of exit level examinations, no-pass no-play, and higher academic standards?
3. Are there differences in school dropout rates for students in special education and students in regular education over a four year period following the implementation of school reform measures, including the establishment of exit level examinations, no-pass no-play, and higher academic standards?

4. If any significant differences are found in #1, #2, or #3, are there differences in school district characteristics when comparing retention, graduation, or school dropout for students with disabilities in the state of Texas?
CHAPTER III

METHODOLOGY AND PROCEDURES

This study was conducted in order to compare the differences in graduation, retention, and school dropout rates for special education and regular school populations in the state of Texas over a four year period. This section will present information related to the methodology and procedures used in this study. The organization is as follows: (a) subject description, (b) data sources, and (d) data analysis.

Subject Description

In order to compare students in special education and regular education data was analyzed for grades 9-12 over a period of four years for 1,041 districts in Texas. The Texas Education Agency groups these districts into nine categories based on the number of students enrolled. Information regarding these districts by category can be found in Table 1. Students in grades 9 through 12 were identified according to regular education or special education status. Data was collected for retention, graduation, and dropout according to district category size. A description of each district category follows and reflects information found in the Texas Education Agency Snapshot Analyzed Data of 1996.

The largest of these categories (over 50,000) is composed of 9 school districts from the major urban centers in Texas. The school districts included in this category
TABLE 1

District Characteristics by Category (Texas Education Agency, 1996)

<table>
<thead>
<tr>
<th>Category</th>
<th>Over 50,000</th>
<th>25,000-49,999</th>
<th>10,999-24,999</th>
<th>5,000-9,999</th>
<th>3,000-4,999</th>
<th>1,600-2,999</th>
<th>1,000-1,599</th>
<th>500-999</th>
<th>Under 500</th>
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<td># of Districts</td>
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<td>44</td>
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<td>80</td>
<td>135</td>
<td>118</td>
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<td>364</td>
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<td>152</td>
<td>117</td>
<td>115</td>
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<td>% Change</td>
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<td>10.5</td>
<td>14.6</td>
<td>9</td>
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<td>25</td>
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<td>% White</td>
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<td>% Economic Disadvantage</td>
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<td>52.9</td>
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<td>19</td>
<td>21</td>
<td>22</td>
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<tr>
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<td>65.5</td>
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<td>68.4</td>
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<tr>
<td>% African American Pass TAAS</td>
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<td>43.8</td>
<td>44.3</td>
<td>43.8</td>
<td>46.1</td>
<td>43</td>
</tr>
<tr>
<td>% Hispanic Passing</td>
<td>49.7</td>
<td>57.6</td>
<td>56.1</td>
<td>54.6</td>
<td>54.8</td>
<td>52.5</td>
<td>52.8</td>
<td>56.2</td>
<td>55.1</td>
</tr>
<tr>
<td>% White Passing</td>
<td>80.4</td>
<td>83.4</td>
<td>80.8</td>
<td>79.5</td>
<td>77.3</td>
<td>79</td>
<td>75.6</td>
<td>78.5</td>
<td>76.4</td>
</tr>
<tr>
<td>Mean SAT scores</td>
<td>861</td>
<td>924</td>
<td>890</td>
<td>910</td>
<td>879</td>
<td>865</td>
<td>857</td>
<td>860</td>
<td>852</td>
</tr>
<tr>
<td>Avg. teacher salary</td>
<td>33,400</td>
<td>32,163</td>
<td>31,903</td>
<td>30,671</td>
<td>30,143</td>
<td>29,615</td>
<td>29,305</td>
<td>29,147</td>
<td>28,612</td>
</tr>
</tbody>
</table>
include San Antonio ISD, Northside ISD, Dallas ISD, El Paso ISD, Cypress-Fairbanks ISD, Houston ISD, Arlington ISD, Fort Worth ISD, and Austin ISD.

According to the Texas Education Agency these districts typically have a higher percentage of minority students and economically disadvantaged students. In addition, a lower percentage of students in these districts pass the TAAS tests. These districts generally have higher than average teacher salaries and a larger percentage of minority teachers. In 1996 10% of the students in this category received special education services, the smallest percentage of the nine categories.

The second largest category (25,000 to 49,999) includes 24 school districts located in suburban areas near the major urban cities and a few large independent cities throughout Texas. Approximately 49% of the students are white, 34% Hispanic, and 12% African American. These districts have the lowest percentage of economically disadvantaged students and the highest percentage of students passing TAAS.

The next category (10,000 to 24,999) is composed of districts in independent cities throughout Texas. These cities are characterized by moderate growth, the largest Hispanic student populations (48%), and the second highest percentage of students considered to be economically disadvantaged.

Districts with student enrollments of 5,000 to 9,000 compose the next category. These districts generally represent outlying suburbs and medium size cities throughout Texas. The majority of students (58%) are white and approximately 40% are economically disadvantaged. Students in these districts reflect the second highest mean
SAT score. In addition, these districts have seen the greatest change in total school enrollment recently.

The fifth category is made up of districts with an enrollment of 3,000 to 4,999. Almost 60% of the students are white and slightly over 42% economically disadvantaged. These districts are generally found in small independent cities experiencing limited growth.

The last four district categories have similar characteristics. The percentage of African-American students is low and the majority of students are white. Hispanic students account for 23% to 30% of the student enrollment. These districts are typically located in very small towns and rural areas. Students in these districts have some of the lowest mean SAT scores and have the fewest number of students qualifying for college admission. From 43% to 46% of the students are economically disadvantaged. The percentage of students in these districts receiving special education services ranges from 14% to 16%, the highest in the state. These districts also see the highest percentage of students in career and technology education.

Data Sources

The data reported here was extracted from the state wide management system for public information in the State of Texas, referred to as PEIMS (Public Education Information Management System). Student demographics, program participation, retention, graduation, and dropout information are among the data collected (Texas Education Agency, 1997).
Graduation information is reported once a year and includes all students who graduated during the school year, including summer. This information does not identify graduates by grade level. Student demographics include ethnicity and the Texas Education Agency currently identifies students in 5 categories: Native American, Asian, Hispanic, African American, and White. This study included data on all students who graduated according to ethnicity and special or regular education participation.

At the end of each year districts report the number of public school students retained in kindergarten through 12th grade. These students are identified by grade and program participation. However, some student demographic information is not available, including ethnicity. For this study, data on students in grades 9, 10, 11, and 12 was analyzed according to special or regular education participation.

Dropout information is collected after the end of each school year from the school districts. Although the information is collected for grades 7 - 12 only information for grades 9-12 was used for the purposes of this study. The definition of what constitutes a dropout has changed significantly over the years. In 1990-91 the Texas Education Agency standardized the definition and also instituted what is called a dropout recovery program. The purpose of this recovery program is to remove certain individuals from the dropout roles for previous years. As an example, if it is determined that a student is enrolled in another district after being reported as a dropout they are removed from the dropout role. Other examples of dropout recovery include students who receive a General Educational Development (GED) certificate, students who graduate within the last year, and students who are expelled for criminal behavior at school and put in jail.
This standardization is not reflected in the data until school year 1992-93. This study included data on all students who were reported as dropouts according to grade and ethnicity according to special or regular education status.

Data Analysis

The statistical analysis included in this study was performed using the Statistical Analysis System (SAS) and the Statistical Package for the Social Sciences (SPSS). Groups were compared separately on 3 variables, retention, graduation, and school dropout over a four year period. Differences in school district characteristics were analyzed by performing a trend analysis on each of the nine district groups according to size.

In the first analysis graduate data was analyzed using a $9 \times 2$ repeated measures ANOVA ($n=90$). Retention data was analyzed using a $9 \times 2$ repeated measures analysis of variance (ANOVA) ($n=72$). Dropout data was analyzed using a $9 \times 2$ repeated measures ANOVA ($n=360$). The purpose of this analysis was to determine if group differences existed over a four year period. In the second analysis a repeated measures analysis of variance with polynomial contrasts was used to determine if trends were present for each of the nine district sizes for each of the three variables (retention, graduation, dropout). Adjustments were done using appropriate multiple contrasts using advanced techniques to avoid Type I error for performing these tests simultaneously (Parker & Rothenberg, 1988). The purpose of this analysis was to determine if differences exist in school district characteristics when comparing retention, dropout, and graduation. The results of all forms of analyses are presented in the following section.
CHAPTER IV

PRESENTATION OF THE FINDINGS

This study investigated graduation, retention, and dropout for students in special and regular education programs across a period of four years. A complete evaluation of the data included a comparison of both groups across years and a trend analysis according to district size. The findings of the study are represented as follows: (a) results, (b) summary of results.

Results

An analysis of the data was conducted using SAS and SPSS. In the first analysis, using SAS, a repeated measures analysis of variance was performed on data for graduation, retention, and dropout across all district categories. Next, a trend analysis for graduation, retention, and dropout within each district category using SPSS was performed. The results for graduation, retention, and dropout across all district categories will be discussed first. The findings, which examined trends within each district size, will be discussed last.

Graduation

The first research question to guide this study was as follows: Are there differences in graduation rates for students in special education and students in regular education over a four year period following the implementation of school reform.
measures, including the establishment of exit level examinations, no-pass no-play, and higher academic standards?

No significant differences were found in the rate of graduation for the two groups. The analysis did reveal a year by group interaction effect and post hoc tests reveal a significant difference in 1994-95 as seen in Table 4. Figure 2 depicts an increase in graduation for students in special education in 1994-95 and a decrease in graduation for regular students in the same year.

Table 4

Multivariate F Tests of Significance using Wilks' Lambda criterion. Significant Post Hoc Results by Year for Graduates

<table>
<thead>
<tr>
<th>Year</th>
<th>F</th>
<th>Significance Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>1994-95</td>
<td>5.25</td>
<td>.0249</td>
</tr>
</tbody>
</table>

Computed using alpha = .05
Figure 2. Percentage of students graduating for years 1992-93 to 1995-96.

Retention

The second research question guiding the study was: Are there differences in retention rates for students in special education and students in regular education over a
four year period following the implementation of school reform measures, including the establishment of exit level examinations, no-pass no-play, and higher academic standards?

A significant difference in the rate of retention for the two groups was found (Table 2). In addition, no interaction effect was present. The difference in groups was present for all four years (Table 3). As depicted in Figure 1, students in special education were retained at about twice the rate of students in regular education in all four years.

Table 2

Univariate Analysis of Variance of Retention

<table>
<thead>
<tr>
<th>Source</th>
<th>df</th>
<th>Type III SS</th>
<th>Mean Square</th>
<th>F</th>
<th>Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Group</td>
<td>1</td>
<td>0.16183769</td>
<td>0.1618379</td>
<td>15.24</td>
<td>.0002</td>
</tr>
<tr>
<td>Error</td>
<td>70</td>
<td>0.74337862</td>
<td>0.01061969</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 3

Multivariate F Tests of Significance using Wilks' Lambda criterion. Significant Post Hoc Results by Year for Retention.

<table>
<thead>
<tr>
<th>Year</th>
<th>F</th>
<th>Significance Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>1993</td>
<td>14.52</td>
<td>.0003</td>
</tr>
<tr>
<td>1994</td>
<td>16.39</td>
<td>.0001</td>
</tr>
<tr>
<td>1995</td>
<td>14.93</td>
<td>.0001</td>
</tr>
<tr>
<td>1996</td>
<td>14.31</td>
<td>.0003</td>
</tr>
</tbody>
</table>

Computed using alpha = .05
Figure 1. Percentage of students in grades 9-12 retained for years 1992-93 to 1995-96.
The next research question guiding this study was: Are there differences in school dropout rates for students in special education and students in regular education over a four year period following the implementation of school reform measures, including the establishment of exit level examinations, no-pass no-play, and higher academic standards?

No significant differences were found in the rate of dropout for the two groups. The analysis did reveal a year by group interaction effect and post hoc tests reveal a significant difference in 1994-95 and 1995-96 as seen in Table 5. Figure 3 depicts a steady decline for students in regular education but not for students in special education. A gap between students in special education programs and those in regular programs appears to be widening.

Table 5

Multivariate F Tests of Significance using Wilks' Lambda criterion. Significant Post Hoc Results by Year for Dropout.

<table>
<thead>
<tr>
<th>Year</th>
<th>F</th>
<th>Significance Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>1994-95</td>
<td>11.90</td>
<td>.0007</td>
</tr>
<tr>
<td>1995-96</td>
<td>17.95</td>
<td>.0001</td>
</tr>
</tbody>
</table>

Computed using alpha = .05
Figure 3. Percentage of students in grades 9-12 dropping out for years 1992-93 to 1994-95.

Trend Analysis

The final question this study proposed to answer was: If any significant differences are found in #1, #2, or #3, then are there differences in school district
characteristics when comparing graduation, retention, or school dropout rates for students with disabilities in the state of Texas?

A trend analysis of each district grouping revealed no significant results for graduation or retention. As seen in Figure 4, retention does, however, vary greatly according to grade. Significant results were found in dropout rates for 4 of the 9 district categories according to size. The results of these analyses will be discussed separately.

Figure 4. Retention rates by grade for special and regular education students.
Medium Size Districts

A significant linear trend was found in district categories C & D (Table 6). As shown in Figure 5, these districts, which fall in the medium range of student enrollment, show a consistent decrease in dropout rate. This linear trend is evident for both regular and special education students.

Table 6


<table>
<thead>
<tr>
<th>District Enrollment</th>
<th>F</th>
<th>Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>C - 10,000 -24,000</td>
<td>46.287</td>
<td>.000</td>
</tr>
<tr>
<td>D 5,000-9,999</td>
<td>42.864</td>
<td>.000</td>
</tr>
</tbody>
</table>

Computed using alpha = .05
Figure 5. Linear trend for dropouts in school districts with 5,000 to 24,000 students (medium size).
Large Suburban Districts

A significant quadratic trend was found in district category B (Table 7). As shown in Figure 6, these districts, typically found in large suburban areas, show a decreasing dropout rate for three years followed by a sharp increase for students in special education and a slight increase for students in regular education.

Table 7


<table>
<thead>
<tr>
<th>District Enrollment</th>
<th>F</th>
<th>Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>B-25,000-49,999</td>
<td>16.226</td>
<td>.000</td>
</tr>
</tbody>
</table>

Computed using alpha = .05
Figure 6. Quadratic trend for dropouts in school districts with 25,000 to 49,999 students (large suburban).
Major Urban Districts

A significant cubic trend was found in district category A which represents the 9 major urban cities in Texas (Table 8). As shown in Figure 7, the dropout rate has fluctuated for the two groups and both groups experienced an increase in dropout for the last year.

Table 8


<table>
<thead>
<tr>
<th>District Enrollment</th>
<th>F</th>
<th>Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>A Over 50,000</td>
<td>23.205</td>
<td>.000</td>
</tr>
</tbody>
</table>

Computed using alpha = .05
Figure 7. Cubic trend for dropouts in school districts with over 50,000 (large urban).
Dropout rates for regular students can be found in Figure 8 for those districts which exhibit significant trends. In Figure 9 these same rates are depicted for students in special education. Table 9 reflects the variability in dropout rates within districts between 1992-93 and 1995-96. As depicted in Figure 10, a wide range of dropout rates exist.

**Figure 8** Dropout trends for students in regular education over years 1992-93 to 1995-96.
Figure 9. Dropout trends for students in regular education over years 1992-93 to 1995-96.

Table 9

Variability of dropout rates in school districts.

<table>
<thead>
<tr>
<th>Year</th>
<th>Student Group</th>
<th>Minimum</th>
<th>Maximum</th>
<th>Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>1993</td>
<td>Regular</td>
<td>.006</td>
<td>.112</td>
<td>.042</td>
</tr>
<tr>
<td>1993</td>
<td>Special</td>
<td>.012</td>
<td>.093</td>
<td>.039</td>
</tr>
<tr>
<td>1994</td>
<td>Regular</td>
<td>.007</td>
<td>.094</td>
<td>.038</td>
</tr>
<tr>
<td>1994</td>
<td>Special</td>
<td>.015</td>
<td>.113</td>
<td>.042</td>
</tr>
<tr>
<td>1995</td>
<td>Regular</td>
<td>.006</td>
<td>.090</td>
<td>.028</td>
</tr>
<tr>
<td>1995</td>
<td>Special</td>
<td>.012</td>
<td>.067</td>
<td>.032</td>
</tr>
<tr>
<td>1996</td>
<td>Regular</td>
<td>.006</td>
<td>.100</td>
<td>.025</td>
</tr>
<tr>
<td>1996</td>
<td>Special</td>
<td>.006</td>
<td>.089</td>
<td>.032</td>
</tr>
</tbody>
</table>
### Overall Summary of Findings

No significant differences were found in graduation rates for the two groups of students across four years. Post hoc results did reveal a significant difference in the 1994-95 school year at which time graduation rates for students in special education surpassed those of regular education. No significant trends were evident for graduation within district categories.

Students in special education were retained at significantly higher rates than regular students. Across a period of four years no difference was found. Retention rates for both groups remained relatively steady with no significant trends within district categories. The highest retention rates occur in 9th grade for both groups.

Significant differences in the dropout rate for special and regular education

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#### Figure 10. Minimum, maximum, and mean rates for dropout in grades 9-12 by districts.
students were found in the last two years of the study. The trend analysis for dropout within district categories revealed three significant trends. Medium size districts displayed a linear trend with a steady decrease in dropout across the four years. Large suburban districts exhibited a quadratic trend with a decrease followed by an increase in the dropout rate across four years. The large urban districts displayed a quadratic trend with fluctuating dropout rates for both special and regular education students.
CHAPTER V

DISCUSSIONS, IMPLICATIONS, RECOMMENDATIONS

The purpose of this study was to determine if significant differences exist between students who qualify for special education services and students in regular education programs when analyzing data regarding graduation, retention, and dropout over a period of four years. In addition, it was also the intent of this study to determine if certain district characteristics have an impact on the rates at which students in special education graduate, are retained, or dropout of high school. In the first section the results of the study regarding graduation, retention, and dropout will be discussed. The conclusions along with a summary will follow. The final two sections will discuss implications for the future and recommendations for further studies.

Discussion

The purpose of this section is to present and discuss the results of data analysis on graduation, retention, and dropout for students in regular and special education programs over a period of four years. The time period covered school years 1992-93 through 1995-96 and included data for all students in Texas in grades 9 through 12.

Graduation

Students receiving special education services graduated at about the same rate as students in regular programs for the years studied. This appears to be a very positive outcome for students with disabilities compared to retention rates for students with
disabilities. However, these positive results may be influenced by certain factors. Students who qualify for special education programs may be exempted from all or a portion of the TAAS tests if the ARD committee agrees, and may therefore graduate without the same requirements as regular students. The fact that students in special education do not have to necessarily meet the same standards for graduation has led to speculation that underachievers are being classified as learning disabled in order to enable them to graduate (Levitan & Gallo, 1993). There is no research to support this claim, however, the percentage of students in special education who graduated surpassed the percentage of regular education students who graduated in the last year of this study. Whether or not these numbers represent underachievers, low performers, or actual students with disabilities may not really matter. What matters is the fact that these students are staying in school to graduate and by doing so greatly increase opportunities for success.

Retention

Students in special education are retained at about twice the rate of students in regular education. The significant difference in retention rates for the two groups is reflective of the literature (McLeskey & Grizzle, 1992; McGill-Franzen, & Allington, 1993) and is not surprising. Although students in special education were retained at about twice the rate of their regular peers, the difference in the two groups remained steady across time. Higher standards for core curriculum courses and the elimination of fundamental courses at the high school level may make it impossible for students in
special education to narrow the gap. It is encouraging, nonetheless, to see that the gap has not widened.

Current grading practices require students to perform at a 70% minimum level. This aspect of reform agenda, designed as a lever to raise overall achievement, may be ineffective and lend itself to a "lowering of the curve" (Medrich, 1992). It is possible that retention based on grades becomes arbitrary depending on the teacher, campus, or even district. If this is the case, retention as a tool for remediation, is applied consistently within each group of students from one year to the next.

Students who repeat a course or find themselves older than their classmates due to retention may lack a sense of belonging and dropout of school. The literature reflects significantly poorer outcomes for students who are retained as evidenced by higher dropout rates (Holmes & Matthews, 1984; Hahn 1987; Grant & Sleeter, 1988; Lenarduzzi, Grant, & McLaughlin, 1992). Clearly, in order to lower the dropout rate for students with disabilities, it is necessary to first see a drop in the retention of students with disabilities. Currently, there is no evidence to suggest that this is happening. In fact, if the rate of retention for students in special education continues to stay around 10%, it is likely that many of these same students will leave school without graduating. The very high numbers of students retained in the 9th grade is disturbing, particularly for students receiving special education services. These numbers show an increase for each year and are approaching 20% of the special education population. Certainly, this may be a clear indication that these students are not mastering the curriculum as they enter high school. It is perhaps time to examine alternatives to retention. School districts and
policy makers must accept the fact that early intervention is not always enough (Thomas, 1992), and specific programs for prevention must be developed and implemented throughout the educational process.

**Dropout**

The dropout rate for regular students has steadily declined while the dropout rates for students in special education have fluctuated from one year to the next. It appears that those programs designed to keep students in school have been more successful for students without disabilities. Even more disturbing is a growing gap between the two student groups beginning in September of 1994. At this time dropout rates for regular students continued to decline while the rates for special education students increased. This state-wide increase in dropout rates for students in special education is not evident in all districts, however.

As evidenced by a trend in mid-sized districts, many schools are seeing a consistent decline in school dropout for all their students. These districts are characterized by a combined Hispanic and white student population of slightly over 85%. The mean SAT score for these districts ranks second. The majority of these districts are located throughout Texas in independent cities experiencing moderate growth. It may be a function of stability and size which allows these districts to provide environments which help keep all their students in school.

Large suburban school districts experienced a decline in dropout until 1994 at which time both the dropout rate for regular students leveled off and the rates for special education students rose significantly. These large districts are characterized by the
highest TAAS passing rates and college admissions scores. Students in these districts are less likely to be poor or members of a minority group when compared with other non-rural districts. The higher academic achievements of students in this group combined with apparent affluence may contribute to the disparate dropout rates over time. The emphasis on college preparatory programs may be at the expense of students who are less academically talented.

Nine school districts located in the major urban areas in Texas serve just over 20% of the total students. These large districts have not demonstrated consistency in lowering the dropout rates for students in special education or for students in regular education. Almost 60% of the students from these districts are considered economically deprived and fare poorly on the TAAS. The large Hispanic population (47% in 1996) and African American population (25% in 1996) pass the TAAS at significantly lower proportions than white students. It appears that interventions designed to keep students in school have not been consistent or effective for special education or regular education students.

Summary

In summary, a number of poignant facts were revealed. A higher percentage of students in special education were retained than students in regular programs. This difference appears to be constant across years. Graduation rates between the two groups did not vary significantly, however, the rates for special education students were higher than regular students in 1996. A gap in dropout rate for the two groups appeared in 1995 and continued to grow into 1996. Three trends appear in dropout rates according to
district size. Medium size districts have been the most effective in decreasing dropout rates for all students. Large suburban districts demonstrated a sharp increase in dropout for special education students following three years of decreasing dropout rates consistent with regular students. School districts in the largest cities across Texas show no consistency in keeping dropout rates in a downward spiral for either group.

Conclusions

There appears to be no evidence that students in special education programs as a whole were negatively impacted by school reform measures from September 1992 to August of 1996. Retention rates increased slightly for students in special education, along with those of regular students. Retention rates are highest in the ninth grade for both groups. Graduation rates actually experienced a sharp increase for the last year of the study. Dropout rates were inconsistent but lowest in the last year of this study. There is evidence, however, that these same students are not doing as well when compared to students in regular education. Theoretically, both groups should experience the same degree of change if higher standards and competency testing were effective means of improving school performance. Retention as a policy of academic remediation has not changed for either group. In keeping with other studies in other states, students in special education continue to be retained at twice the rate of their regular peers at the high school level (Holmes & Matthews, 1984). By keeping these students in school an additional year, the possibility of dropping out of school is significantly increased for both groups. A gap in dropout rates between the two groups exists and may likely continue as public policy calls for the retention of students who do not exhibit mastery of
the curriculum at each grade level (Walt, 1998). Although there is no research to support the benefits of retention, policy alternatives must ensure that students learn what they ultimately need to know to be successful in life. Ignoring the problem of failure or doing again what failed to work the first time is not the answer.

Implications for the Future

The state of Texas has spent a significant amount of time and money to improve education with the intent to provide more positive outcomes for all students. Keeping students in school while also maintaining high standards has been a challenging role for both policy makers and educators.

Students in large urban areas are not as successful in school whether they are in special or regular education programs. As a group, students in the major cities do not score well on the TAAS and are generally less prepared for college if measured by SAT scores. In addition, an overwhelming majority of these students are considered to have minority status and are economically disadvantaged. The use of mandatory tests such as the TAAS can and should be used as a means of identifying those students who need interventions, however, it may come far too late for many. Although the use of statewide assessments should continue in order to provide an external check on both the teaching and learning process for all students they should serve as a detriment to any student.

Some policies, including smaller class size, have proven to be more successful for positive school outcomes (Mosteller, 1996). Although Texas instituted smaller classroom size many years ago it only applies to grades K through 4 and policy makers have not
suggested extending this concept to higher grades. The traditional approach to remediation generally includes retention, lower expectations, and leading students through school at a slower pace. These methods may well lead to failure for any student. Struggling students, whether in regular or special education, generally have options including extra homework, pull-out programs in reading and math, peer tutoring, and tutorials. Research has shown that schools are much less likely to offer summer school, one-on-one adult tutors, an extra core subject (double-dosing), or Saturday classes. These may be more effective measures to meet the educational needs of students with academic deficits. Combining this type of remediation with small class sizes, a safe and orderly environment, and frequent monitoring of individual performance is perhaps a better way to insure the academic success of both regular and special education students.

Texas is in the process of developing a separate alternative assessment instrument for students who are unable to take the TAAS. By the year 2000 the results of these assessments along with the TAAS scores for students in special education programs will be included in the district accountability system. For the first time schools will be accountable for the educational progress of ALL students. By actively engaging these students in the learning process, the holding power of schools may become stronger for students with disabilities, particularly those with learning disabilities, who compose 72% of students in special education at the high school level.

Recommendations

It is important to continue to monitor the educational outcomes for students with disabilities in light of the continued push for increased academic standards, the call to end
"social promotion", and the passage of mandatory tests as a requirement to move from one grade to the next. A number of factors influenced the design of this study and are important to note. In dealing with historical data, it is imperative to determine that a consistency in definitions exists, confidentiality is addressed, and the information collected is accurate.

Until the 1992-93 school year it was impossible to track the number of students in Texas who dropped out of school accurately due to changes in the definition of the term "dropout". The lack of consistency in definitions over the years leads to speculation about the accuracy of published reports prior to 1992. For this reason, this study did not include previous years.

The confidentiality of students receiving special education services must be preserved. The large number of small districts in Texas (enrollments less than 500) required aggregating data or dropping any counts of 5 and under. For that reason, the data was aggregated according to district size to preserve accurate information to the greatest extent possible.

Future studies may want to focus on large urban districts for two reasons. The diversity and number of students might allow for a more detailed analysis. In addition, the inconsistency in dropout rates from year to year in these districts is an area of concern. If this trend continues it may serve as a basis to institute different interventions based on district characteristics. Demographics undoubtedly influence student outcomes for both regular and special education students.
REFERENCES


P. L. 103-227, Sec 3[9]

P. L. 102-227, Sec. 1015, 19


Senate Bill 1, Texas Education Code, May, 1995.


