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AN ANALYSIS OF A TITLE I INCLUSIVE MIDDLE SCHOOL PROGRAM IN
TEXAS OVER A THREE YEAR PERIOD: A CASE STUDY

DISSERTATION

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By

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The purpose of this study was to describe a Title I inclusion program in a north Texas middle school, to evaluate the degree of its success as a high achieving program, and to analyze how closely it met the requirements of the Improving America's Schools Act of 1994. Data were collected from the learning facilitators and teachers at the middle school with the permission of the school district.

This study began with extensive research on the nature of adolescents and the beliefs and characteristics of high achieving middle schools. It addressed the steps which were recommended in the literature to improve middle schools and benefit students that are at-risk of failing to master the curriculum at their grade level. The researcher concluded by reporting effective strategies being used in middle school at-risk programs. These are strategies noted by experts as successful in identified programs.

The population for this study was seventh and eighth grade Title I students who attended middle school during the 1992-1993, 1993-1994, 1994-1995 and 1995-1996 school years. The data collected by the researcher are presented in two parts: the description of the Title I inclusion program; and the results of the Texas Assessment of Academic Skills tests in reading and math, the Shaw-Hiehle Math Tests, and the Gates-MacGinitie Reading Tests.

Findings from this study suggest that the program met the requirements of a Title I program established by the federal government. The test scores for the middle school

improved during the three years of the program. The Title I inclusion program met the requirements of the Improving America's Schools Act. Finally, the Title I students were successful working in classrooms with other students on challenging curriculum which met the State's content and performance standards. These findings have implications for other middle schools who are developing Title I programs to meet the requirements of the Improving America's Schools Act.

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CHAPTER I

INTRODUCTION

Background of the Problem

On October 20, 1994 President Clinton signed the Improving America's Schools Act, creating a new Title I which became effective in the 1995-96 school year. This Act, along with the Goals 2000 and the School-to-Work Transition Act, formed the foundation for transforming education for low achieving and disadvantaged students. The new law was based on the belief that all children can learn at higher levels and that all students, including those in high poverty schools, should be well educated.

Following are the significant highlights of Title I, Part A, "Improving Basic Programs Operated by Local Education Agencies":

- The legislation shifts from a remedial approach to instruction, to one that assists Title I students to reach high standards ;
- The legislation lowers the poverty threshold level for eligibility for schoolwide programs ;
- The legislation actively promotes the use of funds for high quality professional development ; and

- The legislation begins to provide more resources to high poverty school districts .

Chapter I, originally known as Title I of the Elementary and Secondary Education Act of 1965, was part of President Lyndon B. Johnson's "War on Poverty" (Siegel 1993, 10). Chapter I was designed to increase educational opportunities and outcomes in school districts serving high proportions of low income students (Rowan, and Guthrie 1989, 195). In 1983, Congress mandated that a National Assessment of Chapter I be conducted in order to consider the current operations of the program and prospects for its improvement. In fiscal 1992, Congress appropriated \$6.1 billion for Chapter I, comprising 19% of the Department of Education's total budget. The Chapter I name was changed to Title I in 1994.

For most of the millions of students who participated in Title I before 1994, the program consisted largely of remedial services. The Improving America's Schools Act attempted to change this by requiring that Title I students be taught challenging content, with quality instruction that will enable them to have a chance to reach the same high standards as other children. The Independent Commission on Chapter I supported this change as an essential element of the effort to improve education results for Title I students. The Act requires each state to submit a plan to the Secretary of Education demonstrating that it has developed or adopted challenging content to meet performance standards and high quality assessments. The plan must also show that the state's assessments are aligned with its content and performance standards. The school district is required to submit a plan describing the strategies it will use to assist Title I students in meeting the state's standards. This was a major shift from low-level remediation which

often pulled students out of their regular classrooms and provided students with rote practice of material which covered only a part of the required content at a determined grade level.

The legislation lowers the poverty threshold for eligibility for schoolwide programs. The Commission recommended abolishing the poverty threshold for eligibility for statewide programs so that all Title I schools could use this strategy to improve the quality of teaching and learning for their students. With Title I funds, they could employ additional staff to work with Title I students, provide training for their teachers on methods of teaching which have shown success with other Title I students, and purchase resources and materials which students could use in the classroom to increase their understanding of the lessons being taught. Under the Act, the poverty threshold, or starting point, for schoolwide eligibility is lowered to 60% of the student population for the 1995-96 school year, and to 50% thereafter. Approximately 22,879 or 46% of all the Title I schools would be eligible to participate in schoolwide programs when the threshold was lowered to 50%, whereas only 20% of Title I schools were eligible to participate under the prior threshold of 75%.

The legislation actively promotes the use of funds for high quality professional development. Title I, Part A, Section 1119 describes in detail the elements of high quality professional development that local education agencies must provide teachers, principals, other staff -- and parents "where appropriate." In both targeted assistance and schoolwide programs, the legislation specifically states that the schools have to commit "sufficient

resources” to professional development to carry out the activities that are prescribed in Section 1119. Schoolwide programs include those schools who have a high enough population of low-income students that they can use the Title I funds to improve the educational program of the entire school. Targeted assistance schools are schools that do not have a high enough population of low-income students to qualify for schoolwide status or do not choose to run a schoolwide program. Targeted assistance programs must use Title I funds to serve those students who are furthest behind their peers. The Act also specifies that professional development shall be designed by the building level staff with “intensive participation of teachers.” Schools identified as being in need of improvement of their programs for working with kids in at-risk situations so that they can meet the standard must devote a specified percentage of their allocation to professional development. Schools must use effective instructional strategies that help provide accelerated, high-quality curriculum and minimize pulling students out of class. The program must be coordinated with regular programs and taught by high quality professional staff. Further, the schools must put into effect strategies for increasing parent involvement.

The legislation began to target more resources to high poverty school districts. For the fiscal year 1996 and succeeding years, the bill retained the basic and concentration formulas for all funds up to the fiscal year 1995 funding level of \$6.566 billion. The legislation took steps toward targeting more resources to high poverty school districts over the next five years by:

* Raising the eligibility threshold for Concentration Grants. To qualify for Concentration Grants, counties and Local Education Agencies (LEA's) must have at least 6500 eligible children or 15% of the student population must be eligible children. Federal and state guidelines specify which schools are eligible for Chapter I funds. This is done by ranking schools on the basis of the poverty level in the school attendance area, typically using data from the free/reduced-price lunch or Aid to Families with Dependent Children programs.

Local Education Agencies (LEA) that qualify under the 6500 eligible children threshold receive funds for all formula-eligible children.

* Eliminating Title 1 funding to the wealthiest school districts. To be eligible for the Basic Grants, school districts must have 10 poor students and at least 2% of the student population at poverty level.

* Creating a new category of "Targeted Grants." Beginning in 1996, all new money is allocated through Targeted Grants, a new weighted-child formula that provides a higher per-child amount for districts with high percentages or high numbers of formula-eligible students in the county or Local Education Agency.

The Act also changes the way funds are allocated within the school districts. Districts must rank the school attendance areas in which 75% or more of the children are from low income families and serve those schools without regard to grade span. A high-poverty school in a low poverty school district is eligible for service. In some districts, these changes will shift Title I funding to high poverty middle and high schools for the first time. Prior to this, Chapter I funds had been allocated for elementary schools. Thus, the reason for this study was to assist middle schools as they attempt to set up Title I programs which meet the requirements of the Improving America's Schools Act.

Statement of the Problem

The problem of this study was to describe a Title I inclusion program in a north Texas middle school, to evaluate the degree of its success as a high achieving program and to analyze how closely it met the requirements of the Improving America's Schools Act.

Purposes of the Study

The purposes of this study were:

1. To describe the characteristics of an inclusion program in a north Texas middle school that was set up to meet the requirements of a Chapter I program as established by the federal government under the Elementary and Secondary Education Act of 1965.
2. To provide assessment data to compare achievement scores of students during the three years of the program with the year prior to the program.

3. To analyze how closely the north Texas middle school Title I inclusion program met the requirements of the Improving America's Schools Act of 1994.

Research Questions

The following questions were addressed descriptively and analytically:

1. What characteristics of the district's Title I inclusion program met the requirements of a Title I program that was established by the federal government?
2. What differences existed in the Texas Assessment of Academic Skills test scores of the students in the north Texas middle school studied, in reading and math, during the three years of the Title I program, from the year preceding the program?
3. In what ways did the north Texas middle school inclusion program meet the requirements of the Improving America's Schools Act?

Definition of Terms

Accelerated Learning: Increasing the amount of content taught to students to hasten the learning process and bring students through more of the curriculum than they would normally be expected to cover in the same amount of time.

Class Period: The length of the specific subject taught each day. Most classes are fifty minutes in length and are repeated in the same order each day of the week.

Facilitator: One who stimulates and regulates the active participation of a group of people.

Kuder-Richardson Formulas: Formulas that provide an index of the internal consistency reliability of a measure. The index is a function of the number of components and their interrelationship.

Learning Facilitators: The title given to the math and reading teachers employed in the north Texas middle school as part of the Title I program.

Middle School: A campus having grades six, seven and eight.

Parent Support Services: Services which are provided to the families of the students, which are intended to help keep students doing their best work in school. They include social, emotional and health services.

Raw Score: The raw score is the number of items answered correctly on a subject area test. By itself, the raw score has limited utility; it can only be interpreted in reference to the total number of items on a subject-area test, and raw scores should not be compared across different administrations of the test.

Reliability of Measurement: The extent of unsystematic variation in the quantitative description of some characteristic of an individual when the same individual is measured a number of times.

Scale Score: The scale score is a statistic that provides a comparison of scores with a minimum expectations/passing standard and allows for comparisons across years within a subject or a grade.

Texas Learning Index: The Texas Learning Index is a statistic that allows for comparison both across the years and across grade levels within a subject area for reading and mathematics at grades three through eight and exit level.

Validity: The extent to which a test or set of operations measures what it is supposed to measure; the appropriateness of inferences from test scores or other forms of assessment.

Zero Period: The period which precedes first period. There are seven regular class periods during the school day. Teachers meet with students for additional help during the zero period.

Basic Assumptions

For the purpose of this study, it was assumed that:

1. Title I funds are used to service disadvantaged students in schools with a high proportion of low-income students.
2. All children can learn beyond the basics and should be taught problem solving skills.

Limitations of the Study

Limitations of this study included:

1. The population at the north Texas middle school changed so frequently that some students did not take part in the program for the entire year. Other students entered several months into the program which delayed their involvement and progress in the program.

2. Several teachers in the school transferred over the period studied which meant that new teachers were continually being trained and added to the classrooms studied.

3. Adjustments to an inclusion program took time from the actual functioning of the program.

Significance of the Study

This study is significant in that the program at the middle school is an early effort to teach Title I students in an inclusive setting with the Title I facilitator working along with the teacher in the regular classroom. Students are taught challenging content with varied instructional methods which enables them to have a chance to reach the same high achievement levels as the other children. This study is notable since the Improving America's Schools Act requires each state submit a plan for its at-risk students to the Secretary of Education demonstrating that the state has developed or adopted challenging content that meets performance standards and assessments. The Act also required the school districts to submit plans describing the strategies they use to assist Title I students in an effort to meet the state's requirement.

CHAPTER II

REVIEW OF RELATED LITERATURE

There is little question about the uniqueness of middle school students. The movement from junior high to middle school reflects an awareness of this understanding. The middle school student goes through more life changes (physical, mental, emotional, psychological, social) than any other time in life, except early childhood (Lorain 1997, 34). A parent needs to keep his camera handy because the child that started middle school in August might have a completely different look by December. Educators must be aware of these changes and develop programs to address the unique needs.

Nature of Adolescents

Educational leaders who accept that young adolescents are at an age with unique characteristics gain an appreciation of these students, and with this knowledge, adapt programs to meet their needs (Lorain 1997, 34). Middle school age students are restless, in perpetual motion, and restless in their seats. Many are experiencing phenomenal growth spurts. Their muscles and bones are growing as fast as their skin. As the skin stretches, nerve endings lie close to the skin. Some adolescents move constantly

because it hurts for them to sit still too long. Knowledge of this restlessness allows those who work with young adolescents to do so with a different attitude.

Growth spurts have their disadvantages. Students who are growing rapidly have a low tolerance for fatigue. Fatigue and fast physical growth affect attention span. These middle school students really can not sit for long. Their minds are racing, causing a battle for attention between the teacher and everything else (Campbell 92, 9).

Adolescents are struggling to find a sensible connection between their lives and the world. Educators who recognize and accept this, will structure their programs with service learning which brings students into the community. These experiences will engage middle school students in meaningful activities which benefit the community. Students in one middle school are engaged in an ongoing wetlands and stream-conservation project. Others, might serve meals to the homeless, or read stories to residents of a senior-citizen care facility (Lorain 1997, 35).

If educators believe the evidence that significant changes occur which affect every aspect of the student's life, then they must accept the middle school student's behavior in that context. Peer influence is at its most powerful stage during these years. If a student is overtly and cruelly rejected at lunchtime, this will affect all other aspects of the student's ability to function in school. The student's attention toward a math class which follows such a lunchtime experience will be distracted.

As a result of schools' and school districts' middle school improvement efforts, we have seen change in school climate. Many schools are warmer, happier, and more

peaceful places for both students and adults, who exhibit greater levels of mutual respect and thoughtfulness. Because educators have become familiar with characteristics of early adolescents' social, emotional, and physical development, they have set in place structural changes (house teams, advisories) to create small, consistent communities of learning that have personalized the school environment (Lipsitz, Mizell, and Jackson 97, 535).

Research suggests that family involvement works. Middle school students whose families participate in programs show improved academic achievement. The greater the intensity of involvement and the more roles parents play, the better the outcome (Goodman, Sutton and Harkavy 95, 695). This is true across grade and socioeconomic levels. One of the more common mechanisms for bringing home and school into partnership is the family workshop. It does not matter what kind of methods are used to lead discussions as long as parents and middle school students feel that they are being listened to and encouraged.

A school district must continually reaffirm its beliefs about the unique needs of adolescents by reviewing programs in principals' meetings. The school board needs to be given an update on the middle schools. The latest research and literature on middle schools should be forwarded to the board.

Neither the elementary nor the high school programs are suitable to middle school students. Appropriate middle school programs will connect middle schools to the students they serve. If it hurts a middle schooler to sit for long periods of time, academic and classroom planning should allow for movement, for changing positions, for learning

by doing, rather than sitting. Teaching strategies that serve this group better are hands on science; group work that engages each student for a time, then changes the group; and projects related to the community and outside world. The least effective is a full period of seatwork.

The role of the district is most important in maintaining the appropriate middle school programs. District personnel must realize the importance of professional networking and renewal activities (George and Anderson 1990, 21). Attendance at workshops and conferences on both the state and national levels are vital. Renewal opportunities, both personally and professionally, are worth the time and money they require.

Middle schools need to be dynamic, willing to change goals and shift visions as new information is disclosed. If a middle school holds to its beliefs and continually adjusts to its changing environment, it will continue to be an improving school, striving actively to meet students' needs.

People and programs are dynamic. They will be different from day to day, and from year to year. School leaders must recognize changes, accept them as normal, and not judge the effectiveness of middle schooling against a constant standard. It is the district administration's responsibility to help the site administrators know and accept this fact and keep the board, parents and community aware of the changes.

The district leaders are responsible for ensuring the right people are in the right places at all levels. Central administrators must keep the board informed and conscious of

middle school efforts. Principals, assigned to middle schools, must have beliefs consistent with the middle school and an understanding of the early adolescents and the program most suited for those students. New teachers employed should be required to demonstrate specific knowledge related to middle school beliefs and programs. They should have graduated from a program directly geared to middle schooling. All segments of the community should work with state licensing bureaus to include, or support, a licensure level for middle schools.

All levels of the educational community must be in constant conversation with each other about middle schools, middle school students, and middle school programs and the characteristics of young adolescents. These conversations keep the educational community focused on middle schooling and keep the unique characteristics of adolescents at a conscious level. Much of this conversation can be initiated at district and board levels.

Characteristics of High Achieving Middle Schools

Kanthak contrasts the subject-centered junior high schools with the child-centered middle schools (Kanthak 1996, 30). In some communities, educators have interpreted becoming a middle school as becoming child-centered instead of achievement-centered. They focus on a safe, nurturing environment instead of on student achievement. The middle school reform means more than improved climate and happier students and staff. Middle schools must demonstrate that student achievement is enhanced.

There is no formula for developing a high achieving middle school. Each school is as unique as its staff, its students, and its community. However, Kanthak believes some basic beliefs and characteristics can be found:

1. High achieving middle schools are built on the belief that all students can learn and achieve, and succeed at high levels.

2. The principal and staff demonstrate that belief through a challenging curriculum and support it with instructional strategies that recognize that students learn in different ways and at different rates. The curriculum is built on identified learner outcomes that describe what students will know and be able to do when they leave the school. These outcomes drive all school decisions, including curriculum, assessment, scheduling, staffing, and budgeting.

3. All students pursue a common, comprehensive, academically oriented core curriculum empowering them to participate in and benefit from a higher quality life. The core includes cultural literacy, scientific literacy, knowledge of the humanities, and an appreciation of the values of our society. Through the core curriculum, the students fully develop the skills of reading, writing, speaking, listening, and calculating, and the ability to think critically.

4. The curriculum is meaningful to young adolescents. While the curriculum in middle schools often results from district curriculum guides, state and federal regulations, traditional expectations of parents and community members, textbooks and other materials, and pressure to prepare students for the rigors of high school, in high achieving

middle schools the curriculum focuses on widely shared concerns of early adolescents. Young adolescents have serious questions about themselves and the world in which they live, and the curriculum of a high achieving middle school addresses those questions. Teachers in high achieving middle schools build comprehensive interdisciplinary units around these questions (Kanthak 1996, 31).

5. In addition to the core curriculum - and within it - students have opportunities to explore their own individual interests, talents, and skills. They have opportunities to learn about and experience different careers by visiting different community job sites, shadowing working members of the community and participating in community service projects. All students have a chance to participate in sports programs, interest clubs, and leadership activities.

6. The principal, teachers, students, and parents talk about achievement. The principal recognizes individual students and teachers for high achievement. They give pats on the backs, notes of appreciation and thank-yous at faculty meetings and in daily school announcements. Rewards for academic achievement are given freely and are as prestigious as athletic and other nonacademic awards.

7. The principal and staff believe that school improvement is a continuous process. They are always looking for ways to improve the teaching and learning. They continually evaluate the success of their programs and use the information in planning (Showers 1985). The schools have a School Improvement Plan that identifies long-term and short-

term goals, the individuals responsible for each goal, the resources needed to meet the goal and the strategies to be used to evaluate the progress toward each goal.

All middle school educators should be trained to teach at the middle level before they are employed . However, the responsibility often falls on the principal and the school district to ensure that the principal, teachers and other staff are provided with the appropriate inservice development to master the knowledge and skills necessary to be successful at the middle level.

All middle-level educators should have a thorough knowledge of the nature and needs of early adolescents, middle level curriculum and instruction and middle level programs and practices. Middle school teachers should have experience in a broad academic program, including concentration in at least two academic areas.

8. Schools are organized into small communities of learning. Kanthak (1996) points out that it is important that large schools are organized into schools-within-a-school in which students and teachers can develop close personal relationships. Every student is known well by at least one adult and has at least one adult with whom he feels comfortable approaching about a particular problem.

9. Interdisciplinary team organization is a central feature. Common groups of students are taught by an interdisciplinary team of teachers who share a common planning period and whose classrooms are usually located close to each others. Some of the responsibilities of the interdisciplinary team are: scheduling instruction within assigned blocks of time, grouping and regrouping students for instruction, developing

interdisciplinary units of study, setting teamwide disciplinary rules and expectations, conducting team parent/student conferences and agreeing to common grading standards.

10. Principals have a clear vision of where they want the school to go and the ability to communicate that goal to others. The principal must not only know the vision, but be able to make that vision meaningful to others.

11. Principals provide instructional leadership. They place primary importance on issues relating to curriculum, instruction and assessment and create a climate of high academic expectations. They frequently observe in classrooms and keep track of student progress. They see themselves as master teachers and partner themselves with teachers in the challenge of improving student achievement for all the students.

12. Principals are collaborative leaders. They are comfortable sharing power with teachers, students, parents and the community. They see the organization of the school as a web with the student in the center rather than as a pyramid with the principal at the top. They set up a decision making structure that provide for staff input. A variety of decision making teams cut across the school, both horizontally and vertically, to involve a broad range of school participants.

13. Leaders in high achieving middle schools are risk takers (Kanthak 1996, 33). They do not accept defeat or dwell on failure. These leaders enjoy the challenge of leadership. They are willing to take risks and support teachers and others who are risk takers. Their work is guided by what is best for kids.

14. Principals are managers and leaders. The principal manages the building so that teachers can teach and students can learn. The building is clean and safe, the budget is aligned with learning outcomes and equipment and materials are available and in good condition. The leader makes sure that the school is moving toward a shared vision.

15. High achieving middle schools attend to all the needs of youngsters. The principal and teachers understand that if students come to school tired, hungry, cold, ill, or scared, they cannot learn. They realize that schools do not have all the resources to address all of these problems. High achieving middle schools reach out to form partnerships with other agencies such as the health department, social services, police, probation, recreation departments, YMCA, and Girls and Boys Clubs.

16. Educators in high achieving middle schools are not content to choose between being child-centered and achievement-centered. They expect and demand both.

In "Characteristics of Effective Inner-City Intermediate Schools," Levine, Levine, and Eubanks describe the common threads they observed in visits to four relatively successful inner-city intermediate schools (Levine, Levine, and Eubanks 1984, 707). They present data on each school under four major headings: 1)organizational arrangements facilitating improved reading, 2) emphasis on higher order thinking skills, 3) emphasis on personal development, 4) high institutional expectations. The authors say that significant structural change is a requirement for effective instruction in inner-city secondary schools, but most inner-city intermediate schools can improve the achievement of their students without investing heavily in additional faculty, staff development, or

materials. Levine, Levine, and Eubanks stress the importance of using combined scores on achievement tests in math and reading to place students in high-, medium-, and low-achievement groupings in English, mathematics, social studies, and science to improve student achievement. Successful inner-city intermediate schools have Chapter I (Title I) students remain in the classroom for their learning. These schools increase the amount of lessons involving Bloom's taxonomy, cognitive learning, critical thinking skills and learning how to learn rather than subject matter to improve students' achievement. Language development and cognitive growth are stressed in both regular and elective classes. Although reading is stressed in all classes, a great deal of emphasis is placed on analytical skills and creative writing skills. Students are expected to do more than just find the "main Idea" in their readings. A special effort is made to place low achieving students in small classes with master teachers who have been trained to work with such students. Student personal development is held as important as their academic development. Many of the electives devote a great deal of attention to students' personal development. The staff plays a large role in steering students into subjects that will be most beneficial to them. They also contribute to their personal well being through counseling sessions, tutoring, and after school programs.

The arrangements and the activities of the four schools reported on in "Characteristics of Effective Inner-City Intermediate Schools are compatible with recent research on effective inner-city schools. Most of the research, however, has dealt with elementary schools and has concentrated on the following five characteristics: 1) strong

leadership, 2) emphasis on basic skills, 3) positive and orderly climate, 4) frequent testing coordinated with instruction, and 5) high expectations for students (Levine, Levine, and Eubanks 1984, 711). All four schools studied exhibited these five characteristics. The authors stress that there is no one way that is best for improving achievement. The right mix for a given school will depend on its specific situation - its history and current status, the strengths and weaknesses of its faculty and the resources and direction available from the central office.

The arrangements in the schools studied can be thought of as structural. They involve grouping of students and staff, scheduling of instruction, differentiation of curriculum and instruction for differing groups of students, and the initiation of schoolwide responses to the problems of education. Levine, Levine, and Eubanks believe that significant structural change is a requirement for effective instruction at inner-city secondary schools; efforts to improve teaching methods at inner-city junior or senior high schools are not likely to have impact unless accompanied by appropriate structural changes in instruction and organizational arrangements.

Levine, Levine, and Eubanks (1984) say most middle schools can improve the achievement of their students in ways similar to those used in the schools studied without requiring an enormous number of additional personnel, staff development, or materials. Fundamental reforms, like holistic teaching, require a great deal of demands on the staff and more from staff development and recruiting than incremental reforms, in which some major changes are made in key areas of the existing instructional and

organizational patterns. Reassigning students to ensure effective arrangements for low achievers, designing curriculum and instruction to emphasize key objectives, and selecting electives to enhance language and cognitive development are changes that can be introduced at the school rather quickly and relatively inexpensively. Such changes require more resources (e.g., an instructional coordinator, an additional Chapter I teacher, an additional counselor) than many schools now have. However, the level of additional resources needed to institute incremental changes is less than that required for fundamental reform. Levine, Levine and Eubanks point out that there has been some evidence that the gains made as a result of incremental reform, though they are significant, tend to level off after two or three years. The incremental approach to school reform must evolve toward a more fundamental kind of reform if a school is going to continue to improve. The fundamental reforms require more resources and make large demands on staff development. As a result there is a sense of ownership and a single philosophy which impacts the students throughout their entire school day. Through this study Levine, Levine, and Eubanks emphasize that although incremental reforms can positively impact the improvement of student achievement, incremental approach to school reform must evolve toward a more fundamental kind of reform if a school is to continue to improve (Levine, Levine and Eubanks 1884, 711). Middle school reform must be fundamental to improve middle school student achievement over a long period of time.

Improving Achievement In Middle Schools

Chapter I , now Title I, is a part of the Elementary and Secondary Education Act

of 1965. Through this education program the federal government provides extra dollars to schools with high concentrations of children from low-income families. Since 1988, Chapter I has contained a provision allowing schools with an enrollment of 75% or more poor students to implement schoolwide projects and use Chapter I dollars throughout the schools (Walker 1994, 35).

The Carnegie Council on Adolescent Development was established in June 1986 by the Carnegie Corporation of New York to place challenges of the adolescent years higher on the national agenda. Additional funds provided by the Chapter I program opened new doors for reform. The Task Force on Education was set up by the Carnegie Corporation of New York's Council on Adolescent Development to make recommendations for the improvement of at-risk programs in middle schools.

The Task Force on Education of Young Adolescents (Carnegie Council on Adolescent Development 1990, 12) condensed the ideas from Turning Points: Preparing American Youth for the 21st Century, published in June 1989, and made recommendations to improve middle grade schools and benefit students at risk of failing to master the curriculum at their grade level. The group contends that in order to transform middle schools, teachers, administrators, leaders in higher education, health care professionals, community organizations, state and national leaders, the private and philanthropic sectors and parents must be mobilized to build a national consensus that all students need to be successful at meeting middle school goals. For many youths, early adolescence offers opportunities to choose a path toward a productive and fulfilling life.

For others, it represents their last opportunity to avoid a diminished future. The recommendations of the Task Force on Education of Young Adolescents which was set up by the Carnegie Corporation of New York's Council on Adolescent Development, will vastly improve educational experiences of all middle school students, but will most benefit those at -risk of being left behind. The task force calls for middle schools that:

1. Create small communities for learning where stable, close, mutually respectful relationships with adults and peers are considered fundamental for intellectual development and personal growth. The key element to these communities are schools-within-schools, students and teachers grouped together as teams, and small group advisories that ensure that every student is known well by at least one adult.
2. Teach a core academic program that results in students who are literate and who know how to think critically, lead a healthy life, behave ethically and assume the responsibilities of citizenship. Youth service to promote values for citizenship is an essential part of the core academic program.
3. Ensure success for all students through the elimination of tracking by achievement level and promotion of cooperative learning, flexibility in arranging instructional time, and adequate resources (time, space, equipment , and materials) for teachers.
4. Empower teachers and administrators to make decisions about the experiences of middle school students through creative control by teachers over the instructional program linked to greater responsibilities for students' performance, governance

committees that assist the principal in designing and coordinating schoolwide programs, and autonomy and leadership within sub-schools or houses to create environments tailored to enhance the intellectual and emotional development of all youth.

5. Staff middle-grade schools with teachers who are expert at teaching young adolescents and who have been especially prepared for assignment to the middle grades.

6. Improve academic performances through fostering the health and fitness of young adolescents, by providing a health coordinator in every middle school, access to health care and counseling services and a health promoting school environment.

7. Re-engage families in the education of young adolescents by giving families meaningful roles in school governance, communicating with families about the school program and students' progress and offering families opportunities to support the learning process at home and at the school.

8. Connect schools with communities, which together share responsibility for each middle school student's success, through identifying service opportunities in the community, establishing partnerships and collaborations to ensure students' access to health and social services and using community resources to enrich the instructional program and opportunities for constructive after school activities.

The task force calls for the educators to start changing the middle schools now. Teachers and principals are the center of this process. They urge superintendents and boards of education to give teachers and principals the authority to make essential changes, and work collaboratively to evaluate student outcomes effectively. The task

force calls upon states to consider new mechanisms for providing incentives that will be required to bring about local collaboration between schools and community agencies.

The members of the task force urge the President to review this report and establish a comprehensive federal policy for youth development, including research and demonstration projects; support for pre- and inservice teacher education; full funding for successful existing programs serving middle school students, such as the Chapter I (Title I) program for disadvantaged youth; and along with states and local districts, relief from compliance with nonessential regulations that inhibit experimentation within individual schools willing to test the ideas presented in this report.

The Task Force calls upon parents to become involved in defining goals, monitoring their children's studies and evaluating the progress of the entire school. They urge parents to bring pressure for change in education, health care and school-community partnerships. They urge parents and other tax payers, to support public schools and encourage them not to settle for less, but insist that schools deliver a far better performance than schools now deliver.

Finally, the Task Force calls on all those who are deeply concerned about the future of young adolescents, and the future of the nation, to begin now to create the nationwide constituency required to give American adolescents the preparation they need for life in the twenty-first century. The Task Force insists that the work of all sectors will be necessary to transform middle schools. Through their efforts communities of learning

can be created which engage those adolescents for whom life already holds high promise, and welcomes into the mainstream of society those who might otherwise be left behind.

At-risk Middle School Programs

In an effort to meet the needs of all students, the middle schools have established programs designed to provide opportunities for students served to acquire the knowledge and skills contained in the challenging State content standards and to meet the challenging State performance standards developed for all children..

Chapter I

Chapter I (Title I) and other compensatory programs can hold the answer for at-risk kids (Anderson, and Pellicer 1993, 27). Chapter I, Title I, is part of the Elementary and Secondary Education Act of 1965. It is the federal government's largest education program, and it provides dollars to schools with high concentrations of children from low-income families. In 1992, about 30,000 schools received just over six billion dollars from the Chapter I program to help nearly five million children improve in mathematics and reading.

Chapter I (Title I) has been used mostly to help low-achieving students "catch-up," using pull-out programs of twenty-five to thirty minutes a day. Students missed the lessons which were taught in their regular classrooms and did rote practice and remedial lessons. In 1988, Chapter I, contained a provision allowing schools with an enrollment of seventy-five percent or more low income students to implement schoolwide projects and use Chapter I dollars throughout the school. Many hope that schoolwide projects will

eliminate the ineffective pull-out programs and allow schools to improve their total education program (Walker 1994, 35 ; Siegal 1993, 10).

In research, several problems have been found in compensatory programs (Anderson and Pellicer 1993, 27). The programs lack definition. Federal and state guidelines specify which schools are eligible for Chapter I funds. This is done by ranking schools on the basis of the poverty level in the school attendance area, using data from the free/reduced-price lunch or Aid to Families with Dependent Children programs. The guidelines also specify which students should receive Chapter I services. These are students who are designated low achievers on the basis of achievement tests and their teacher's judgment. However, the Federal and state guidelines do not specify how schools should serve those students.

Programs differ from school to school - and remedial programs often differed little from compensatory programs, even though they served different purposes.

Compensatory programs are designed to compensate for educational disadvantages that are attendant on poverty, unlike remedial programs which are designed to teach basic skills to low-achieving students, regardless of the cause of their low achievement.

Remedial and compensatory programs were frequently isolated from other school programs. Although much has been said about the importance of innovative schoolwide programs in Chapter I schools, fewer than one-third of the schools receiving Chapter I funds used such an approach. Decisions about the programs tended to be made in the central office rather than at the building level.

Remedial and compensatory education programs tended to rely on the use of paraprofessionals or teachers' aides. Teachers' aides are less expensive than certified teachers, and the use of paraprofessionals reduces classroom conflict over the compensatory instructor's role. Unfortunately, many of the paraprofessionals have limited educational backgrounds and no formal training in teaching basic skills to low achieving students (Anderson 1993, 28).

Many compensatory and remedial education teachers viewed their students merely as "slow learners" who came from intellectually deficient homes and who were unable to work without supervision. These perceptions led to low expectations and low demands in the classrooms. Even though remedial and compensatory classrooms had fewer students than regular classrooms, the kind of instruction students received in these classrooms did not vary very much, even with the difference in class size. Chapter I students spent large amounts of time working alone at their desks - they were seldom taught as a group. Their teacher spent little time working with the whole class, explaining material or answering questions. Instead, students were given assignments and worked alone at their desks while the teacher circulated and monitored their work.

Although these students might have scored well enough on the fill-in-the-blank assignments that are so common in compensatory education, the academic content of their classwork was far below what is needed to pass state and national tests. Research (Kennedy, Jung, and Orland, 1986; Kennedy, Birman, and Demaline, 1987; Office of Educational Research and Improvement, in press) shows that the assignments teachers

typically gave to students in remedial and compensatory classrooms were frequently below the academic level at which students were actually functioning. Work on higher-order thinking skills was seldom included; basic skills predominated - despite the fact that in 1988, Congress identified the purpose of Chapter I as the improvement of both basic and more advanced skills.

Remedial and compensatory programs tended to be most effective for students who tested closest to the achievement standards set for being included in the program. They were less effective for the rest of the students in the programs. The majority of the students in the remedial or compensatory programs either remained in or returned to these programs periodically for the majority of their lives. From forty to seventy-five percent of these students remained in the remedial or compensatory program from one year to the next. About half of the students who left the program at the end of a given year qualified for reentry by the next testing date (Anderson and Pellicer 1993, 29).

Components of an Effective Middle School Instructional Program

On the basis of this literature, the following variables were identified as components of an effective instructional program:

Time. Educational research has shown a consistent relationship between the amount of time students spend on academic tasks and their subsequent performance on achievement tests (Walberg and Frederick 1983; Waxman and Walberg 1991, 121). The relationship of time to student achievement is greater in studies that measured engaged time rather than allocated time. Engaged time is that fraction of allocated time that

students spend actively working on academic tasks (Fisher, Berliner, Filby, Marliave, Cahen, and Dishaw, 1980).

Class Size. Past research also indicates that student achievement is increased when learning activities take place in smaller groups (Cahen, Filby, McCutcheon, and Kyle, 1983). A meta-analysis of class size by Glass, Cahen, Smith, and Filby (1982) presented a curve that traced the effects on learning of reductions of group size. This curve suggested that reduction of group size had minimal effects until instruction groups reached a size of about ten students. Below this number, reductions in class size tended to have larger effects. Reduction in class size had larger effects when the reduction lasted for longer periods of time. For example, Glass and associates (1982) arbitrarily divided studies into those that reduced group size for less than 100 hours and found that reductions lasting longer than 100 hours had larger effects than those lasting less hours.

Instructional Formats. A third component of instructional quality consists of the formats used by teachers during lessons. A great deal of research has searched for instructional strategies that result in effective instruction for low-income, low-achieving students (Brophy and Good, 1986). In the 1970s, researchers held high hopes for individualized instructional formats, but the Instructional Dimensions Study (Cooley and Leinhardt, 1980), sponsored by the National Institute of Education during its last evaluation of compensatory education (National Institute of Education, 1976), provided little support for the effectiveness of this approach, at least as measured in the study. More empirical support has been found for an approach that has come to be known as

“direct instruction” (Brophy and Evertson 1974; Good 1978; Stallings and Kaskowitz 1974; Rosenshine 1983). In this approach, teachers actively present lessons and present students with guided practice in new academic skills. This approach contrasts sharply with the frequent use of independent seatwork as an instructional format, common to many individualized programs. Although good instruction always includes some independent practice, and this kind of practice usually occurs during seatwork, recent research suggests that an overreliance on seatwork, especially its use to present skills, is less effective than more “direct” instruction formats (Anderson, Brubaker, Alleman-Brooks, and Duffy, 1985; Brophy and Good, 1986).

Curriculum Content. Discussions of instructional quality must consider not only how students are taught, but also what they are taught (Carter, 1984; Cooley and Leinhardt, 1980). Increasingly, thoughtful observers are beginning to question the curriculum content of compensatory education programs (Botel, 1978; Allington, Steutzel, Shake, and Lamarche, 1986). Past research suggests that compensatory students spend much time working on “lower-order” academic skills. For example, students practice phonics skills but do little reading of connected text, or students practice basic arithmetic skills but do not apply these skills in problem-solving situations. Recent research also suggests that the “direct” instruction formats that many educational researchers advocate for use with low-income, low-achieving students may have limited utility for instruction in higher-order thinking skills (Peterson, 1986).

National Assessment of Chapter I

The National Assessment of Chapter I (Title I) was designed to gather information on the quality of instruction received by compensatory education students. In order to meet this goal, it needed to develop an approach to gather data. Data were collected on the characteristics of instruction provided to Chapter I students, and these data were compared to an effective instructional program identified by past educational research. The major purpose of the analysis was to examine the processes within schools that lead to instruction in a variety of local settings. A clear understanding of the instruction process helped us while examining the Title I program at the north Texas middle school.

The National Assessment of Chapter I (Title I) purpose was also to describe the type of project designs used in schools and assess the effects of these designs on the scope and quality of instruction received by Chapter I (Title I) students. A final set of questions concerned the relationship between Chapter I and the regular instruction. Student achievement results from the combination of instruction in both of these programs, and most educators view compensatory education, Chapter I, as a supplement to a student's regular program of instruction. The question was raised as to how Chapter I instruction fits with the overall instruction.

An evaluation by the National Institute of Education (1976) reported that Title I instruction often substituted for, rather than added to, students' regular instructional programs. This study found that the average compensatory education student spent

between four and five-and-a-half hours a week in compensatory instruction, almost always after being pulled out of the regular classroom, almost forty percent of participating students missed instruction in a variety of regular classroom subjects. Many teachers reported that they were aware of the problem and saved time for instruction on important subjects until it could be offered when all the students were present. It is important to consider not only what students miss when they receive Chapter I lessons, but also the extent to which lesson content in Chapter I and the regular program is congruent.

At both the secondary and elementary levels, in both reading and math, the study found that the Chapter I group sizes were smaller than those in the regular classroom. The magnitude of reduction in group sizes between Chapter I and the regular classroom at school were enough to affect student achievement positively.

A final question investigated was the extent to which Chapter I instruction offered students opportunities to practice higher order skills. In general, the narrative records from classroom observations showed that Chapter I reading and math projects did not focus on these kinds of tasks. In math, Chapter I students in both elementary and secondary schools worked primarily on computational tasks involving basic arithmetic facts. Word problems were common, but they did not constitute the core of instruction, and little attempt was made to engage students in the tasks that required the use of mathematical models to synthesize or evaluate ideas. In reading, the general pattern also was for Chapter I lessons to focus on lower-order tasks. Students spent a good deal of time on worksheets that involved little reading of connected text. The low level of the

Chapter I curriculum undoubtedly served a useful purpose by providing students with useful review and practice of basic skills, especially in the lower grades, but as students entered upper elementary schools and passed into secondary schools, the focus on basic reading skills appeared incongruent with the reading tasks demanded in the regular classrooms.

For students who were performing near grade level, supportive Chapter I assignments which reinforced regular classroom instruction appeared effective in maintaining and promoting student success in the regular academic program. However, alternative assignment patterns appear more appropriate for students who were performing well below grade level or who had instructional needs that were not addressed by the regular curricula.

Finally, it was found that formal procedures for coordinating Chapter I and regular instruction were necessary but not sufficient to the integration of the two instructional programs within a school. Formal policies about curriculum and evaluation, formal organization of the school staff into teams or planning units that included the Chapter I staff, and the formal scheduling of joint planning times for Chapter I and the regular staff all facilitated coordination of Chapter I and the regular program. However, the schools that showed the tightest coupling between Chapter I and the regular program were those in which the staff endorsed a norm of collegiality and had developed shared beliefs about instruction.

Steps To Improve Compensatory Education

While working with a dozen Chapter I schools in South Carolina, Anderson and Pellicer (1993) found that improvement of compensatory education means taking six crucial steps:

1. Set meaningful goals. All remedial and compensatory programs were focused on teaching the necessary knowledge and skills for students to return to the regular school program. To achieve that goal, there must be specific and meaningful standards which reflect the goals of the school, as well as the district. They should be specific as to what they expect students to know and, also, how students should be able to demonstrate that knowledge.

2. Pay attention to school culture. For the program to succeed, there must be strong leadership at the building level, perhaps by forming school leadership teams made up of both administrators and teachers. These teams will oversee the progress of the program and its students. Restrict the hiring of paraprofessionals as teachers, or provide them with specific training. If compensatory programs are to succeed, they must be staffed by the best teachers.

3. Revamp the curriculum. Less use of work sheets, workbooks and fill-in-the-blanks. Students in remedial or compensatory programs need to be given passages to read rather than work sheets to complete. Students need writing assignments that promote higher-order thinking and get them involved or engaged in writing.

4. Pick up the pace. Remedial and compensatory programs have to attend to grade level pacing. Administrators and teachers should set a pace students must follow to move from one grade level to the next. Students who start out below grade level must be presented content at a more rapid pace if they are to catch up.

5. Integrate, integrate, integrate. What goes on in remedial and compensatory programs does not mesh with what goes on in other classrooms. As a result, students who are successful in remedial programs are likely to find the transition into the regular school program difficult. The learning objectives and curriculum content included in the remedial and compensatory program should be similar to those in the regular program.

6. Change teaching tactics. Have students work in groups rather than alone at their desks. Have them complete projects rather than work sheets.

These six steps are not new expectations but point toward a direction that the Chapter I (Title I) program needed to take to increase the achievement of at-risk students.

Title I

During 1993 and 1994, President Clinton proposed that most federal programs in education be revised and that the federal government adopt a new and different approach for helping states and local districts to reform schooling. Congress enacted the Goals 2000 bill in the spring of 1994. Once the President signed the Goals 2000 bill into law, The United States Department of Education began to work with the states to help them raise their educational standards and help them carry out their plans for school reform.

During 1993 and 1994, Congress took important actions related to education. One action was the revision of the Elementary and Secondary Education Act. This change aligned federal Elementary and Secondary Education Act programs with state reform efforts by requiring that children who benefit from federal aid be held to the same high academic standards as all other children. It also gave school districts increased flexibility in the use of federal funds, so that programs supported by those funds could be more readily folded into a school's regular instructional program instead of serving as "add-on" activities (Jennings & Stark 1995, 1).

Improving America's Schools Act

When President Clinton signed the Improving America's Schools Act in 1994, he created a new Title I. This Act, along with Goals 2000 and School-to-Work Transition Act, laid the foundation for transforming education for low achieving and disadvantaged students. This act made Title I funds contingent on the establishment by states of content and performance standards as evidence of accountability. This eliminated the need for norm-reference tests for Title I students. The act broadened students' access to Title I funds by loosening the requirements and thus enabling more schools to become schoolwide Title I projects. Title I funds and other Elementary and Secondary Education Act funds could be combined for particular purposes, and the Title I program and other Educational Elementary Education Act programs were aligned to the Goals 2000 reform plans of the states. Waivers of the federal legal and regulatory requirements are allowed.

Prior to the reauthorization of the Elementary and Secondary Education Act, 75% of the school's enrollment had to be children of poverty in order for the school to be eligible to use federal funds for schoolwide projects. This level was changed to 60% for the 1995-1996 school year and 50% in 1996-1997.

To receive federal funds, a state had to set standards in core academic subjects, at least in the areas of mathematics and reading or language arts. A state has to apply the same educational standards to students receiving Title I services as it applies to other children. States without standards of any kind were given a two year deadline to develop or adopt standards in the content areas. Programs needed to be established which provided challenging curriculum and higher level thinking skills for all students. Schools needed to provide professional development which would train their teachers to use strategies found to be effective in ensuring the success of at-risk students along with the students who were already successful in middle school.

Effective Strategies in Middle School At-risk Programs

Title I funds offered new opportunities for middle schools to develop programs which would improve the achievement level of all of their students. Schools evaluated the practices which were in place and began to seek other strategies which would effectively improve the achievement of all the middle school students in their schools.

As educators, we are always thinking of how we can provide the best educational experiences for our students. The most direct lessons, however, come when we ask the students which experiences are most meaningful. Real engagement in learning

comes from empowering students, not superficially but intrinsically. In a study conducted with 200 middle school students, 27% indicated that hands-on science was their most memorable work, 28% of the students cited work that involved independent research of a variety of topics, including banking systems and currency as well as investigation of foreign cultures, as their most memorable work. Students reported that these projects were fun, even though they took more time and effort than one-shot tasks. Students again and again cited stand-up performances such as school plays, skits, and speeches, activities in which they were directly involved in learning (Wasserstein, 1995). Students equated hard work with success and satisfaction.

The current research in cognitive psychology corroborates students' responses. Researchers (Resnick and Klopfer 1989) are urging educators to offer learning experiences beyond what Whitehead (1929), decades ago, referred to as "inert knowledge." Students need opportunities to apply knowledge, to generate and construct meaning, the kind of cognition that combines declarative and procedural knowledge (Anderson 1982, 1987). Declarative knowledge is the what, while procedural knowledge is the how. Knowing one's strengths, weaknesses, needs, and abilities empowers a student to rely on an internal locus of control. The ability to articulate thinking processes helps eliminate trial-and-error approaches to problem solving. Sternberg has classified metacognition as one of the three components of intelligence (1985). The ability to self-monitor and self-regulate is as important as knowledge acquisition and thinking skills such as organizing, analyzing, and inferring.

Portfolio Projects

In designing an Interdisciplinary Portfolio Project, educators at Campus Middle School in Englewood, Colorado surveyed seventh and eighth grade students about their most memorable work (Wasserstein, 1995). Several maxims have grown out of the survey of students at Campus Middle School:

1. Students of different abilities and backgrounds crave doing important work. All students benefit from opportunities to explore ideas for their own sake, and need to see the link between routine drill-and-practice and more complex work. All through the curriculum the possibilities are endless. Looking closely invites analogy, demands that something be seen from a different angle, in a different scale, with another focus, as another thing. The teacher's questions help expand the learner's awareness of the interconnectedness of all things, as well as the learner's and teacher's awareness of the interconnectedness of all curriculum (Johnson 1995). Children who see their teacher getting excited about an activity, or sharing a discovery, or caring about an idea, these children have the gift of example. The student and the teacher have a personal investment and interest in the subject from the analogy-making step, which propels them to theorizing and to individual or group research (Ruef 1992).

2. Passive learning is not engaging. Students need to question real world problems, and they need opportunities to construct knowledge. Teachers elicit prior knowledge from students and build upon it so they will become intrigued and invested in further exploration (Zorfass and Copel 1995). Once students have their questions,

teachers help them design a productive research plan, extract relevant information as they follow and revise their plan, process information so they “own” and understand it, and convey what they have learned to an audience.

3. Hard work does not run students away, but busy work destroys them. Though all students must learn the basics in order to move forward, the basics should not be an end in themselves but a means to an end.

4. Every student deserves the opportunity to be reflective and self-monitoring. Teachers can nurture a strong self image by letting students develop an internal locus of control, aware of their strengths and weaknesses.

5. Self-esteem is enhanced when we accomplish something which is challenging, something we thought impossible.

Knowledge and Performance

On October 7, 1997, U. S. News And World Report published “Schools That Work” in which Thomas Toch shares the views of E. D. Hirsch who believes that knowledge is education’s brass ring; What students learn is most important, and TheodoreSizer who supports the idea that education ought to stress thinking skills; How students learn is the key.

At schools E. D. Hirsch has guided, like Roland Park Elementary and Middle School on Baltimore’s West Side, his philosophy is on display. Students in Regina White’s fifth grade classroom perform a scene, theater-in-the -round style, from Don Quiote. Elizabeth Alberti’s sixth grade pupils practice songs from the musical version of

Oliver Twist. Each day, students are presented a study into core knowledge, from Bach to Michelangelo to the science of rainbows (Toch 1996, 59). Hirsh says a traditionally taught core curriculum helps disadvantaged students the most: “Kids from affluent backgrounds get knowledge from outside school; those who rely on school to give it to them - disadvantaged students - don’t get it” because schools are not teaching that basic knowledge that affluent kids gain from early childhood experiences (Toch 1996, 61).

The atmosphere at Hope Essential High School in Providence, Rhode Island where Theodore Sizer’s ideas flourish, reflects his emphasis on developing students’ minds. Housed on the top floor of an inner-city building, three hundred seventy, mostly African-American and Latino students of this school-within-a-school move through their day in 90-minute sessions. There are few textbooks and teachers rarely lecture. The curriculum is divided into four blocks - math, science, English, and social studies. Breaking the day into large blocks makes relationships between students and teachers more personal. In turn, student attendance is up, discipline problems are down. Interdisciplinary instruction gives students a richer understanding of what they are learning. To Sizer, true education means students who exhibit the right “habits of mind,” asking inquiring questions and utilize knowledge in thoughtful ways. Instead of standardized tests he calls for measuring students’ achievement by having them present “exhibitions” to their classmates. “Even in remedial classes, there’s a lot of enthusiasm.”

The value of both traditional and progressive strategies can best be illustrated in the teaching of reading. Studies suggest that kids need to learn phonics, the building

blocks of sound letter relationships, as traditionalists argue. But equally compelling evidence exists that kids learn such skills faster and more thoroughly when teachers use progressive techniques to learn phonics, such as asking students to write stories using phonetic or inventive spelling. Both traditionalist and progressive strategies are important.

Problem Based Learning

It is the job of educators to prepare students to live and work in the world where they will encounter perplexing puzzles and questions. Those best equipped to cope with the complicated real world issues once they leave school are those who struggle with similar issues while still in school, through an approach to teaching and learning called problem-based learning. Problem-based learning is an instructional method that uses a real-world problem as the context for an in-depth investigation of core content. The problems that students tackle are ill-structured; they include just enough information to suggest how students should proceed with an investigation, but never enough information to enable the student to solve the problem without further inquiry. These problems cannot be solved using formulas - students must use the inquiry process and reasoning - and there may be more than one way to solve the problem. Howard Barrows, chair of the medical education department of Southern Illinois University School of Medicine in Carbondale, Illinois, explains, "We want students to become effective problem solvers, to become self-directed learners, and to be able to work collaboratively with others" (Checkley 1997, 2).

Problem based learning is more than an "add-on", it is a "permanent component of the new educational system," and teachers, administrators, parents and community

members need to understand how this approach enhances learning. We need to link the problems to standards and high quality content so that teachers and administrators will see how problem-based learning can meet learning objectives, says Shelagh Gallagher, professor of education at the University of North Carolina at Charlotte. Students' enthusiasm will do much to convince parents and community members, she adds, recalling that at one school in South Carolina, teachers were encouraged to design more problem-based learning units because students and parents demanded them (Checkey 1997, 6).

Students' emotional development is tied to the social and emotional climate they experience as they grow up. In optimal environments, children, adolescents, and adults enjoy themselves more and get more done (Dodd 1995, 65). Students' feelings about their classes not only affect their interest and engagement in the subject matter but also help them acquire social skills. Students learn more when their classes are satisfying, challenging, and friendly and they have a voice in decision making. Students need structure, direction, and organization to make sense of classes. When classes are unfriendly, cliquish, and fragmented, students feel rejected and their learning is impeded (Walberg 1997, 46).

English-as-a-Second Language

Principals prepare teachers to meet the challenges of a diverse population by providing professional development which focuses on teaching strategies which are effective in working with students of different cultures. When the National Council of Teachers of Mathematics released content standards a decade ago, they imposed an

approach to teaching and learning mathematics which especially challenged English-As-A-Second-Language students (Association for Supervision and Curriculum Development 1997, 6). Even though standards were “wonderfully sound,” English-as-a-Second-Language students might have difficulty meeting them because of the emphasis on problem solving, communicating, and reasoning. Many of these students may know how to do the math, but may not be able to communicate that understanding. Teachers must be sensitive to students who are not proficient in English, and use techniques that have been effective in teaching English-as-a-Second-Language students in other content classrooms. Students must be taught to “slow down, back up, and reread” a problem to gain a better understanding of what is being asked. To assure that all students will be given access to a full mathematics program, Fairfax County (Va.) Public Schools has developed a K-12 curriculum to help English-as-a-Second-Language students acquire math and language skills simultaneously. This program, Focus on Achieving Standards of Teaching Mathematics (FAST MATH), gives teachers “sound instructional strategies” for introducing and developing language in math classrooms. “We really believe that students can learn language through the content, if it’s done at their level and approached in the right way,” said Sharon Norman, an instructional support teacher for the Fairfax County (Va.) Public Schools (Association for Supervision and Curriculum Development 1997, 6). Focus on Achieving Standards of Teaching Mathematics helps teachers understand the need to teach language first if they want all students to learn math. Developing such programs allow school districts to meet both the standards and the

individual needs of their students. Teachers can skip the textbook word problems. For problem solving, have students work with contextual paragraphs from across the curriculum to answer questions using higher order thinking skills (Eaton 1993, 3).

Inclusion

Inclusion is a philosophy that acknowledges the importance of the real world for students' learning. Every society has had to face the question of how to deal with individuals who differ from the norm. The vision of building strong communities based on peace, unity, and acceptance for all is an appealing one. Schools are communities to which children belong and classrooms reflect real life with its challenges and distractions (Van Dyke, Stallings, and Colley 1995, 476). Each child has a legal right to an equal opportunity to obtain an education in the "least restrictive environment" possible. Research has shown that students who are not pulled out do better than those who are segregated. Finally, a strong moral and ethical argument can be made for the "rightness" of inclusion. It is the best thing for students. Segregating students throughout the day in any way is not good because it classifies them, creates bias, and it makes them different. Schools are a reflection of the communities they serve, and all the members of those communities should be a part of the schools. Students in an inclusive setting develop a sense of understanding and respect for one another and for human differences. Classroom teachers who do not lower their expectations are amazed at what students can achieve in a risk-free environment where differences are recognized and celebrated. Students feel that everyone has something to offer. Class members get to know each

others likes and dislikes, and start to realize that they are all equal members of the classroom community. In such classrooms, individual needs are met, from the gifted and talented to those students who have individual educational programs.

Effective discipline strategies must be in place in an inclusive program, and part of any successful discipline strategy is the setting of realistic and positive goals for students. When realistic goals are in place for individuals, appropriate classroom behaviors thrive. When students recognize the appropriateness of their behavior, they become more trustworthy and confident (Van Dyke, Stallings, and Cooley 1995, 477).

Cooperative Learning

Cooperative learning is a noncompetitive teaching strategy that works well in an inclusive classroom (Collopy and Green 1995, 38). Through the activities of cooperative learning groups, each student takes part in classroom assignments. The roles of group members need to be clearly defined, and each member must do his part, allowing each student to contribute to the learning process. The roles of the individual group members are clearly important, and each student can feel valued. At the same time, the students develop needed interpersonal skills (Joyce, Weil, and Showers 1992, 31).

Student Centered Classrooms

The classroom becomes student-centered as the teacher has an opportunity to constantly assess how each student is doing. The instructors become facilitators and coaches rather than lecturers (Tredway 1995, 28). They lead the class into a more interactive mode. In the student-centered classroom, adult learning theories are applied

as students are probed for their experiences and constantly challenged, and engaged in application-oriented, hands-on activities (Green 1993, 28). Student-centered courses become more experiential. When adults learn, they bring their experiences values and attitudes. They learn by doing. They need to try things for themselves. This “doing” keeps them active both physically and mentally. Adult students learn new skills, knowledge, and attitudes by experiencing them, not merely by seeing or hearing about them. The sooner that students get to practice new skills and techniques following the initial learning, the better and more permanent the results will be. Researchers have found that an increased number of minutes of assigned homework is associated with the movement of students from the bottom portion of the distribution of math achievement test scores to the top segment. The increase in homework also produced similar movement in verbal and reading standardized test scores (Namboodiri, Corwin, Dorsten, and Eberst 1993, 291; Cooper 1989, 86; Epstein 1988; Epstein 1987, 120). As they learn, they need recognition and reinforcement. They need logic, perspective, and vision.

A three year study was conducted by twelve master teachers involved with Technical Education Research Centers, to explore techniques, principles, and models of mathematical talk (Russell 1993, 555). To increase student engagement the teachers all agreed that they would start the school year by “going slow.” Five major shifts became apparent as teachers shared their notes and experiences. Teachers planned and scheduled more time for mathematics. Teachers increasingly found that the complexity in apparently straightforward mathematical ideas led students to a deep immersion in the subject and

thus to longer mathematical periods. Teachers asked different kinds of questions and refrained from accepting the first right answer offered by students. Asking questions that require one word answers, shuts down the conversation about mathematics. Teachers required students to share their thinking, and students became better at doing this. Teachers insisted that students explain their clarity or confusion. Teachers structured mathematics experiences to focus on finding patterns, describing and analyzing those patterns, and devising conjectures, generalizations, formulas, and rules about how mathematical objects behave. Most important, Teachers learned to “let go” of the planned goal or lesson in order to pursue important mathematical ideas through classroom discourse. Letting go involved more time for reflection and analysis, for students to articulate their approaches. It requires more careful listening to students and probing beneath surface understanding. Teachers were sometimes shocked to find that their students did not understand ideas that teachers had thought were straightforward. There was no summary of the lesson, no closure. Instead, the students left the room still talking about whether points and corners were the same (Russell 1993, 558).

Summary

Research in the past few decades suggests that successful public school systems would have the following characteristics:

1. High standards in English, math, science and history for all children and assessments that align with those standards. Children do better when they know what is expected of them and when those expectations are high. Standards are intended to clearly

spell that out for the children, their teachers and parents. They must serve as the basis for a challenging curriculum. Standards must be a part of teacher training institutions.

Instruction, textbooks, and other learning materials must be keyed to the standards.

2. Teachers whose primary focus is on student learning and who possess the knowledge, skills, and commitment to teach to higher standards (Spady 1995, 83).

Teachers must be prepared and motivated. They must know their subject well and be competent to help students meet the standard. Teachers need the time and opportunity to be professional and continue their own learning.

3. Schools that are organized and operated in a way that encourages and supports teaching and learning. Schools should model the highest values of democracy. They should be orderly and safe, well maintained and adequately equipped. Their highest priority should be children learning. Teachers should take part in decision making, keeping in mind what is best for students. These conditions are more likely to occur in schools where classes are small enough for teachers to know their students well and work closely with their colleagues.

4. Adequate funding distributed equitably to all children and focused on the functions that matter. Money does matter. Resources should concentrate on teaching and learning for both teachers and students. More financial resources should be spent on the neediest children.

5. All students achieving at high levels and engaged in challenging intellectual work. Poor and minority students can excel if they are taught at high levels. All students

must accumulate knowledge and develop skills that help them grow into successful and productive citizens and fulfilled adults. Standardized tests can measure achievement but the real measure of whether students are learning lies in the quality of their work.

Assessment must be developed to evaluate student achievement on the basis of their performance and what they produce.

In addition to these five characteristics of a successful system, there must be commitment from policymakers, taxpayers, parents and business leaders to work for better schools and higher student achievement. Schools need public involvement and support.

Under the changes made in 1994 by the Congress, Title I employs the *standards* way of thinking about how to organize teaching, learning, and schools so that poor children have the same opportunities to take challenging coursework and to progress through high school and go to college. The goal is to use Title I dollars to create a school-wide setting in which all children can participate in a quality education.

Now, Title I has a more comprehensive way of looking at budgets, school operations, and instruction. Academic and performance standards guide their decisions about what to do in school, where to spend the dollars and how to organize a school's human resources- teachers, students, special teachers, volunteers, and community support. As a result, teachers, parents and students have a common language and reference when it comes to making decisions about what is expected from students. By anchoring expectations and assessments with standards, districts provide a tool for communicating, as well as holding everyone accountable for students learning at high levels. With content

and performance standards, learning becomes a matter of hard work and communication, not guesswork. Nevertheless, there are some Title I schools who do not take advantage of the new law and are working under the older “pull-out” approach. Parents who were reluctant about the new law and standards accept them willingly once they see that they ensure that their students are not “left out.” Some teachers worry about high standards being unrealistic, that they cannot be expected to bring children of poverty up to such expectations. They are right. No one teacher can do it alone. This is a whole school and community commitment. Teachers need support and training and resources to meet the challenge. However, when teachers know that they are supported then they see the common sense in standard centered schools. Students get an education that requires rigorous learning but provides the time and support to reach high expectations. Students are guaranteed a free public education until they are twenty-one years of age and are provided the setting and instruction at the community college level to continue on until they can satisfactorily demonstrate they have mastered the standards.

In communities the word “standards” has become familiar, one that parents use in parent-student-teacher conferences. Now, when parents and teachers talk there is something specific to talk about, something that helps to organize the discussion around a child’s progress toward learning complex and meaningful material. Parents have a guide that states not only what their children should know but how well their students should perform. Parents can see that their schools stay on track in designing challenging

coursework that will lead to choices and opportunities in post-secondary education and employment for their children.

As teachers, parents, business and community members, and administrators engage in open and public discussions around the standards, people find out they have shared visions and goals for students. They are discovering that there is room for individual teaching and learning styles and approaches, too.

The standards allow for common understanding about what well educated students should have learned and demonstrated. Everyone wins - education, communities, business, and students (Haycock 1996, 11). Parents, students and teachers want all children to be challenged and to have opportunities that will nurture students' minds. They want schools that respect every child's intelligence and ability. Standards provide an opportunity for creating real learning communities where respect and fairness are valued and put into action. Title I dollars and the flexibility of the new law make this possible for all students in our schools.

Keeping this review of literature in mind, the researcher had a basis for analyzing and evaluating the successfulness of the Title I program at the north Texas middle school. This review will serve as a reference for reflection as other school districts design their Title I programs or consider programs that presently exist.

CHAPTER III

DESIGN OF THE STUDY

Population

Federal Funds were provided during the 1993-1994 school year to improve the education of Title I students in the north Texas middle school studied. The middle school consists of grades six through eight. There were approximately 950 students; 50% were white, 38% were Hispanic, 6% were African American, and 6% were in the Other category. Forty-seven percent of the middle school population was economically disadvantaged and 4% were Limited English Proficient. The middle school has a Learning Center which is used to help students who need more individualized instruction than the regular classroom can provide. It has a zero period built into the schedule which allows teachers time to tutor students who need additional support. Before 1993, there was no formal program at the campus for Title I students. This case study focused on the Title I Inclusion program at the north Texas middle school during the 1992-93, 1993-94, 1994-95, and 1995-96 school years (Appendix A). During the 1993 -1994 school year, only eighth grade students were involved with the program. The following two years, both seventh and eighth grade students were involved. The Title I Program included one

remedial reading teacher, one remedial math teacher, and one half-time nurse. The reading teacher and math teacher work with identified 7th and 8th grade students in the content areas. The building staff calls these positions Learning Facilitators. The Learning Facilitators coordinate lesson planning and methodology for the Title I students and provide demonstration teaching for the classroom teachers who have these students. The Learning Facilitators work with instructional groups of 1-15 students for instructional periods ranging from twenty to fifty minutes within the students' regular classrooms.

The Title I nurse works with the identified Title I students to teach self responsibility and health care. The nurse works with these students individually to deal with their special health concerns, as well as to connect the students to needed health services, either with appointments or by actually taking them to other health care professionals.

The population studied included the students of the seventh and eighth grades and the Title I teachers at the middle school during the 1992-1993, 1993-94, 1994-95, and 1995-96 school years. The students were identified for the Title I Program, if they failed the Texas Assessment of Academic Skills Test in math or the Texas Assessment of Academic Skills Test in reading, when tested during the prior springtime.

Students in the regular math classes were tested with the Shaw-Hiehle test at the beginning of the school year. The math facilitator used this test to assess the students' computational skills level (addition, subtraction, multiplication, and division with whole numbers, decimals and fractions). Students were tested with the Gates-MacGinitie

Reading test in the regular language arts classes. This test score indicates the student's grade level in reading. Students who were identified as needing help, by the Title I reading facilitator, were serviced in their regular science and social studies classes. Students who score more than one year below grade level on the Shaw-Hiehle or Gates MacGinitie tests qualified for the Title I program.

Research Design

Targeted Sample

The targeted sample was the population of students in a north Texas middle school who were in the Title I program during the 1992-93, 1993-94, 1994-95 and 1995-96 school years.

Sampling Procedure

In this study, the scores of Title I students were collected for the eighth grade only in 1992-93 but for both seventh and eighth grade Title I students in the 1993-94, 1994-95 and 1995-96 school years. Students in the north Texas middle school inclusion program were selected from the eighth grade only in 1993-94, but both seventh and eighth grade students were included in the 1994-95 and 1995-96 school years. The principal wanted the Title I program to be inclusive and worked through the content areas. The Title I facilitators were one math teacher and one reading teacher. The math facilitator worked with regular math teachers in the regular classes, the reading facilitator worked in the science and social studies departments with the teachers of those departments. Title I facilitators did not work in honor classes. Only students who were scheduled for regular

math classes or regular science or social studies classes were tested to qualify as Title I students.

Any students who were already entitled to additional services funded outside the district could not become a part of the Title I program. If the school received English-as-a-Second-Language monies for that student then they could not include that student as part of the Title I program.

Parents of students who qualified for the Title I program were sent a letter of notification at the time when the student qualified, to receive their approval. Students could qualify to participate in either the math or reading Title I program or both. If the students failed the Texas Assessment of Academic Skills (TAAS) Test in math or the Texas Assessment of Academic Skills (TAAS) Test in reading during the prior springtime they qualified to take part in the Title I Program .

Students of regular math classes were also tested with the Shaw-Hiehle test at the beginning of the school year. Students were tested with the Gates-MacGinitie Reading test in the regular language arts classes. They were serviced in their regular science and social studies classes if they qualified. Students who scored more than one year below grade level qualified for the Title I program.

Instrumentation

The assessment instruments used to assess the Title I program at the north Texas middle school were the Texas Assessment of Academic Skills Tests (TAAS) in math and reading, the Shaw-Hiehle test, and the Gates-MacGinitie test. The Texas Assessment of

Academic Skills (TAAS) is a standardized test that students in grades 3, 4, 5, 6, 7, 8, and 10 must take. The TAAS has tests in reading, math and writing. Reading and math are given in grades 3, 4, 5, 6, 7, 8 and 10. Writing is given at grades 4, 8 and 10 only.

Appendix A provides a graphic description of the north Texas middle school TAAS test student performance for 1994.

The reliability of measurement is defined as the extent of unsystematic variation in the quantitative description of some characteristic of an individual when the same individual is measured a number of times (Ghiselli, Campbell, Zedeck, 1981, 266). The Kuder-Richardson Formulas provide an index of the internal consistency reliability of a measure. The index is a function of the number of components and their interrelationship (Ghiselli, Cambell, Zedeck, 1981, 477). TAAS and the end-of-course test reliabilities are based on internal consistency measures, in particular on Kuder-Richardson 20. Most Kuder-Richardson 20 reliabilities for the TAAS are in the high .80 to low .90 range.

Validity is the extent to which a test or set of operations measure what it is supposed to measure; the appropriateness of inferences from test scores or other forms of assessment (Ghiselli, Campbell, and Zedeck, 1981, 266). Validity is a process of collecting evidence to support the inferences from the use of the resulting scores from an assessment. With TAAS and the end-of-course exams, the score used is applied to knowledge and understanding of the Texas essential elements. To attain the highest level of content validity, advisory committees consisting of educators from districts across the state were formed for each grade and subject area and participated in all phases of test

development. These committees and the Texas Education Agency staff members worked together to develop test objectives, instructional targets, specifications, and items. Field test data on the items were analyzed and the committee members identified items that they found eligible for use on the test. This process involved over 4,600 educators. Thus, the test construction process ensures the content validity of the assessment (Texas Education Agency 1997). Since the tests assess the Texas essential elements for curriculum, which are required to be taught to all students, the tests are no more or less valid for use with one subpopulation over another subpopulation. Great care is taken to ensure that the items comprising the TAAS tests are fair and representative of the content domain as provided by the essential elements and expressed in the measurement specifications and objectives. Much scrutiny is applied to the items and their possible impact on minority or subpopulation groups making up the population of the state of Texas. Every effort is made to eliminate items which may have ethnic or cultural biases.

The Shaw-Hiehle test is a standardized test in mathematics. This Computational Test consists of sixty problems involving the basic math processes. Its main purpose is to provide information on the number of arithmetic problems a student can solve correctly within a time limit. The students were allowed fifty minutes to complete their work. This test is divided into five parts. Each part consists of a group of problems as follows: Whole Numbers, Common Fractions, Decimal Fractions, Percents, and Practical Arithmetic Applications. The number of correct answers is assigned a grade equivalent score. Current resources do not disclose the reliability and validity coefficients for this

test. A phone interview with the Houghton Mifflin Company, which produced the test, confirmed that the test was produced as part of a large program which inventoried over five hundred items. The program covered all elementary and high school levels. The test used in the middle school studied was the Computation Test (Form A) 7-12 in the Shaw-Hiehle: Individualized Computational Skills Program. The copyright date is 1972. The phone interview revealed that the test was discontinued after 1986 and the company had no record of the reliability or validity coefficients.

The Gates-MacGinitie Reading Tests are a series of objective, norm-referenced survey tests designed to assess the general level of reading ability for individual students in kindergarten through twelfth grade. The information obtained from the tests, in combination with teacher evaluation, is to be used as a basis for selecting students for further individual diagnosis and remedial instruction, planning instructional emphasis, making decisions about grouping students, choosing appropriate materials, evaluating the effectiveness of instruction, and reporting to parents and the community. Levels one through ten/twelve are divided into two timed subtests- Vocabulary (twenty minutes) and Comprehension (thirty-five minutes). The number of correct responses is located on a grade grid to determine the equivalent grade level for each student score. For level one through ten/twelve, Kuder-Richardson Formula 20 reliability coefficients range from .86 to .94.

Very limited information is provided for test validity. The authors of the test appear most concerned with content validity. Twice as many items as were used in the

published versions of the test were developed and selected on the basis of a nationwide field test. It is recommended that users of this test evaluate the appropriateness of the content for students being tested. The test authors used consultants from minority groups (Asian, black, Hispanic, and Native American) to examine the pictures, passages, and items for apparent bias and for elements that might be considered offensive. Revision or elimination of such items resulted from their analysis. In addition, field testing involved subsamples of black and Hispanic students whose results were analyzed along with all male and female students. Particularly difficult items were reexamined and presumably edited or eliminated (Keyser and Sweetland 1991).

In the north Texas middle school studied, students who did not pass the TAAS test in math or reading during the prior springtime were eligible to partake in the Title I program. Students who score more than one year below grade level on the Shaw-Hiehle math test or the Gates-MacGinitie reading test the first time it is taken that school year, are also eligible to be in the Title I program. The Shaw-Hiehle test was administered at the beginning of the school year, at the end of the first semester and at the end of the second semester. Gates-MacGinitie test was given at the beginning of the school year and in April.

Data Collection Procedures

The Texas Assessment of Academic Skills Tests (TAAS) in math and reading were administered in the springtime, usually the first week of May. Students at the north Texas middle school took these exams in scheduled testing sites, some in the assembly or band

hall, others took them in classrooms. The TAAS tests were to be given on days which were established by the state. Students were given test booklets which were separated into different sections for the different content areas. The students could work on only one content area per day but they were given an unlimited timeframe to work. The students could work on the word problems in their test booklets but multiple choice answer selections were transferred to scantrons before the students completed their testwork for the day. Test booklets and scantrons were sent back to the state for grading and the results were returned to the school in May or early June.

The Shaw-Hiehle test was administered to the seventh and eighth grade math classes at the beginning of the school year, at the end of the first semester, and at the end of the school year. The tests were given in the math classrooms during their regular classtime. The students were allowed to complete as much of the test as possible during a fifty minute period. They could not work on the test booklet but were given additional paper to work on. Answer selections were placed on a separate answer sheet which was given to each of the students. The tests were collected by the teacher at the end of fifty minutes and the teacher was responsible for grading those tests. There is an equivalent grade level which is correlated to the number of right answers given.

The Gates-MacGinitie Reading test was administered to the seventh and eighth grade regular language arts classes at the beginning of the school year and late in the springtime. The test was administered during the class period by the regular teacher. The

students responded to multiple choice answers on a separate sheet of paper after having read the passages.

This researcher gained permission to collect data on the middle school students from the Research and Evaluation Coordinator of the school district in which the north Texas middle school was located. Application for Approval of Investigation Involving the Use of Human Subjects was approved at the University of North Texas (Appendix G - Letters of Permission to Conduct Research).

The data collected by the researcher were presented in two parts. First, a description of the north Texas Title I inclusion program was presented. Then, the records of the Texas Assessment of Academic Skill tests in reading and math and the results of the Shaw-Hiehle Math Tests and Gates-MacGinitie Reading Tests were revealed. Descriptive statistics presented in charts and illustrated on graphs clarified the degree to which the program achieved success.

The data were analyzed to determine what characteristics of the north Texas middle school Title I program met the requirements of a Title I program established by the federal government and how closely it met the requirements of the Improving America's Schools Act. This researcher analyzed the Texas Assessment of Academic Skills test scores for the seventh and eighth grades as whole groups, comparing the three years of the program with the year prior to the program. The scores of the Title I students were also compared to see if there was a significant difference between the three years of the program, 1993-1994 through 1995-1996, and the year prior, 1992-1993.

For the most part the data were collected directly from teachers in the middle school and the Learning Facilitators of the Title I program. Interviews with the principal of the middle school during the three years of the study provided this researcher with a clearer understanding of how and why the program was developed and organized the way it was. The strongest support of the actual success of the program came from the actual performances of the Title I students.

Because there was no Title I program in the north Texas middle school in the year prior to the program, a comparison was made of the students who would have qualified to be Title I students had there been one that year in the middle school. The researcher was granted access to Texas Assessment of Academic Skill records on file in the district with an agreement that strictest confidentiality would be upheld. The researcher found that the prior Texas Assessment of Academic Skills tests were not given at the same time, some were in springtime and some in the fall. All grade levels were not tested each year. The researcher looked at the students in the prior year of the program in the middle school. Any of those who had failed the Texas Assessment of Academic Skills the year before, or the last time they took it, were included as Title I students for the year prior to the program.

During the years prior to the north Texas middle school Title I inclusion program, Texas Assessment of Academic Skills tests in reading and math did not report the results in the same manner as later years. The results were reported as raw scores and scale scores. The raw score is the number of items answered correctly on a subject area test.

By itself, the raw score has limited utility; it can only be interpreted in reference to the total number of items on a subject-area test, and raw scores should not be compared across administrations. The scale score is a statistic that provides a comparison of scores with a minimum expectations/passing standard and allows for comparisons across years within a subject or a grade. The Texas Learning Index is a statistic that allows for comparison both across the years and across grade levels within a subject area for reading and mathematics at grades three through eight and exit level.

The researcher looked for a measure of comparison and decided to use the Texas Learning Index. The researcher knew that the Texas Learning Index was provided for the Texas Assessment of Academic Skills in reading and math test scores during the years of the program and through the use of a conversion chart the Texas Learning Index could be derived from the raw scores of the tests taken in years prior to the program. The researcher contacted the Texas Education Agency Student Assessment Division which provided the Texas Assessment of Academic Skills Raw Score Conversion Tables for Reading and Math. (Appendix B- Texas Assessment of Academic Skills Raw Score Conversion Table, Reading; Appendix C - Texas Assessment of Academic Skills Raw Score Conversion Table, Math; Appendix D - Texas Assessment of Academic Skills-Title I Eighth Grade Texas Learning Index and Scale Scores 1992-1993 through 1995-1996; and Appendix E -Texas Assessment of Academic Skills-Title I Seventh Grade Texas Learning Index and Scale Scores 1993-1994 through 1995-1996).

To gain a clear understanding of the Improving America's Schools Act the researcher spent numerous hours reviewing the contents of the actual document. There were several meetings and informal interviews with the At-risk Coordinator of the school district to clarify the actual requirements of the school district and individual school campuses.

Methodology

The Chapter I program in the north Texas middle school was described, explaining what steps this program took to meet the needs of its at-risk students in keeping with the requirements established by the federal government for Chapter I programs. This study required descriptive statistics to determine if there was a significant difference in the scores of the Texas middle school students studied during the three years of the Title I inclusion program from the scores for the year prior to the program. Frequencies, means, and standard deviations were calculated for the Gates-MacGinitie and the Shaw-Hiehle Tests. Data were also calculated for the number of students passing the TAAS tests taken in math and reading at the end of each of the school years studied. The use of computer technology enabled the information on spreadsheets to be displayed in charts and graphs for further investigation. The results of these tests are shown not only for the Title I students but for the entire population at the middle school, at the appropriate grade levels, since the inclusion program shared its influence on all of the students in those classes, not only on the students at-risk. The TAAS results for the year prior to the three years

studied was compared to determine the influence of the Title I program at the north Texas middle school.

Effective teaching strategies applied in the program are described. How the program varied teaching instruction to more actively involve both students and parents is presented. Attempts made by the program to raise the level of achievement for the Title I students are described to see if there was evidence of the program meeting the requirements of the Improving America's Schools Act.

The policies and performances of schools successful in producing high achievers, as described by experts in the literature, were used to analyze the strengths and weaknesses of this program and to help other school districts in their search for an appropriate program for their at-risk students. These policies and performances were used to evaluate the Title I program in the middle school in north Texas.

CHAPTER IV

PRESENTATION OF DATA

Description of the Title I Inclusion Model in a North Texas Middle School

The north Texas middle school studied had approximately 900 students, 53% minorities and 48% economically disadvantaged. In the fall of 1993 the school received Title I funds for the first time. An inclusion program was designed by the principal to change both student and teacher behavior. Two Learning Facilitators, acting as change agents, planned with teachers and worked with all students in the classroom. A goal of the Learning Facilitators was to assure that students became active participants and the teachers became facilitators of the learning. A Title I nurse was hired. The Title I nurse helped facilitate this goal through interviews with students and home visits with parents. The Title I nurse taught at-risk middle school students about wellness. The Title I nurse connected Title I students and their families with medical or social community services which were available. She would make appointments for them and drive them when they needed transportation.

Title I students were not isolated from their peers, and the benefits from having a second teacher, the Learning Facilitator, in the classroom was shared by all the students.

During the first year the program served eighth grade students only, in the second and third years it was expanded to both the seventh and eighth grades. One facilitator, a math teacher, worked with the math teachers who had Title I students, the other facilitator, a reading teacher, worked through the content areas of science and social studies, helping teachers who had Title I students in these areas. Both facilitators spent time each week planning with the classroom teachers to meet the needs of the Title I students along with the rest of the class. The classroom teachers determined which essential elements were taught and which objectives and key vocabulary should be emphasized while presenting the lessons for the week.

The facilitators questioned the teachers as to which activities would best accomplish the learning task and what their roles should be in carrying out these activities. Cooperative learning, peer tutoring, and the use of manipulatives were put into practice to accommodate the various learning styles of the students. Both remedial and enrichment activities were planned to reinforce the learning objectives for the week. The facilitator helped the teacher in designing appropriate assessment, and to reteach/retest as needed. The facilitator prepared a permanent file of resources which reinforced basic skills and offered challenge activities for students. The teacher and facilitator planned for continuous improvement of all of the skills by which the program was evaluated.

The facilitator co-taught with the teacher and worked with Title I students and others in small groups. Student independence was encouraged through the use of graphic organizers, the reading/writing process and the math problem solving steps. Since the

Learning Facilitator planned with the teacher, these strategies became a natural part of the learning process and the curriculum of the school. Thus, students gained a repertoire of strategies for use across the curriculum. As activities were carried out in class, the teacher and facilitator assessed the progress of the students and determined the direction of the next lesson. When a Title I student needed further assistance, plans were adjusted and/or the facilitator phoned parents and arranged for the student to come for tutoring.

Parents became a part of their children's success as they participated in the program. Several Parent-Workshops were operated throughout the year to inform parents of Title I students of the nature of the program and to teach them how they could work with their children to help with homework, encourage proper diet and wellness and to improve student organization and study skills. Parents were invited to visit the classrooms and conference with the facilitators as well as with the teachers. Phone calls with news of good effort and success were made frequently. Parents helped by sending their students to school for before and after school tutorials with the Learning Facilitators. There was a "zero" period at the start of the day during which students were free to get help with homework or be tutored. Parents were always anxious to know how their children were doing in class and asked what they could do to encourage their success. Home visits were made as often as possible. The Title I nurse informed parents of community services which would be to their benefit.

The role of the Title I facilitator as "teacher working with teacher" was a very important one. A sense of trust and encouragement was established whereby the teacher

could try new strategies in an effort to promote growth. A risk-free environment was established which allowed for experimenting with a variety of teaching strategies in an effort to find the best match for each teacher with each of her/his students. When weaknesses were exposed, alternative methods were sought to make the teaching/learning situation better.

The Learning Facilitator helped the Title I students remove the barriers which kept them from getting started on the new lessons being introduced in class. The same questioning strategies used with the teachers in planning sessions were practiced as the facilitator worked with the Title I students. There was a constant unveiling of prior student knowledge before new lessons could begin. When a student exposed weaknesses, the lesson was adjusted to support basic skills which were needed to carry out new learning activities. A variety of activities were practiced which helped the student retain the prior learning needed to be successful in the lessons at their present grade level. Graphic organizers, process steps, pneumonics and drill and practice were all employed to strengthen the students' basic skills. They were challenged with higher level thinking activities along with the rest of the class. The Title I students used their teacher, cooperative learning, peer tutoring, and the facilitator to support them in their learning. The facilitators' questions guided the students as they learned to solve problems and develop their reading and writing skills. They learned the steps needed to accomplish the tasks which were used to evaluate their success. If completion of assignments were hampered by lack of organization or lack of study skills, the facilitators worked with the

students to strengthen these areas. Direct instruction became more focused and limited as the students became the “workers” and the teachers became the “facilitators” in the classroom. The students were taught the skills needed to accomplish their work. The change in teacher/student behavior became part of the learning for students whether the Learning Facilitator was present or not. Homework allowed the students to demonstrate the skills they learned during the day. The students became active participators of the learning as the facilitator worked with all the students in class. Title I students were included in the regular class.

One of the most important effects of the Title I program is that the learning continues the next year for both teachers and students and integrates throughout the entire campus, unlike other programs, such as labs, tutorials, and pullouts. The Title I program was successful in increasing the number of students who passed the TAAS test. At the end of the first year of the program 78% of the Title I students passed the TAAS test in Reading, bringing the schoolwide score to 86.6%, while 54% of Title I math students passed, which contributed to a schoolwide math gain of over 25% to a total of 83% passing. However, the most significant gain as a result of the program was the change in student/teacher behavior which continued to be demonstrated in each of the classes. Title I students knew what they needed to do to get themselves started and successfully complete their work. The students worked together on challenging activities without distinguishing which were the Title I students.

The benefits of having a Learning Facilitator working with the students was shared by all. The teachers were mindful of the essential elements which they were intending to teach and employed strategies which actively involved students in learning and allowed the teacher to facilitate. The teachers planned for variations in learning styles and for remedial and enrichment extensions to the lessons. Continuous improvement on measurable outcomes by all the students in class was used to evaluate the success of the inclusion program. If desired outcomes were not achieved, plans were adjusted for further changes in student/teacher behavior.

There was a sense of pride and ownership which was experienced by both the teachers and students of this Title I inclusion program. The students did not ask for the answers, they learned how to solve problems and get the answers themselves. They were proud to know that they were successfully performing challenging learning activities.

Meeting the Requirements of a Title I Program Established by the Federal Government

The initial funds which were provided to the north Texas middle school were Chapter I funds granted by the federal government under the Elementary and Secondary Education Act of 1965. Federal and state guidelines specified which schools were eligible for Chapter I funds. This was done by ranking schools on the basis of the poverty level in the school attendance area, typically using data from free/reduced-priced lunch or Aid to Families with Dependent Children programs. The guidelines also specified that the students who should receive Chapter I services were the students who were designated low achievers on the basis of achievement tests and their teachers' judgment (Anderson

and Pellicer 1993, 27). But the guidelines did not specify *how* schools should serve those children.

The federal government found that the north Texas middle school studied was eligible for Chapter I funds each of the years during which the program was studied. The program guidelines specified that students would be selected to participate in the program if they failed the Texas Assessment of Academic Skills in math or reading during the prior springtime. Students who scored more than one year below grade level on the Shaw-Hiehle Math Test or the Gates-MacGinitie Reading Test, or who were getting failing grades in math, language arts, science, or social studies could be included in the program if there were not enough students who qualified by failing the Texas Assessment of Academic Skills tests in math and reading. During the years studied, the Title I Inclusion Program serviced all of the students who failed the Texas Assessment of Academic Skills tests in math and reading but did not add any additional students. This researcher included the data from the Shaw-Hiehle Math Test and the Gates-MacGinitie Reading Test when it was available within the program. Neither the Shaw-Hiehle Math Test nor the Gates-MacGinitie Reading Tests were given at the north Texas middle school during the years prior to the Title I inclusion program.

Once the students were selected, the Learning Facilitators worked with them on a daily basis within their math, science, and social studies classes. There were study sessions scheduled before and after school. Group size varied from one to fifteen.

The Learning Facilitators planned with the teachers and worked with the at-risk students to improve their learning skills as well as Texas Assessment of Academic Skills test skills. The data presented gives evidence of students' progress in becoming more autonomous in their learning and improving the level of their Texas Assessment of Academic Skills tests in math and reading scores. The north Texas Middle school Title I program did meet the requirements of a Title I program established by the federal government.

Assessment Data

The researcher presented the assessment data on the Texas Assessment of Academic Skills Tests in Math and Reading and on the Shaw-Hiehle Math Test and the Gates-MacGinitie Reading Test. The Texas Assessment of Academic Skills Test results were reported for the whole middle school as well as for the Title I students during the years of the program and the year prior. The Texas Assessment of Academic Skills Test results for the Title I students at each grade level were compared with the scores of the same students one year prior. Finally, the Shaw-Hiehle Math Test and the Gates-MacGinitie Reading Test data were reported indicating both the percent on grade level and the individual scores of Title I students during the years of the program.

Texas Assessment of Academic Skills Test Scores For the Middle School

To create a clear picture of the historical data for the campus of the north Texas middle school studied, this researcher examined the results of the Texas Assessment of Academic Skills in math and reading for the year prior to the Title I inclusion program as well as the three years of the program. Since the Title I program was designed to

influence the entire population, the test scores for the entire grade level were evaluated, not just those of the Title I students. Figure 1 shows the percent of all the 7th and 8th grade middle school students in 1992-93, 1993-94, 1994-95 and 1995-96 who met minimum expectations on the Texas Assessment of Academic Skills Tests in Math and Reading.

Striped Lines Indicate Years Of The Title I Program At The North Texas Middle School

TAAS Scores For All 7th And 8th Grade Middle School Students
1992-93, 1993-94, 1994-95 And 1995-96

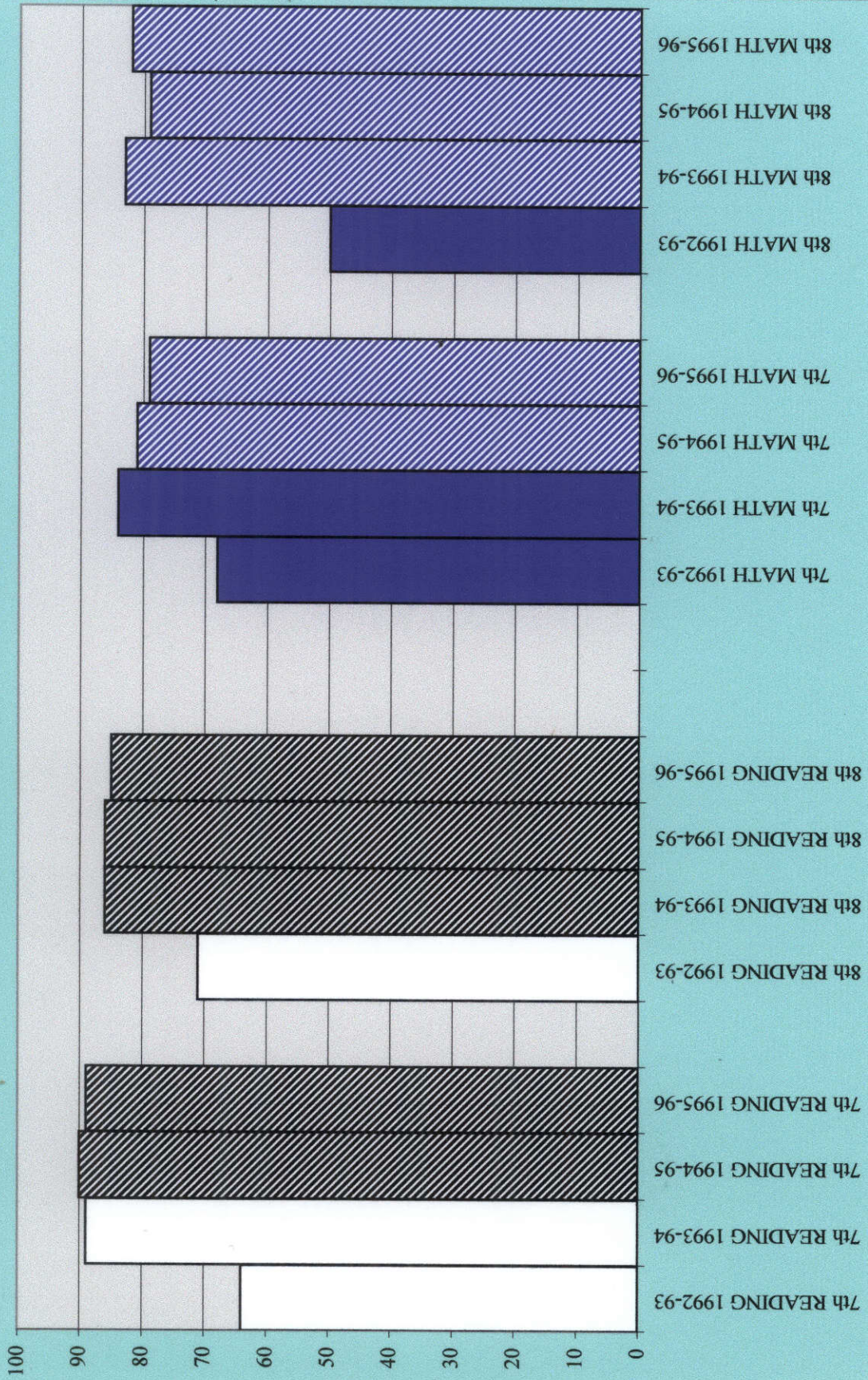


Figure 1. TAAS Scores For All 7th And 8th Grade Middle School Students 1992-93, 1993-94, 1994-95 And 1995-96

In 1992-93 the Title I program was not started at the middle school. That year 64% of the seventh graders met minimum expectations on the TAAS test in reading. Seventh grade students were not included in the Title I program during the 1993-1994 school year but the program was at the middle school. That year, 89% of the seventh grade students met minimum expectations on the TAAS reading test. Seventh graders were included in the Title I program during the following two years. Of the seventh graders, 90% met minimum expectations on the TAAS test in reading in 1994-95 and 89% met minimum expectations in 1995-96.

The results were similar for the eighth graders in the middle school on the TAAS test in reading. The year prior to the program, 1992-93, 71% of all the eighth grade middle school students met minimum expectations on the TAAS test in reading. During the following three years the Title I program was at the middle school. Of the eighth grade middle school students, 86% met minimum expectations on the TAAS test in reading in 1993-94 and 1994-95 and 85% met minimum expectation on the TAAS test in reading in 1995-96.

The year (1992-93) before the Title I program was initiated at the middle school, 68% of the seventh grade students at the middle school met minimum expectations on the TAAS test in math. Even though the first year of the program, 1993-94, did not include the seventh graders many of the teachers adopted some of the practices of the program and 84% of the seventh graders at the middle school met minimum expectations on the TAAS test in math. In 1994-95, 81% of the seventh graders met minimum expectations

on the TAAS test in math and in 1995-96, 79% met minimum expectations on the TAAS test in math. The seventh grade test scores for all the students in the middle school were higher the year before they were taking part in the formal program than during the years in the program. The greatest improvement occurred the year that the Title I program was started at the middle school with the eighth graders. Throughout the years when the seventh grade students were included in the Title I program the math TAAS scores dropped 5% but they always kept well above the 68% that they were at before the Title I program came to the middle school.

The year (1992-93) before the Title I program began at the north Texas middle school, 50% of all the middle school eighth graders met minimum expectations on the TAAS test in math. The Title I program was at the middle school during the following three years. In 1993-94, 83% of all the eighth grade students at the middle school met minimum expectations on the TAAS test in math. In 1994-95, 79% met minimum expectations on the TAAS test in math and 82% of the eighth grade middle school students met minimum expectations on the TAAS test in math in 1995-96.

Texas Assessment of Academic Skills Test Scores for the Title I Inclusion Program in the Middle School

The Texas Learning Index is a statistic that allows for comparison, both across the years and across grade levels within a subject area for reading and mathematics at grades three through eight and Exit level. The researcher knew that the Texas Learning Index was provided for the Texas Assessment of Academic Skills in reading and math during

the years of the program and through the use of a conversion chart the Texas Learning Index could be derived from the raw scores of the tests taken in years prior to the program. The researcher contacted the Texas Education Agency Student Assessment Division which provided the Texas Assessment of Academic Skills Raw Score Conversion Tables for Reading and Math (Appendix B - Texas Assessment of Academic Skills Raw Score Conversion Table, Reading; Appendix C - Texas Assessment of Academic Skills Raw Score Conversion Table, Mathematics; Appendix D - Texas Assessment of Academic Skills-Title I Eighth Grade Texas Learning Index and Scale Scores 1992-1993 through 1995-1996; and Appendix E -Texas Assessment of Academic Skills-Title I Seventh Grade Texas Learning Index and Scale Scores 1993-1994 through 1995-1996).

Striped Lines Indicate Years Of The Title I Program At The Middle School

TITLE I TAAS SCORES 1992-93, 1993-94, 1994-95 AND 1995-96

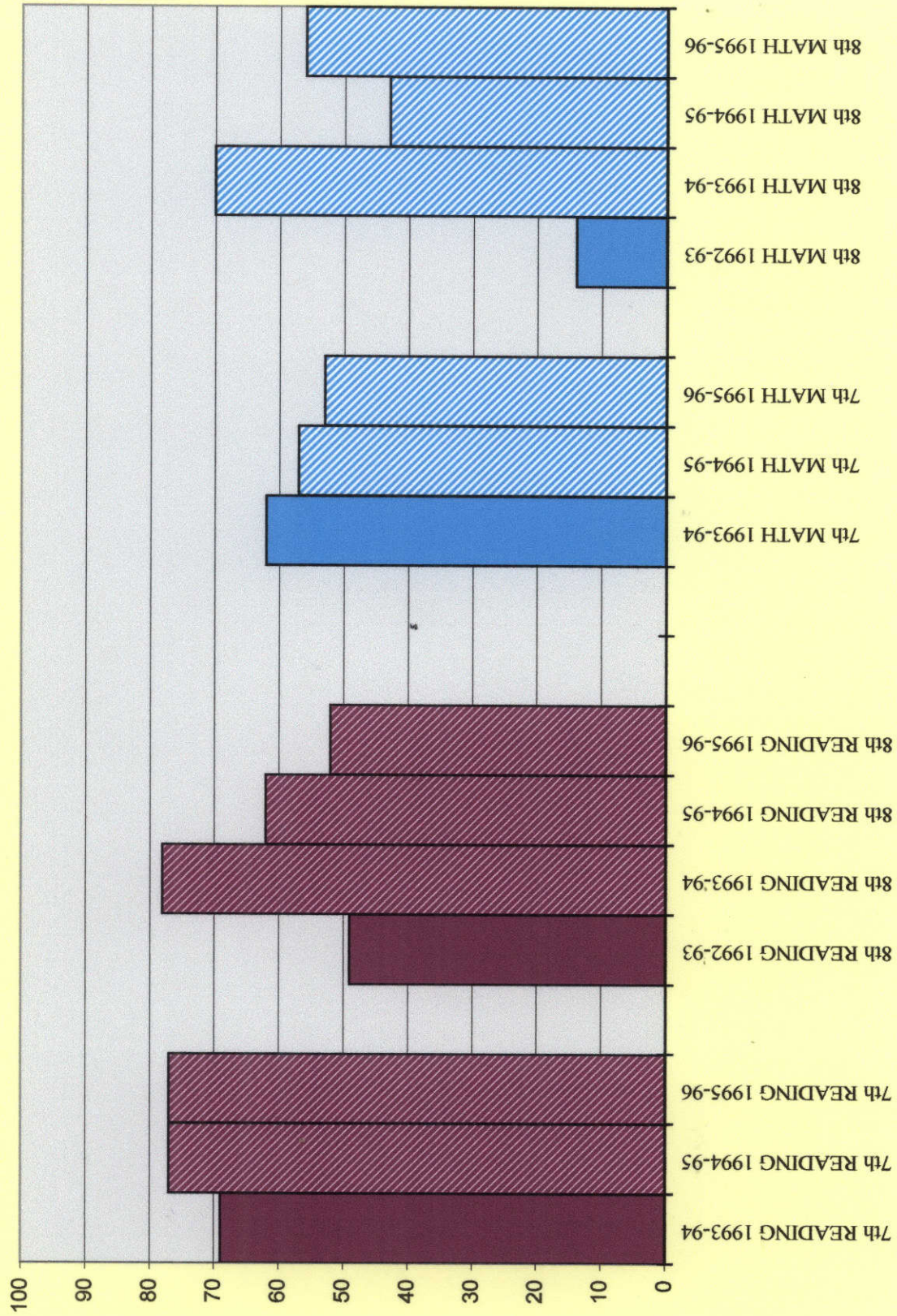


Figure 2. Title I TAAS Scores 1992-93, 1993-94, 1994-95 And 1995-96

Figure 2 displays the TAAS scores for Title I students only for the school years 1992-93, 1993-94, 1994-95 and 1995-96. In 1993-94, the seventh graders were not included in the Title I program. That year, 69% of the students, who would have qualified as Title I students had seventh grade been included, met the minimum expectations on the TAAS test in reading. Looking at Title I students only, 77% seventh grade students met minimum expectations on the TAAS test in reading in 1994-95 and in 1995-96.

In 1992-93, the year prior to the Title I inclusion program, 49% of the Title I eighth grade students met minimum expectations on the TAAS test in reading. In 1993-94, the first year of the Title I inclusion program, 78% of the Title I students met minimum expectations on the TAAS test in reading. Looking at Title I students only, 62% met minimum expectations on the TAAS test in reading in 1994-95 and 52% in 1995-96. The Learning Facilitator in reading was working in both seventh and eighth grades during the last two years. Title I funds decreased in 1994-95 and 1995-96, the Learning Facilitator was half-time Title I Learning Facilitator in reading and half-time department head of the language arts department.

The year prior to the program, 1993-94, 62% of the seventh grade Title I students met minimum expectations on the TAAS test in math. During the years when seventh grade students were included in the program, 57% met minimum expectations on the TAAS test in math in 1994-95 and 53% met minimum expectation on the TAAS test in math in 1995-96.

A more dramatic change was reported when looking at the math scores of the Title I students in the eighth grade during the year prior to the Title I inclusion program. That year, 1992-93, 14% of the Title I eighth graders met minimum expectations on the TAAS test in math. During the years of the program the scores were higher. Looking at Title I students only, 70% in 1993-94, 43% in 1994-95 and 56% in 1995-96 of the Title I eighth grade students met minimum expectations on the TAAS test in math.

In both seventh and eighth grade, Title I math students scores dropped in 1994-95. During the 1993-94 school year the Title I funds were high enough for the program to have a full-time Title I nurse and two full-time Learning Facilitators. They worked with one grade level. In 1994-95 the Title I funds decreased. There was a half-time Title I nurse and one full-time and one half-time Learning Facilitator working with two grade levels. The following year (1995-96) there was no Title I nurse in the program.

Seeing the drop in scores from all 7th and 8th grade middle school students to the 7th and 8th grade Title I middle school students, the researcher investigated the scores of the Title I students in the reading program and the math program more closely.

Title I Reading Program

Some of the Title I students were in both the Title I math and reading programs, other students were in one program or the other. Figure 2 displayed the results on TAAS of the Title I students as the results came back from the state education department. They included the math and reading scores of all Title I students. The classroom scores were slightly lower in some cases when they included students who may have not been counted

by the state for reasons of exemption. When looking at students who qualified in the Title I program because of their low reading scores only and eliminating the reading scores of the students who qualified for the Title I program for poor math scores but who might do well in reading, lowers the Title I reading results considerably.

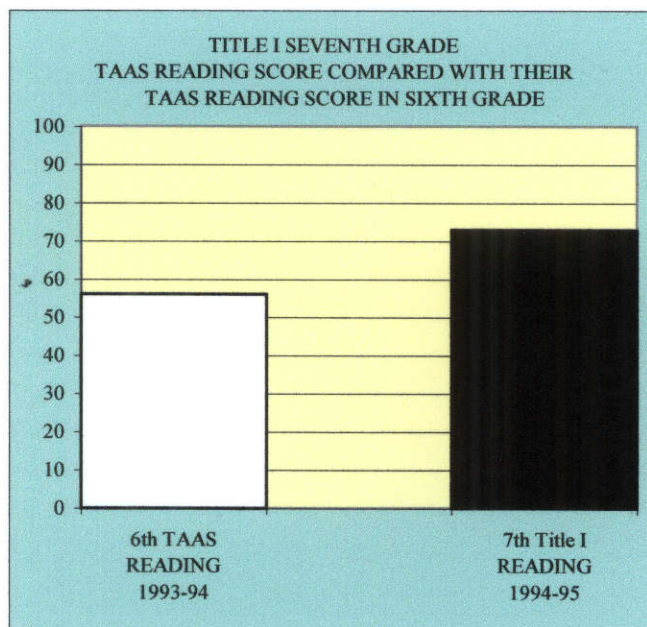


Figure 3. Title I Seventh Grade TAAS Reading Scores Compared With Their TAAS Reading Scores in Sixth Grade

Figure 3 displays the results of the seventh grade Title I students on the TAAS test in reading for 1994-95 and compares it with the scores that the same students scored a year prior in sixth grade. Figure 3 indicates that in 1994-95, after one year of the program, forty out of fifty-five students (73%) passed the Texas Assessment of Academic Skills test in reading. One year prior, only twenty-five of the forty students (56%) passed the Texas Assessment of Academic Skills test in reading.

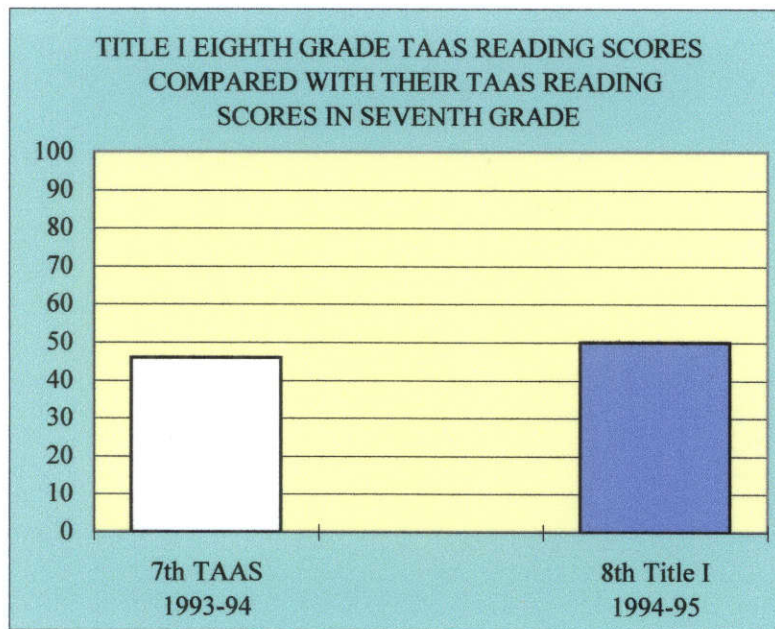


Figure 4. Title I Eighth Grade TAAS Reading Scores Compared With Their TAAS Reading Scores In Seventh Grade

Figure 4 displays the results of the Title I eighth grade students on the TAAS test in reading 1994-95 and compares that score with the score which the same students achieved one year before when they were completing seventh grade. The eighth grade students in the Title I reading program in the 1994-1995 school year had twenty-two out of forty-four students (50%) pass the Texas Assessment of Academic Skills test in reading. Forty-six percent of these students in the Title I reading program had passed Texas Assessment of Academic Skills in reading at the end of the 1993-1994 school year when they completed seventh grade.

Title I Math Program

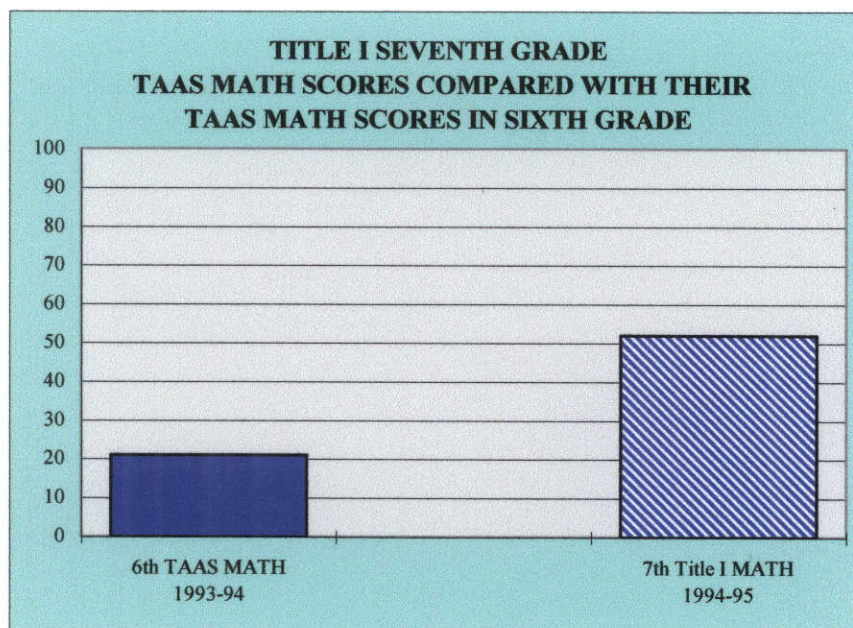


Figure 5. Title I Seventh Grade TAAS Math Scores Compared With Their TAAS Math Scores In Sixth Grade

Figure 5 displays the results of the seventh grade Title I math students on the TAAS test in math in 1994-95 with the scores of the same students one year prior at the end of sixth grade. The Title I math students were assessed using the TAAS test in math and the Shaw-Hiehle test. Looking at the 1994-1995 group of seventh graders, twenty-seven of the group of fifty-two (52%) passed the TAAS test in math at the end of the 1994-1995 school year. Twenty-one percent of these students had passed the TAAS test in math at the end of 1993-1994 when they were sixth grade students.

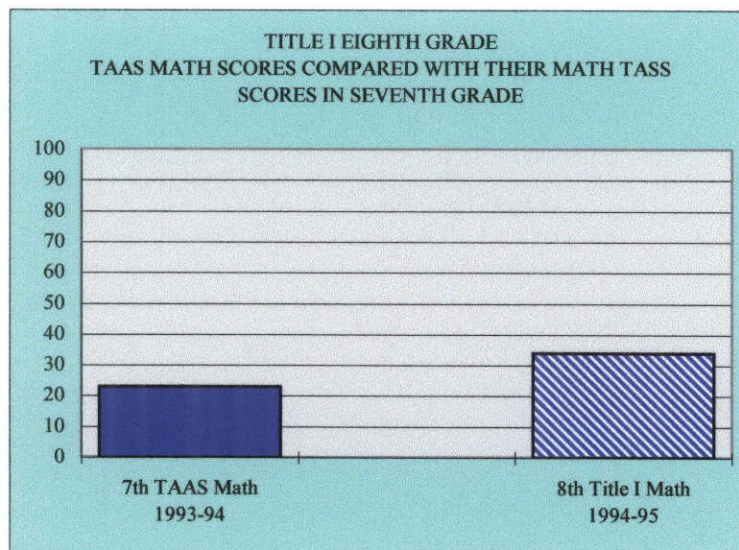


Figure 6. Title I Eighth Grade TAAS Math Scores Compared With Their TAAS Math Scores In Seventh Grade

Figure 6 displays the results of the Title I eighth grade students taking the TAAS test in mathematics in the year 1994-95 and compares that score with the score the same students achieved on the TAAS test in mathematics one year prior when they were in seventh grade. Looking at the 1994-1995 eighth graders in the Title I Math Program, seventeen of the fifty students (34%) passed the TAAS test in math at the end of the 1994-1995 school year. Thirteen of the fifty-six students (23%) passed when they were tested at the end of seventh grade.

SHAW-HIEHLE MATH TEST FOR THE TITLE I INCLUSION PROGRAM

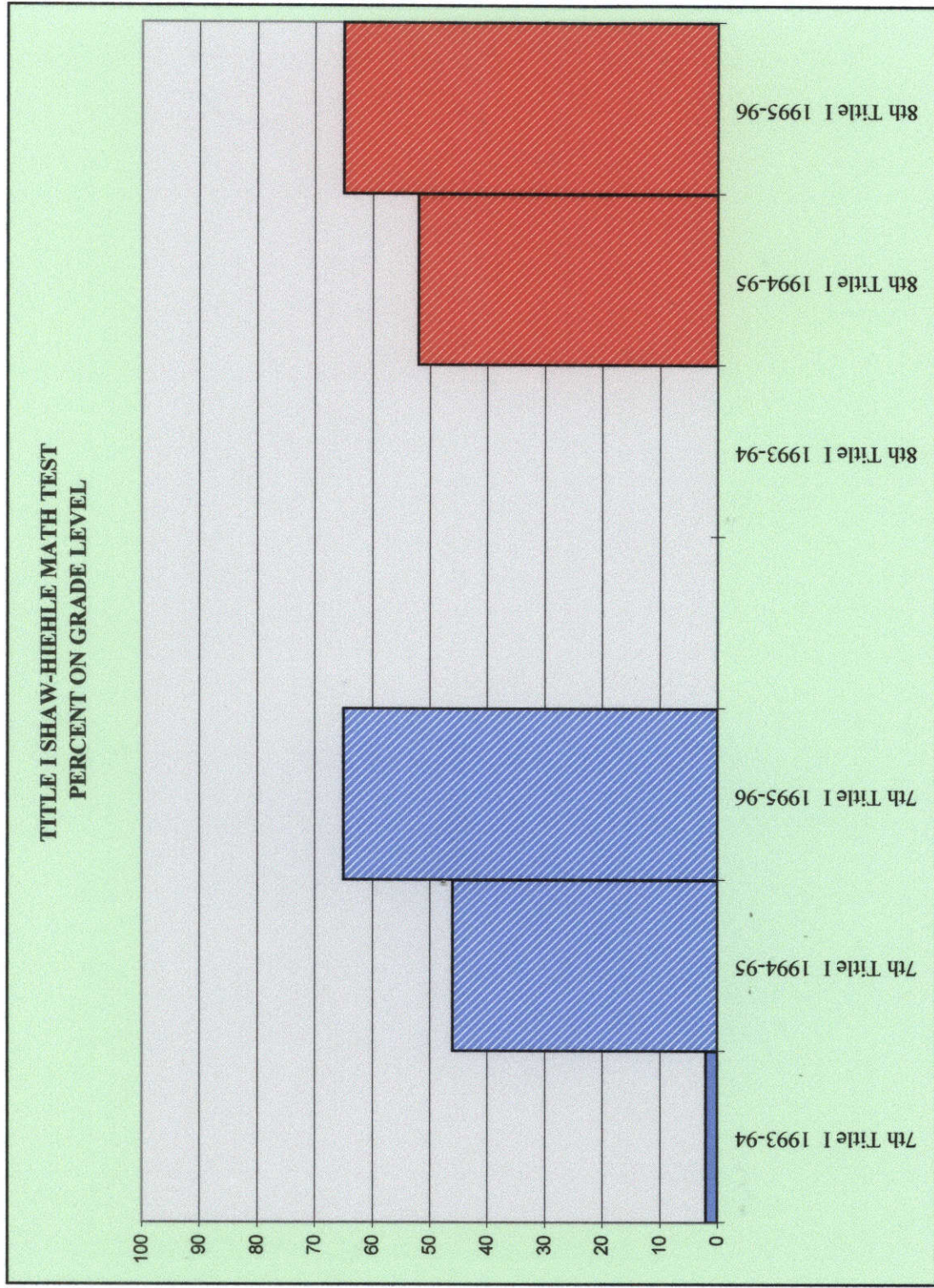


Figure 7. Title I - Shaw-Hiehle Math Test - Percent Of Students On Grade Level 1993-94, 1994-95 And 1995-96

Shaw-Hiehle Math Test and Gates-MacGinitie Reading Test Scores for the Title I Inclusion Program in the Middle School

In addition to the Texas Assessment of Academic Skills test, the Shaw-Hiehle test was given in the math department. This test had a fifty minute time limit. Figure 7 displays the Title I math students' Shaw-Hiehle Math Test results. At the end of the 1993-94 school year 2% of the Title I seventh grade students scored on grade level on the Shaw-Hiehle Math Test, 46% of the seventh grade Title I math students were recorded on grade level by the end of the 1994-95 school year. The Shaw-Hiehle test scores indicated that 65% of Title I seventh grade math students were working on grade level in 1995-96. Looking at eighth grade Title I math students only, at the end of the 1993-94 school year none of the Title I math students in eighth grade were on grade level and 52% of the Title I eighth grade math students were on grade level at the end of the 1994-1995 school year when given the Shaw-Hiehle Math Test. On the same test, 65% of the eighth grade Title I math students were on grade level in 1995-96.

Figure 8 displays the Shaw-Hiehle Math Test results for the Title I seventh grade students during the 1993-94, 1994-95 and 1995-96 school years. The seventh grade students were not a part of the formal Title I program in 1993-94. The seventh grade students who would have qualified for the Title I program that year were recorded as having one student with a score on grade level on the Shaw-Hiehle Math Test at the end of 1993-94. The median score was 5.4, the mean was 5.4 and the trimodal scores were 5.1, 5.3 and 5.8. The Standard Deviation was .957 .

At the end of the 1994-1995 school year twenty-five out of fifty-four Title I math students in seventh grade (46%) were on grade level on the Shaw-Hiehle Mathematics Test. Seventy-eight percent of the students increased their grade level score more than one year. The median of the grade level score was 7.5. The mode was 6.6 and the mean was 7.1. The Standard Deviation was 1.36.

The seventh grade students were given the Shaw-Hiehle Math Test in the fall of 1995-96. The seventh grade Title I scores were examined. The median was 5.8 and the mean was 5.9. The mode was 5.8 and the Standard Deviation was 1.27. By the springtime, when the same students were retested, the median was 8.3 and the mean was 7.9. The mode was 8.5 and the Standard Deviation was 1.5, the mean was 7.1. The mode was 6.6. The Standard Deviation equaled 1.36 . In the springtime of 1995-96 school year 65% of the Title I seventh grade students scored on grade level on the Shaw-Hiehle Math Test.

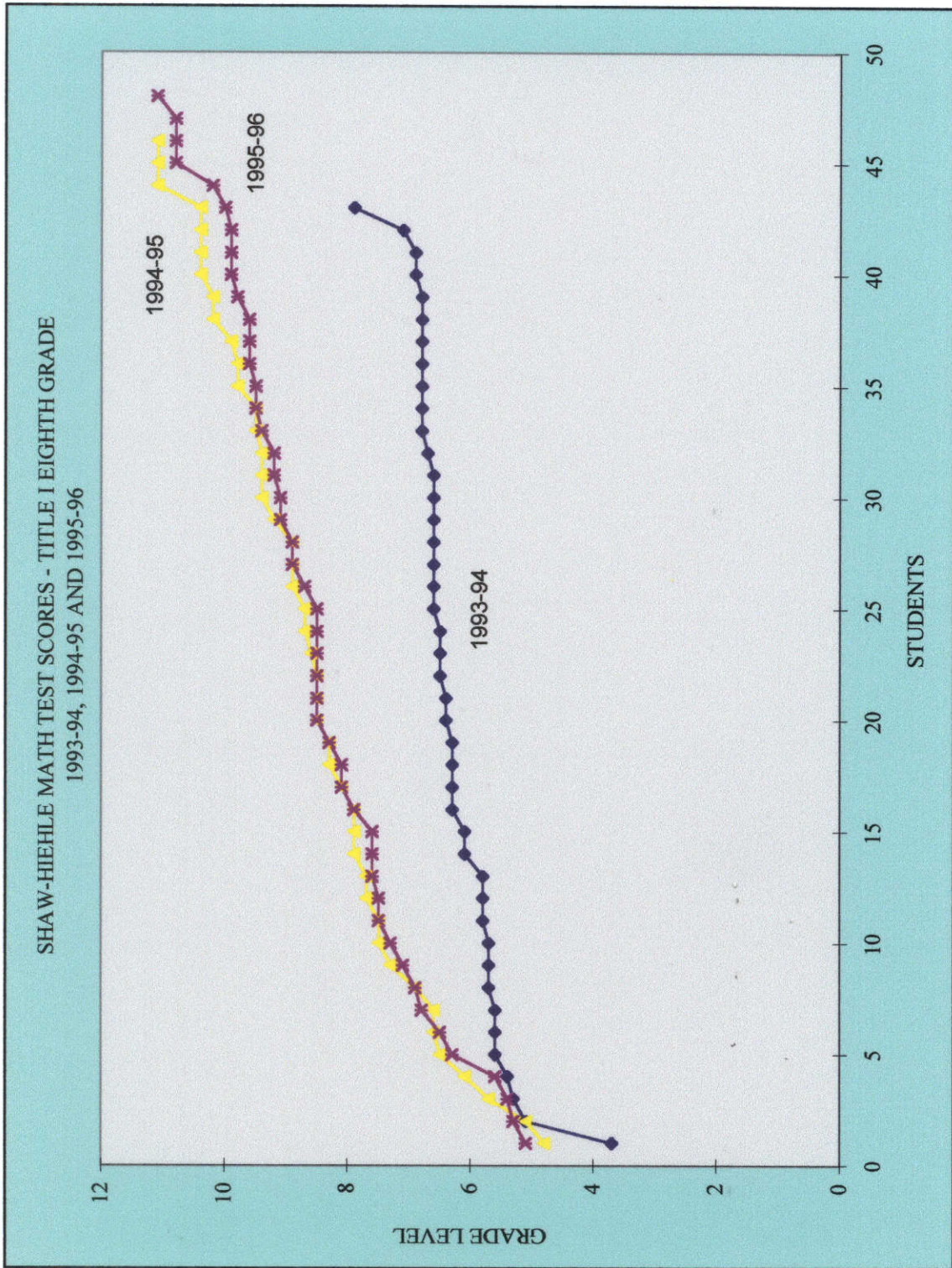


Figure 9. Shaw-Hiehle Math Test Scores - Title I Eighth Grade 1993-94, 1994-95 And 1995-96

Figure 9 displays the Shaw-Hiehle Math Test results for the Title I eighth grade students during the 1993-94, 1994-95 and 1995-96 school years. None of the Title I eighth grade students scored on grade level on the Shaw-Hiehle Math Test at the end of the 1993-94 school year. The median score was 6.4, the mean was 6.3 and the two bimodal scores were 6.6 and 6.8. The Standard Deviation equaled .68. At the end of the 1994-95 school year the eighth grade Title I math students were tested with the Shaw-Hiehle Math Test and twenty-four out of forty-six students (52%) were on grade level. One of the forty-three students was on grade level at the end of the preceding year when they were completing seventh grade. By the end of 1994-1995, twenty-five of the thirty-two students (78%) had increased their grade level scores by more than one year. The grade level median was 8.7, the grade level mean was 8.6, the mode was 10.4, the Standard Deviation equaled 1.55.

In the fall of the 1995 -1996 school year, the eighth grade students took the Shaw-Hiehle Math Test. The Title I students' scores were examined. The median was 7.4, the mean was 7.3 . The trimodal scores were 5.4, 6.4, and 7.5. The Standard Deviation is 1.55. By the Spring, the Shaw-Hiehle Test scores had a median of 8.5, and a mean of 8.5. The mode was 8.5 and the Standard Deviation was 1.49. At the end of the 1995-96 school year, 65% of the Title I eighth grade students were on grade level when given the Shaw-Hiehle Math Test.

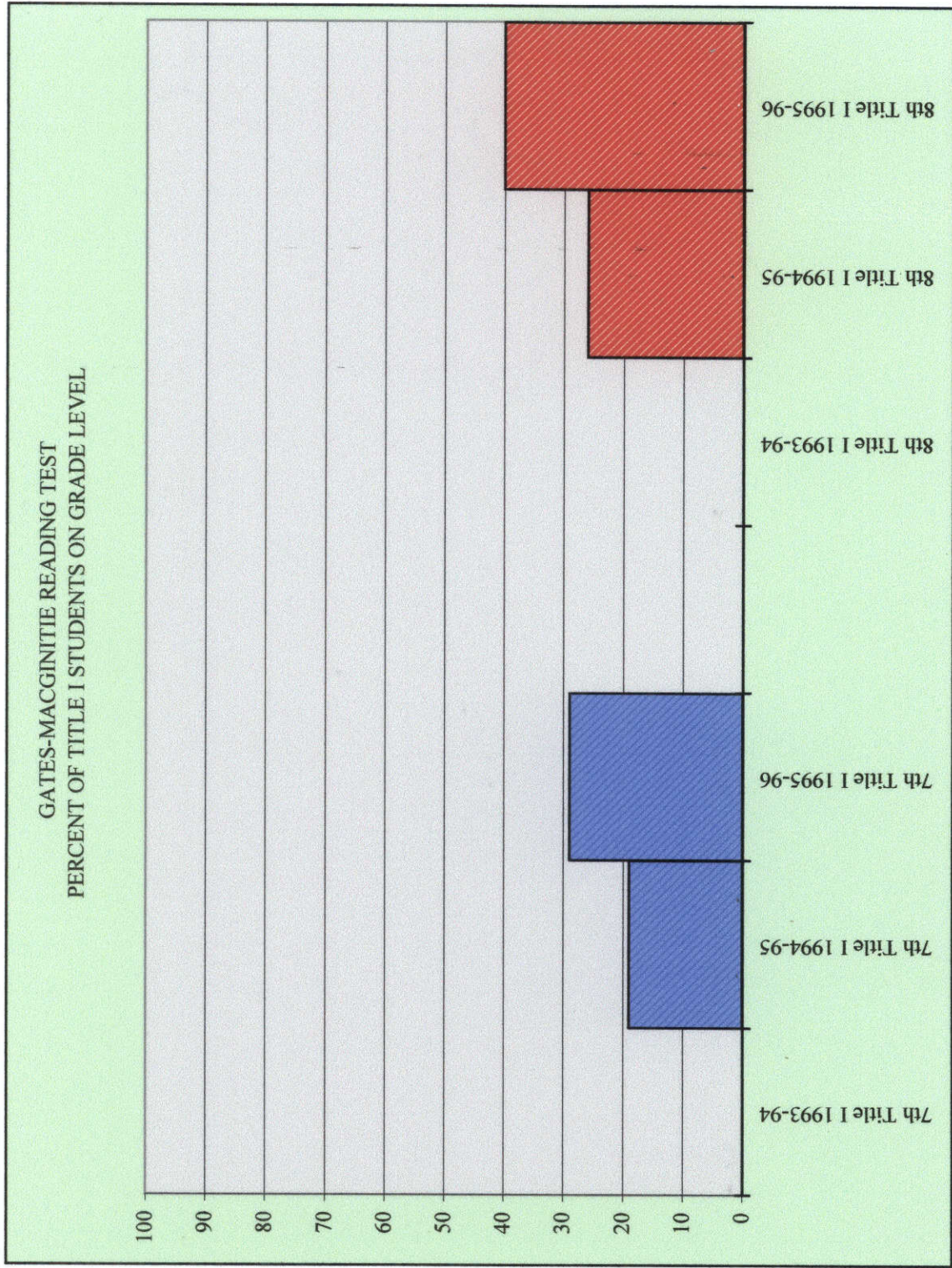


Figure 10. Gates-MacGinitie Reading Test - Percent Of Title I Students On Grade Level 1993-94, 1994-95 And 1995-96

Figure 10 displays the Gates-MacGinitie Reading Test results for the Title I reading students during the 1993-94, 1994-95 and 1995-96 school years. In 1993-94 seventh grade students were not part of the formal Title I program. That year none of the Title I students scored on grade level on the Gates-MacGinitie Reading Test. Nineteen percent of the seventh grade Title I students scored on grade level on the Gates-MacGinitie Reading Test in 1994-95 and 29% were on grade level in 1995-96. The Gates-MacGinitie test results indicate that none of the eighth grade students in the Title I reading program were reading on grade level at the end of the 1993-1994 school year. 26% of the eighth graders in the Title I reading program were on grade level at the end of the 1994-1995 school year and 40% were on grade level by 1995-96.

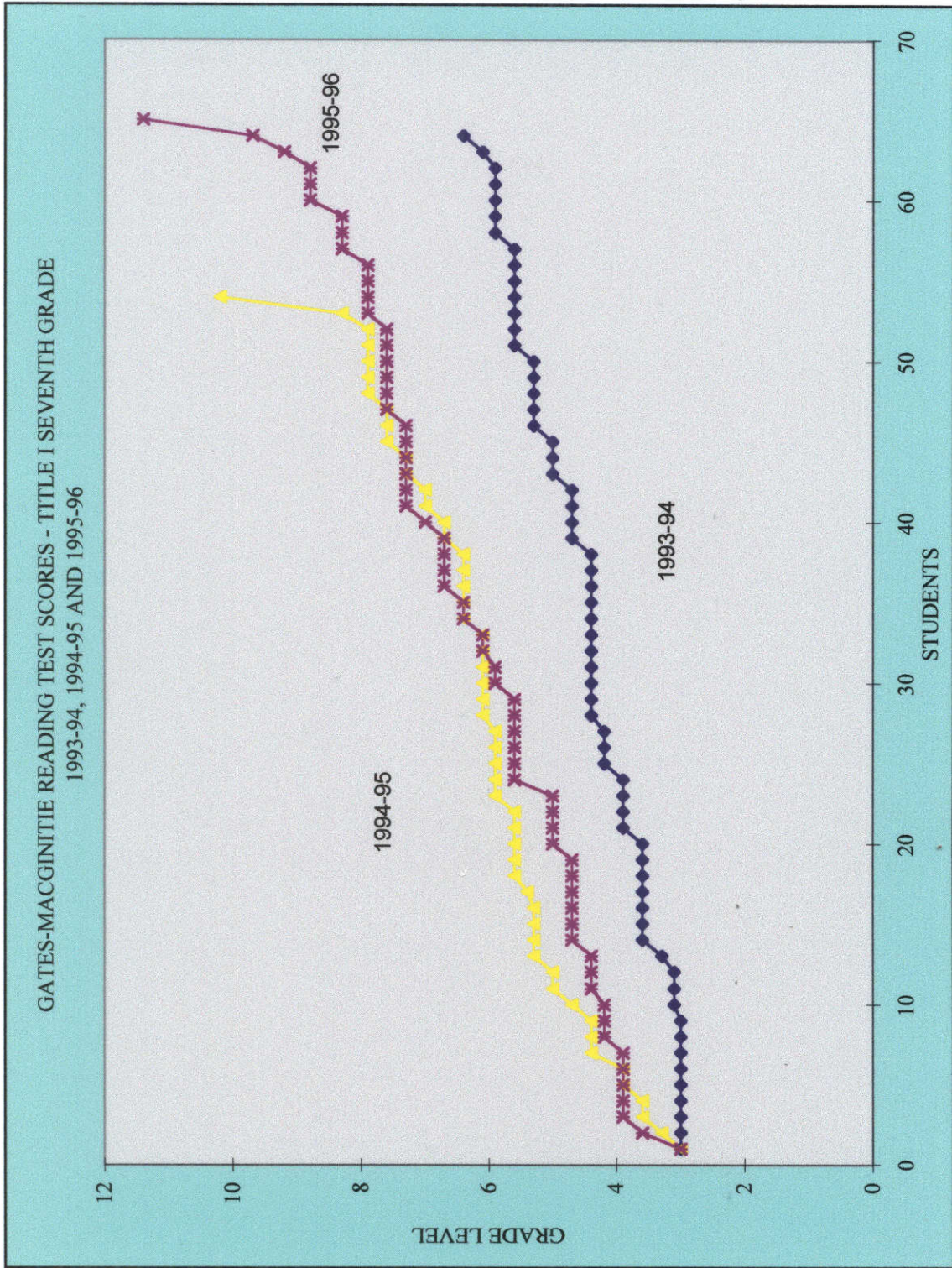


Figure 11. Gates-MacGinitie Reading Test Scores - Title I Seventh Grade 1993-94, 1994-95 And 1995-96

Figure 11 displays the Gates-MacGinitie Reading Test results for the Title I seventh grade students during the 1993-94, 1994-95 and 1995-96 school years. The Gates-MacGinitie Reading Test was given to the Title I students in seventh grade. At the end of the 1994-1995 school year ten out of fifty-four (19%) were on grade level, and thirty-two out of the fifty-four students(59%) improved in their grade level score more than one year. The mean, grade average, increased to 6.0. The median was 6.0, and the mode was 6.1. The Standard Deviation equaled 1.41. These scores become more significant when you know that the seventh grade Title I students had performed at a lower level during the prior school year. At the end of 1993-94 seventh grade Title I students were tested on the Gates-MacGinitie Reading Test and the mean equaled 4.3. The median and mode equaled 4.4. The Standard Deviation equaled 1.01. None of the seventh grade Title I students scored on grade level in 1993-94.

The seventh grade students took the Gates-MacGinitie Reading Test in the spring and fall of 1995-96. The results of these tests in the fall totaled a median of 4.2, and a mean of 4.5. The mode was 4.7 and the Standard Deviation was 1.4. By the springtime, the scores for the seventh grade Title I students had a median score of 6.1 and a mean of 6.3. The modes were 3.9, 4.7, 5.6, 7.3, and 7.6. The Standard Deviation was 1.8. Twenty-nine percent of the seventh grade Title I students scored on grade level in 1995-96.

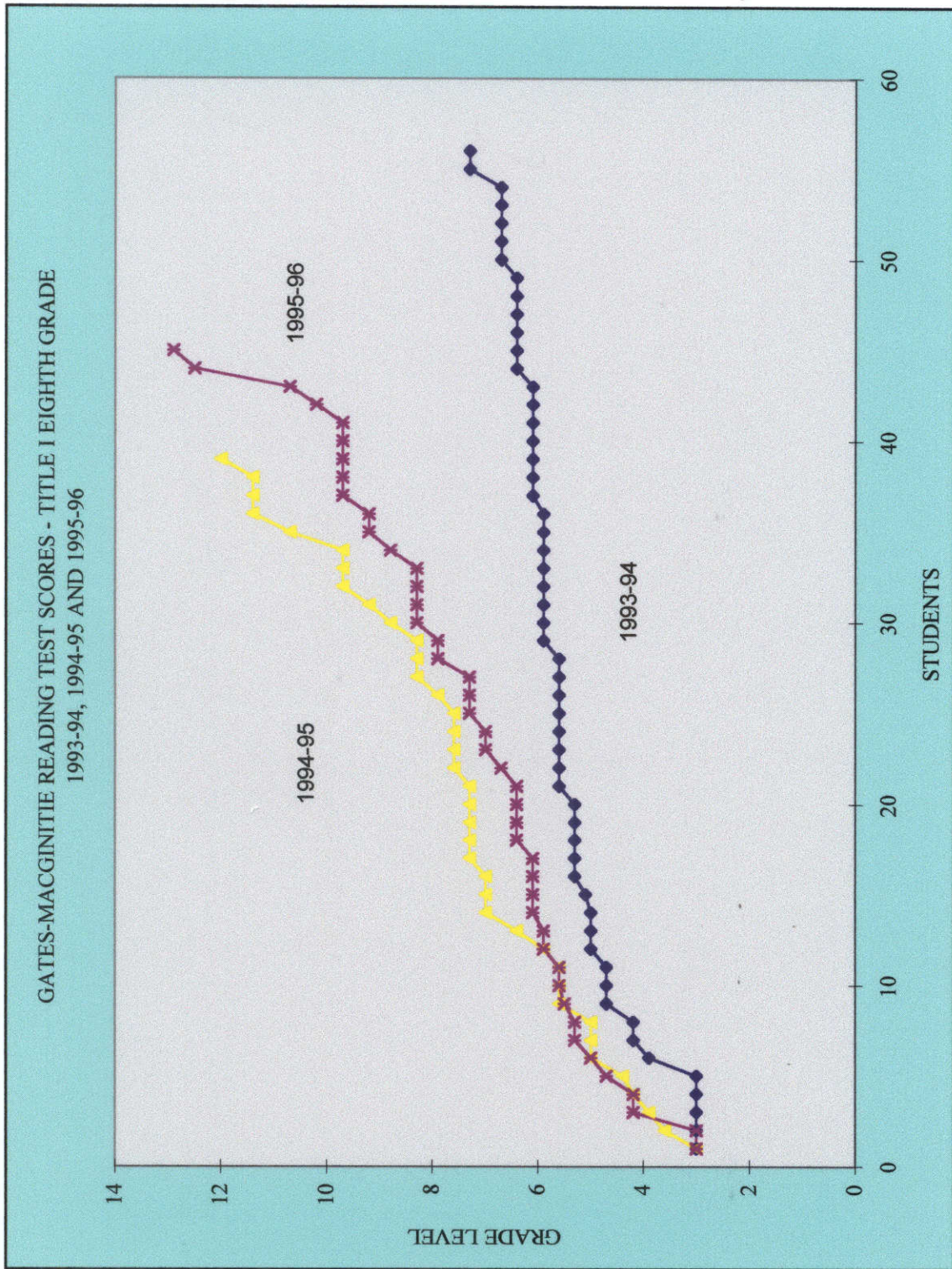


Figure 12. Gates-MacGinitie Reading Test Scores - Title I Eighth Grade 1993-94, 1994-95 And 1995-96

Figure 12 displays the Gates-MacGinitie Reading Test results for the Title I eighth grade students during the 1993-94, 1994-95 and 1995-96 school years. None of the eighth grade Title I reading students scored on grade level on the Gates-MacGinitie Reading Test at the end of the 1993-1994 school year. The average grade point level was at 5.5. The median was 5.9 and its bimodal scores were 5.6 and 5.9. The Standard Deviation equaled .873 . By the end of 1994-1995, 26% of Title I eighth grade reading students were on grade level. Sixty-nine percent of these students had increased their reading grade level score more than one year. The mean, median and mode were also 7.3. The Standard Deviation equaled 2.27 .

The Gates-MacGinitie Reading Test was given to eighth grade students in the fall and spring of 1995-1996. In the fall , the scores of the Title I students had a median of 5.5 and a mean of 5.6. The scores were bimodal ; 4.4, and 5.6. The Standard Deviation was 1.79. In the springtime, the scores improved greatly. The median was 7.0 and the mean was 7.3. The mode was 9.77 and the Standard Deviation was 2.21. Forty percent of the eighth grade Title I students scored on grade level on the Gates-MacGinitie Reading Test at the end of the 1995-96 school year.

Improving America's Schools Act

Under Federal Title Programs, Public Law 103-382 is the "Improving America's Schools Act of 1994." Title I, Part A is a part of that act. Title I, Part A , Improving Basic Programs Operated by Districts, explains how this funding source focuses on two program designs, the schoolwide and the targeted assistance program. The goal of both

programs is to improve teaching and learning and to enable participants to meet the challenging state performance standards that all children are expected to master. In this section this researcher describes the difference between the schoolwide and the targeted assistance programs. To analyze how closely the north Texas middle school inclusion program met the requirements of the Improving America's Schools Act, in the following section this researcher listed each of the requirements of the Improving America's Schools Act and then explained how closely the north Texas middle school Title I inclusion program met these requirements.

Schoolwide And Targeted Assistance Programs

There was no program for Title I students at the north Texas middle school studied during the year prior to the three years studied. For the three years of the Title I inclusion program studied, the north Texas middle school qualified to be a targeted assistance school. A targeted assistance school, primarily addressed in section 1115 of Title I, Part A, is one that receives Part A funds yet is ineligible or has chosen not to operate a Title I schoolwide program. The term "targeted assistance" signifies that the services are provided to a select group of children--those identified as failing, or most at risk of failing, to meet the State's challenging content and student performance standards--rather than for overall school improvement, as in schoolwide programs.

Like schoolwide programs schools, the goal of a targeted assistance school is to improve teaching and learning to enable Part A participants to meet challenging State performance standards that all children are expected to master. To accomplish this goal,

the targeted assistance program must be based on effective means for improving achievement of participating children; use effective instructional strategies that give primary consideration to extended-time strategies, provide accelerated, high-quality curricula and minimize removing children from the regular classroom during regular school hours; coordinate with and support the regular education program; provide instruction by highly-qualified and trained professional staff; and implement strategies to increase parental involvement.

A targeted assistance school differs from a schoolwide program school in several significant respects:

1. Part A funds may be used in targeted assistance schools only for programs that provide services to eligible children identified as having the greatest need for special assistance. The Title I Inclusion Program in the north Texas middle school identified students who had failed the Texas Assessment of Academic Skills tests in math or reading during the prior springtime to qualify for the program. Students who were more than one year below grade level when tested with the Shaw-Hiehle Math Test or the Gates-MacGinitie Reading Test , or who were failing on their report card grades could qualify for the program if the number of students in the program was not too high. During the years studied, all students who failed the Texas Assessment of Academic Skills test were serviced by the program but no others.
2. Part A funds must be used for services that supplement, and do not supplant, the services that would be provided, in absence of the Part A funds, from non-Federal

sources. All Title I students were given the same benefits as all the other students in the middle school. The funds for Title I students were used to buy school supplies, incentives, snacks, software, novels, games and activities above and beyond the regular program.

3. Records must be maintained that Document that Part A funds are spent on activities and services for only Part A participating students. Each year of the program the Title I Learning Facilitators along with the principal attended district meetings which informed and instructed them on the requirements of the targeted assistance school program. The Learning Facilitators consulted with the principal about the needs of the program. Expenses were documented in a notebook and turned in to the principal of the north Texas middle school. Attendance records were kept at all meetings. At the end of the year, records were completed and submitted to the At-risk Coordinator for the district by the principal.

In the new Title I program, since the Improving America's Schools Act was passed, schools play the key role in selecting children to participate in Part A programs. No longer is there a requirement for a districtwide needs assessment in which children are selected on the basis of uniform criteria across the Local Education Agency as a whole. Rather, a Local Education Agency establishes multiple, educationally related, objective criteria to determine which children are eligible to participate in Part A. Each targeted assistance school may supplement these criteria and selects, from among its eligible children, those who are in greatest need for Part A assistance.

Requirements of the Targeted Assistance Program

Improving America's Schools Act has stated the goal of Title I is to enable participating children to achieve mastery of challenging State content and performance standards. To meet this goal, section 1115(c) requires that each targeted assistance program include certain components that research suggests are essential to any high-functioning program. Under section 1115(c), a targeted assistance program includes the following components. It must--

1. Use Part A resources to help participating children meet the State's student performance standards expected for all children. The Title I inclusion program in the north Texas middle school studied included two teachers, Learning Facilitators, who worked with the classroom teachers and at-risk students. The Title I inclusion program also had a Title I nurse who worked with at-risk students and taught them about wellness. She worked with their families and helped get them family services which were provided by the district and the community.

In order to do this, programs must:

2. Be based on effective means for improving achievement of children. Title I students were taught "how" to learn. They were taught to use the Reading Process Steps, Problem Solving Steps and Math Steps To Solve Problems. There was one common School Vocabulary of Curriculum Terms. Technology was taught across the curriculum; hypercard in science, spreadsheets in math, database in social studies and word processing in language arts. Technology Projects were developed by core

curriculum teams which would allow students opportunities to integrate curriculum from a number of the subjects and test a variety of technological skills. The Projects related to real life situations and allowed students to demonstrate Authentic Learning. Cooperative learning, peer tutoring and inclusion were a part of every classroom. The classes were student-centered and the students demonstrated increased independence through the use of graphic organizers, process steps, pneumonics and a better understanding of fundamental skills. The curriculum was accelerated and emphasized higher order thinking skills, pride in work and communication of knowledge.

3. Ensure that planning for participating students is incorporated into existing school planning. Success of at-risk students was addressed in the Campus Improvement Plan. There was a campus goal to have at-risk students pass the Texas Assessment of Academic Skills tests. The Title I Learning Facilitators planned with all of the staff to assist at-risk students while acquiring the skills needed to achieve mastery of these tests. The Quality Improvement Council planned *how* “all kids could succeed” in the middle school and listed Title I students as a special focus in the school’s Instructional Plan.

4. Use effective instructional strategies that--

A. Give primary consideration to providing extended learning time such as an extended school year, before- and after-school, and summer programs and opportunities. The Learning Facilitators and the Title I nurse worked with Title I students before and after school. Many nights, the facilitators would work on homework with students on the

telephone. Every Tuesday before regular classes would begin, there were "TAAS Tuesdays" tutorials. During the zero period Title I students would meet with the Learning Facilitators and practice TAAS strategies. The classes were student centered and interactive with very little paper and pencil activities.

- B. Help provide an accelerated, high-quality curriculum. Title I students learned in the regular classroom along with the rest of the class. High standards set by the State and the district guided what was taught. When gaps in the learning were revealed, the learning was accelerated to keep up with the curriculum. The facilitators planned with the teachers so that the teacher could decide which curriculum objectives were to be taught and which terms would be used while presenting the lesson. The Learning Facilitators prepared remedial as well as enriching activities which correlated with the classroom learning activities.
- C. Minimize removing children from the regular classroom during the regular school hours for Part A instruction. The Learning Facilitators worked with Title I students in their regular math classes or in their science or social studies class. Students were not "pulled-out" at all.

5. Coordinate with the support of the regular education program, which may include--

- A. Counseling, mentoring, and other pupil services. Title I Learning Facilitators worked closely with the counselors to obtain TAAS scores and to conference on the progress of Title I students. The counselors provided Title I Learning Facilitators with lists of students who were failing at the end of each three weeks at the time of progress reports and the end of each six weeks at the time of report cards. The counselors acted as agents who encouraged Title I students to attend before- and after-school tutorials with the Learning Facilitators. The police and recreation center worked closely with the school as well as business partnerships. They were actively involved in the school and provided assemblies, special guest speakers, and mentors. Former middle school students were sent from the high school to be "buddies" to students and meet them for lunch. The district's Central Administration curriculum directors visited the Title I program and provided materials and suggestions on how their area of the curriculum could be most effectively presented. The Title I nurse interviewed students and their parents. She gave them advice on wellness and connected them with health and welfare services which were available in the school district and the community.

- B. College and career awareness and preparation. Leadership groups, sports, and business partnerships encouraged career awareness.

The Title I students along with the other students experienced a Career Day once a year when a diverse group of speakers would come to speak to students. Each year the middle school provided a scholarship to one of its former students who was ready to graduate from high school.

- C. Services to prepare students for the transition from school to work.

The Title I students took part in school programs which included Life Skills Management and a new technologically advanced Shop Class on building and design. Title I students were given daily experiences with technology which were a part of every class.

Working on Portfolio Projects which demonstrated use of word processing, spreadsheets, database and hypercard helped Title I students in the north Texas middle school to prepare to make a smooth transition from school to work.

- D. Services to assist preschool children's transition to elementary school. This did not apply to the middle school campus.

6. Provide instruction by highly qualified staff. The Title I Learning Facilitators were teachers who had been trained to teach middle school. They had prior experience working in Title I programs. The Title I nurse was a registered nurse. They joined with a

qualified staff to teach the at-risk students in the north Texas middle school. The entire staff at this middle school participated in three middle school initiatives: quality standards, collegial coaching and technology integrated across the curriculum. Many of the teachers on the staff had additional certifications beyond those needed to teach the content area to which they were assigned.

7. Provide professional development opportunities with Part A resources and other resources, to extent feasible, for administrators, teachers and other school staff who work with participating children. At the north Texas middle school the professional development was usually presented by members of the faculty. The Title I Learning Facilitators presented a session on *Effective Strategies Used With At-risk Students*. The head of the language arts department at the north Texas middle school presented a training for all teachers and Title I facilitators on the writing and reading process. The teachers in all the content areas throughout the school taught the reading and writing process as a part of their curriculum. Teachers ran a staff development program on Curriculum Mapping so that the campus could coordinate learning objectives which appeared in several content areas. “Ways to Improve Student Thinking” was presented in another session. The technology training was presented on staff development days to the whole faculty by the computer technology teachers.

District curriculum coordinators discussed “Successful Strategies for Teaching Content” in their content areas. The math department received new calculators during the three years of the Title I Inclusion program. Special training on the use of these

calculators were given by Texas Instruments, the company who made the calculators and also by the Coordinator for the Math Department for the district. Speakers were brought in from the district level to speak to the faculty about Cultural Sensitivity and The Role of the Teacher and the Parent during successful conferences.

The Learning Facilitators attended district training classes which included: District Math Training, Facilitator Skills, Gifted and Talented Training and Knowledge Framework. There was professional development training presented on Authentic Learning which the Learning Facilitators and staff members attended.

The principal, Title I facilitators and teachers from each of the content areas went to the Partnership Schools Initiative Conference: A Journey Toward Excellence and Equity in San Antonio. The Title I Learning Facilitators presented a session on the Title I Inclusion Program. Everyone attended sessions which would improve their understanding of the at-risk students and how they learn. There were many sessions on successful writing, reading and math programs. Many described problem based, interactive classrooms with portfolio projects. The at-risk students were included in the regular classrooms.

The Title I Learning Facilitator in math and the math department head attended a professional development session in the summer which was offered by GTE. They presented a program, GTE PROJECT PASS, which used football to teach TAAS skills in math with the use of technology. The program was used in the math classes in the north Texas middle school.

8. Provide strategies to increase parental involvement, such as family literacy services. The Learning Facilitators made frequent phone calls to the parents of students. If the parent did not speak English, a younger sibling was called to the phone to interpret the conversation. Parents were cooperative about sending students to school early for tutorials. The Title I nurse made visits to the homes of almost all of the Title I students. She provided wellness instruction and information about services which were available through the Family Clinic which was located in the middle school and other community services.

The Title I Learning Facilitators and the Title I nurse planned for three or four Parent Night meetings each year. Phone calls were made by the facilitators to the parents informing them of the meetings. Flyers were sent home on neon green paper. Information was presented in English and Spanish. The Parent Night meetings focused on teaching them about student study skills and homework, organization, wellness, and TAAS skills. It showed them what their children should be doing to be successful at school. The reading, writing, and problem solving process steps were explained. Information was given at the meeting about district opportunities for literacy training, family counseling, and use of the district resource center. During the Parent Night meetings baby-sitting and snacks were provided. Books were given to families who attended.

The north Texas middle school kept parents informed of school events through the school newspaper which was sent home in English and Spanish. It included articles about the Title I program. Twice a year there were Parent Conference Days. The Title I

Learning Facilitators joined the rest of the faculty to share the progress of their students with their parents. The students attended the conferences with their parents. Interpreters were available if needed for a conference.

Parents were invited to be part of Title I committees at school and at the district level. They shared in making decisions. When they expressed concerns, changes were made to accommodate their wishes. A speaker was brought to school to meet with parents to discuss the Role of the Teacher and the Parent at a Conference. She spoke in Spanish and English. After the meeting she shared the concerns of parents with the teachers and administration. The teachers realized the importance of giving parents time to speak about their children. Teachers became better listeners.

Parents were very supportive of the program. They wanted their children to do well in school and encouraged the Title I facilitators to work with them in any way possible to ensure that success. They asked teachers to send home folders which showed assignments on a calendar for the month. They wanted to know what kind of homework assignments would be required. Many of the parents were not available to come to school to take part in school programs during the day. However, when there was a Technology Night they joined their children in the computer lab. Title I students were the teachers that night and their parents were the students.

Parents joined teachers and students at the ball park for the annual Red Ribbon Softball Tournament each year in October. It was organized by the police department for the middle school. Many parents and teachers coached teams together. This tournament

provided an opportunity for students who struggled in the classroom to really shine on the field. The tournament would start by seven-thirty in the morning and last until seven o'clock at night. It was a total family outing. All the students were given free T-shirts and lunches.

9. One of the most significant changes in the Title I program after the passing of the Improving America's Schools Act is that it brings Part A program decisions to the school level. Schools, in consultation with their districts, determine the uses of funds that best meet the needs of their students. The new Title I Part A distributes funds to schools based on the number of children from low-income families in the school or school attendance area. The school then selects the children to serve, based on those who are most in need of service in the school and on the amount of funds available.

Each year the district assigned the amount of funding to each school that qualified for Title I programs. It set the amounts for Total Allocation, Parent Involvement, Professional Payroll, Professional/Contracted Services, Supplies, Other Operating Costs, and Capital Outlay. Typical items that were required to operate the program on a daily basis were covered under Supplies. These items included: instructional supplies and materials, office supplies and materials, supplies and materials for training/staff development, printing supplies, testing materials, media materials, computer software, instructional equipment and furniture having an acquisition of less than five thousand dollars, awards/incentives for participation, gasoline and costs associated with operating an advisory council or committee.

Food Costs were included if they were for snacks and/or refreshments which were necessary to accomplish the objectives of the program, were of reasonable cost and were an integral part of the instructional process. Examples of allowable expenditures might include snacks for child care, extended day programs and for parent involvement activities to encourage participation/attendance.

Certificates, plaques, ribbons, small trophies, or inexpensive instructionally related items to be used in the classroom such as pen/pencils were acceptable awards for participation in program activities. Under the category of Capital Outlay-Furniture and Equipment, "Equipment" means an article of non-expendable, tangible personal property having a useful life of more than two years and a cost of more than five hundred dollars.

Eligible items under Professional and Contracted Services included: utilities, contracted printing services, data processing services that do not require the purchase of equipment, media services, contracted maintenance and repair services, rental and lease of building space, equipment rental or lease, professional or consultant services, telephone and telecommunication services, contracted transportation services, tuition, and audit service for the annual audit. Other Operating Costs were the typical items that were required to operate the program on a daily basis. They may include: insurance required, travel expenses for project staff or project participant, conference registration fees, transportation, newspaper advertisements, stipends for non-employees, and travel costs for members of an advisory council or committee pursuant to federal requirements.

Field trips were allowed if they are directly related to a teacher's lesson as a part of classroom instruction, and if they were necessary to meet the objectives of the program. Entertainment or recreational field trips were not allowable under any circumstances.

Funds may be transferred between major objects of expenditures without an amendment if the cumulative total transferred does not exceed ten percent of the total approval budget for each fund source and funds are budgeted in the class/object codes involved.

10. One percent of the funds which the district/schools are allocated must be used to improve parent involvement. During the initial year of funding the middle schools who qualified for Title I Part A agreed with the district to set aside five hundred dollars for parent workshop funding: Two hundred-seventy-five dollars would be for supplies, one hundred-fifty for stipends, and seventy-five dollars for child care. The stipends could be spent on a district employee, the child care money was to be spent on a non-district employee. The district Family Center had a speaker who came to the north Texas middle school to speak to parents about "Student-Parent Conflict" and "How to Handle Homework at Home." The Family Center knew of some teenage girls who spoke both English and Spanish who could be hired to baby-sit the young children who accompanied parents who attended Parent Night meetings.

The north Texas middle school has a new principal and secretary since the time of the study. They have no records of how the money was spent each year. We know that each year the district assigned the amount of funding to each school that qualified for Title

I funds. It set the amounts for total allocation, parent allocation, professional payroll, professional/contracted services, supplies, other operating costs and capital outlay. Some Title I records were collected at the district office. The north Texas middle school received \$84,979.59 for the 1993-1994 school year, \$78,032.82 during 1994-1995, and \$63,246.03 in 1995-1996 in Title I funds. A record shows that only \$52,852 was allotted for teacher salaries in 1995-1996, enough for one-and-one-half facilitators but not two facilitators. This was a drop of ten percent from the amount of program funding for the first year of the north Texas Title I inclusion program. The record of the total allocation for the Chapter I 1993-1994 budget showed that there was \$58,778 for facilitators that year plus an additional \$18,687 for the Title I nurse. (Appendix F - Title I Program Budget Records).

In the middle of the second year of the program one of the Learning Facilitators moved. Since the Professional Payroll allocation had dropped from the first year, the principal took that opportunity to cut costs by splitting a teacher who was the head of the language arts department to be a half-time Title I Learning Facilitator. After the first year of the program the school was not allowed to hire a full-time Title I nurse if there was one nurse already assigned to the middle school. The program shared a nurse half of the time during the second year. Only the school nurse serviced the program during the third year.

The teachers in the north Texas middle school presented most of their professional development themselves, thus the principal could pay them stipends and keep costs lower

under Professional/Contracted Services. The principal decided how the funds were spent. A new computer was purchased for the Learning Facilitators during the first year of the program. The Title I Learning Facilitators did not have a classroom after the first year. They did not need one since they always worked in the regular classrooms. Two desks, a filing cabinet, and a bookshelf was purchased for their office. Additional calculators were purchased for the students to use.

Since the Title I students remained in the regular classrooms at the north Texas middle school, they worked with all the teachers of the school. Therefore, it was important for the entire faculty to be trained to work well with at-risk students. Teachers took part in professional development and attended conferences to get new ideas on how they could improve their teaching strategies. They examined the Academic Excellence Indicator System results and sought training in the areas which needed improvement . In addition to meeting the other requirements of the Improving America's Schools Act, the teachers increased the success level of their students through skills students learned through authentic learning activities, portfolio projects and real life problem solving. Technology was integrated throughout the content areas. Peer tutoring and cooperative learning were a part of daily classroom routine. The curriculum was accelerated and challenging for the at-risk students in the north Texas middle school. Even students who did not pass the Texas Assessment of Academic Skills test were successful in learning "how" to learn.

CHAPTER V

SUMMARY, FINDINGS, CONCLUSIONS, AND RECOMMENDATIONS

Summary

A state mandate for the implementation of a plan for Title I students at every school receiving Title I Part A funds prompted this study. The Improving America's Schools Act of 1994 was based on the belief that all children can learn at higher levels and that all children, including those in high poverty schools, should be well educated. This act lowered the poverty threshold level for eligibility for schoolwide programs. The legislation actively promotes the use of funds for high quality professional development and begins to provide more resources to high poverty school districts. The passing of the Improving America's Schools Act in 1994 changed the way funds are allocated within school districts. In some districts, Title I funds were shifted to some middle schools and high schools for the first time. Prior to this, funds had been distributed through Chapter I to elementary schools.

The Improving America's Schools Act requires that each state submit a plan to the Secretary of Education demonstrating that it has developed or adopted challenging content to meet the performance standards and high quality assessments. The plan must

also show that the state's assessments are aligned with its content and performance standards. The school district is required to submit a plan describing the strategies it will use to assist Title I students in meeting the state's standards. This study was designed to record an in-depth look at how one north Texas middle school met the needs of Title I students in an inclusion program.

There were three purposes for this study. First, it described the characteristics of an inclusion program in a north Texas middle school that was set up to meet the requirements of a Chapter I program that was established by the federal government under the Elementary and Secondary Education Act of 1965. Next, it provided assessment data to compare achievement scores of students during the three years of the program with the year prior to the program. The third purpose of the program was to analyze how closely the north Texas middle school Title I inclusion program met the requirements of the Improving America's Schools Act of 1994.

The Texas Assessment of Academic Skills changed its testing schedule from seventh grade to seventh and eighth grades and from fall to springtime during the time of the study. Therefore, it was not always possible to compare growth on a yearly basis. Scores were obtained for each of the years studied. Test data were presented from three perspectives. First, data were presented on the population of the middle school grade levels since the Learning Facilitators taught along with the teachers in the regular classrooms and affected all the children in these classes, not just the Title I students. Next, data were presented to show the progress of Title I students on the Texas Assessment of

Academic Skills tests in math and reading, and Title I students' progress on the Shaw-Hiehle Math Test and the Gates-MacGinitie Reading Tests. The Title I students' progress on the Shaw-Hiehle Math Test and the Gates-MacGinitie Reading Tests were not available for the year preceding the program. The results of these test were viewed as a comparison of student progress on the skills assessed.

One unique quality of the north Texas middle school Title I program that was studied is that it was an inclusion program. The Title I Learning Facilitators worked with the teachers in the regular classrooms. As a result, the Title I inclusion program had a direct impact on the success of the middle school as a whole.

Findings

The focus of this study was to describe the implementation of an inclusion program in a north Texas middle school that was set up to meet the requirements of a Chapter I program established by the federal government under the Elementary and Secondary Education Act of 1965. Also, the data on the Texas Assessment of Academic Skills tests in reading and math were collected and examined to determine what differences exist between the year prior to the program (1992-1993) and the data from the three years of the program (1993-1994 through 1995-1996). Finally, data were collected and examined to determine how closely the Title I inclusion program in a north Texas middle school met the requirements of the Improving America's Schools Act of 1994.

Implementation of the Inclusion Program

In this study the researcher described the implementation of an inclusion program in a north Texas middle school. The researcher found the north Texas middle school was eligible for Chapter I funds and those funds were directed toward improving the achievement level of Title I students. Federal and state guidelines specify which schools are eligible for Title I funds under the Elementary and Secondary Education Act of 1965. The guidelines also specify that the students who should receive Chapter I services are the students who are designated low achievers on the basis of achievement tests or their teachers' judgment. But they do not specify how schools should serve those children. The Texas Assessment of Academic Skills in reading and math test results were used to determine which students qualified for services in the north Texas middle school Title I inclusion program. All students who failed the Texas Assessment of Academic Skills in reading or math during the prior springtime were served by the Title I inclusion program in the north Texas middle school from 1993-1994 through 1995-1996. Compensatory funds provided by the federal government for the Title I inclusion program were used to pay for educational supplies for the Title I students in the program, for the two Title I Learning Facilitators and the Title I nurse who worked directly with Title I students to improve their learning skills as well as Texas Assessment of Academic Skills test skills. These characteristics of the Title I program fulfilled the legal requirements of a Chapter I program established by the federal government under the Elementary and Secondary Education Act of 1965.

Differences in Texas Assessment of Academic Skills Test Scores Before and After the Title I Program

Several findings emerged as a result of the study of the second question: What differences exist in the Texas Assessment of Academic Skills in reading and math test scores of the students of the north Texas middle school studied during the three years of the Title I program from the year preceding the program? During this study, the researcher found that the Title I program at the north Texas middle school was successful in increasing the number of students who passed the Texas Assessment of Academic Skills tests in reading and math. The Texas Assessment of Academic Skills test results were reported for all middle school students and for the Title I students only. This researcher compared the TAAS test scores of the Title I students in the program during the 1994-95 school year with their scores on the TAAS test one year before. The Shaw-Hiehle Math Test and the Gates-MacGinitie Reading Test results were reported during the years of the program.

All Students - TAAS Reading

In the 1992-93 school year, 64% of all the seventh grade students passed the TAAS test in reading. In the 1993-94 school year, 89% of all the seventh grade students passed the TAAS test in reading. The seventh grade students were not a part of the formal Title I program during the 1992-93 and 1993-94 school years. Their scores showed a significant gain in the 1993-94 school year. The Title I program started that year at the middle school. In the 1994-95 school year, 90% of all the seventh grade students passed

the TAAS test in reading. In the 1995-96 school year, 89% of all the seventh grade students passed the TAAS test in reading.

In the 1992-93 school year, the year before the formal Title I program started at the middle school, 71% of all the eighth grade students passed the TAAS test in reading. In the 1993-94 school year, 86% of all the eighth grade students passed the TAAS test in reading. The scores remained at that level for the following two years. In the 1994-95 school year, 86% of all the eighth grade middle school students passed the TAAS test in reading. In the 1995-96 school year, 85% of all the eighth grade students at the middle school passed the TAAS test in reading.

All Students - TAAS Math

In math, 68% of all seventh grade students passed the TAAS test in the 1992-93 school year. In the 1993-94 school year, 84% of all the seventh grade students passed the TAAS test in math. In the 1994-95 school year, 81% of all the seventh grade students passed the TAAS test in math. This score dropped two points in the 1995-96 school year, 79% of all seventh grade students passed the TAAS test in reading.

Fifty percent of all the eighth grade students passed the TAAS test in math in the 1992-93 school year. The Title I inclusion program started at the north Texas middle school the following year. In the 1993-94 school year, 83% of all the eighth grade students passed the TAAS test in math. The percentage dropped to 79% in 1994-95. In the 1995-96 school year, 82% of all eighth grade students passed the TAAS test in math.

Title I Students Only - TAAS Reading

In the 1993-94 school year, seventh grade students were not included in the formal Title I program. The researcher recorded the scores of the students who would have qualified for Title I program that year had the program been offered. In the 1993-94 school year, 68% of the students who would have qualified for the Title I program passed the TAAS test in reading. Seventh grade students were included in the Title I program during the 1994-95 and 1995-96 school years. In both the 1994-95 and 1995-96 school years, 77% of the seventh grade students in the Title I inclusion program passed the TAAS test in reading.

In the 1992-93 school year, the year before the formal program was started, 49% of the eighth grade students who would have qualified to be in the Title I program, passed the TAAS test in reading. During the first year of the program, 1993-94, 78% of the Title I students in the eighth grade passed the TAAS test in reading. The percentage of eighth grade students passing the TAAS test in reading dropped in the 1994-95 school year when 62% passed and in the 1995-96 school year when 52% passed.

Title I Students Only - TAAS Math

In the 1993-94 school year, 62% of the seventh grade students who would have qualified to be in the Title I program, passed the TAAS test in math. The seventh grade students were included in the Title I inclusion program the next year. In the 1994-95 school year, 57% of the seventh grade students in the Title I program passed the TAAS test in math. The following year, 1995-96, the percentage of students passing the TAAS

test in math continued to drop to 53% of the seventh grade students in the Title I program.

There was no formal Title I program during the 1992-93 school year. In the 1992-93 school year, 14% of the eighth grade students who would have qualified for the Title I program passed the TAAS test in math. The formal Title I program started in 1993-94. Seventy percent of the eighth grade students in the Title I program passed the TAAS test in math that year. The percentage of Title I students in the eighth grade passing the TAAS test in math dropped the next year, 1994-95, to 43%. The percentage gained to 56% the following year, 1995-96.

The percentage of Title I students passing the TAAS test in math and reading was lower than the percentage of all the middle school students passing the TAAS test in math and reading during the years of this study.

Title I Students - Year Before and Year After

To gain a greater insight, the researcher compared the TAAS test scores of Title I students in the 1994-95 school year with the TAAS test scores of the same students one year before.

In the 1994-95 school year, 73% of the Title I seventh grade students passed the TAAS test in reading. The same students took the TAAS test in reading one year prior, before they were in the Title I program. When they were in the sixth grade, in 1993-94, 56% passed the TAAS test in reading. The eighth grade students in the Title I program took the TAAS test in reading in 1994-95 and 50% passed. The same students took the

TAAS test in reading the year before when they were in seventh grade and 46% had passed.

The seventh grade students in the Title I program took the TAAS test in math in 1994-95 and 52% passed. The same group of students had taken the TAAS test in math at the end of sixth grade when 21% passed. The eighth grade students in the Title I program took the TAAS test in reading in 1994-95 and 34% passed. The same group had taken the TAAS test in math one year before and that year 23% passed. More students were passing the TAAS test after one year of the Title I program than before the program.

Shaw-Hiehle Math Test

In the 1993-94 school year, the seventh grade students were not a part of the Title I program. Two percent of the seventh grade students who would have qualified for the Title I program had scores on grade level on the Shaw-Hiehle Math Test. In the 1994-95 school year, after one year of the program, 46% of the seventh grade students in the Title I program had scores on grade level when given the Shaw-Hiehle Math Test, and in the 1995-96 school year, 65% had scores on grade level.

None of the eighth grade students in the Title I program had scores on grade level when given the Shaw-Hiehle Math Test in 1993-94, the first year of the program. In the 1994-95 school year, 52% of the eighth grade students in the Title I program had scores on grade level when given the Shaw-Hiehle Math Test. In 1995-96, 65% of the eighth grade students in the Title I program had scores on grade level.

Gates-MacGinitie Reading Test

In 1993-94, none of the seventh grade students who would have qualified for the Title I program had a score on grade level when given the Gates-MacGinitie Reading Test. In 1994-95, after one year in the Title I program, 19% of the seventh grade students in the Title I program had scores on grade level when given the Gates-MacGinitie Reading Test. The following year, 1995-96, 29% had scores on grade level.

When the eighth grade students in the Title I inclusion program were given the Gates-MacGinitie Reading Test in 1993-94, none of them had scores on grade level. In 1994-95, 26% of the eighth grade students in the Title I program had scores on grade level. and in 1995-96 , 40% of the eighth grade students in the Title I program had scores on grade level when given the Gates-MacGinitie Reading Test.

More Title I students in the middle school had scores on grade level on the Shaw-Hiehle Math Test than on the Gates-MacGinitie Reading Test during the years of the study.

Requirements of the Improving America's Schools Act

The third research question asked in what ways the north Texas Title I inclusion program met the requirements of the Improving America's Schools Act of 1994. Step by step through each of the requirements, the north Texas Title I inclusion program did give evidence of meeting the requirements of this act.

The program qualified with enough low income students to have a targeted assistance program each year. The funds were used to supplement the Title I students' academic program.

Title I, Part A resources were used to help participating children meet the State's student performance standards. The north Texas Title I inclusion program included two Title I Learning Facilitators, who worked with the classroom teachers and at-risk students for the first year of the program. During the fall of the second year of the program funds decreased and the program had one full-time Learning Facilitator and one half-time Learning Facilitator. The Title I inclusion program had one Title I nurse who worked with at-risk students and taught them about wellness. She worked with families and helped them get family services which were provided by the district and the community. The Title I nurse was cut from full-time in the first year of the program to half-time during the second year of the program and was eliminated in the third year of the program as the amount of Title I funds decreased.

The program was based on effective means of improving achievement of children. Title I students were taught "how" to learn. They were taught to use Reading Process Steps, Problem Solving Steps and Math Steps To Solve Problems. Technology was used across the curriculum. Students used word processing, hypercard, spreadsheets and database. Cooperative learning, peer tutoring and inclusion were a part of every classroom. The classes were student-centered and students demonstrated increased independence through the use of graphic organizers, process steps, pneumonics and a

better understanding of the fundamentals. The curriculum was accelerated and emphasized higher order thinking skills, pride in work and communication of knowledge.

The entire faculty of the north Texas middle school planned for the improvement of Title I students by including them in Campus Improvement Plan goals. The Quality Improvement Council planned how “all kids can succeed” in the middle school and listed Title I students as a special focus in the school’s Instructional Plan.

The learning time was extended before and after school, where the Learning Facilitators held Texas Assessment of Academic Skills tutoring and gave individual attention to students. Frequently calls were made at night so that the Learning Facilitators could help students do their homework.

Title I students learned in the regular classroom along with the rest of the class. High standards set by the State and the district guided what was taught. When gaps in the learning were revealed, the learning was accelerated to keep up with the curriculum. The Title I students were not “pulled-out.” The program was impacted by the efforts of counselors, business partnerships and visits by District Administrators. Leadership groups, sports and business partnerships encouraged career awareness.

The staff was highly qualified with experience and training in dealing with middle-school-age students as well as their content areas. Professional development was planned to improve teacher lesson plans, make curriculum connections and improve student thinking, achievement and technology skills. The professional development was taught by

the teachers in the middle school most of the time. The principal allowed teachers and Learning Facilitators to attend training in and outside the district.

One percent of the Title I, Part A funds was spent on meaningful parent involvement. The Parent Night meetings were well advertised and had a good turnout. These meetings were used to encourage parent literacy and help parents understand their children and how they can promote their childrens' success at school and at home on their schoolwork. A record of attendance was submitted to the district At-risk Coordinator at the end of the year.

In summary, did the north Texas middle school Title I inclusion program meet the requirements of a Title I program established by the federal government? It succeeded in doing this by providing additional assistance to the Title I students on a daily basis and directing the benefits of compensatory funds toward improving the instruction of these at-risk students. It established an inclusion program for students who were at risk of falling short of mastery of the State's content and performance standards. The Title I, Part A funds were used for the students in need of the most help to master all the objectives of the Texas Assessment of Academic Skills test. All of the Title I students included in the north Texas middle school program had failed the Texas Assessment of Academic Skills in reading or math the year before they qualified for the Title I program. The scores of the north Texas middle school improved significantly from the year preceding the program, even though the scores of Title I students showed a less significant gain.

Conclusions and Implications

The findings of this study of the north Texas middle school Title I inclusion program support the fact that this program did meet the requirements of a Chapter I program established by the federal government under the Elementary and Secondary Education Act of 1965. There was a significant improvement in the Texas Assessment of Academic Skills scores in reading and math for the north Texas middle school during the years of the program over the year preceding the program. The findings of this study indicate that the north Texas middle school Title I inclusion program did meet most of the requirements of the Improving America's Schools Act of 1994. Proper records of the finances for the program each year were not available.

The north Texas middle school Title I inclusion program was initiated to serve students who were at risk of not mastering the State's content and performance standards. This program identified students who failed the Texas Assessment of Academic Skills tests in reading and math. The program was successful in improving the Texas Assessment of Academic Skills in reading and math test scores for the north Texas middle school. The north Texas Title I inclusion program was successful in increasing the number of Title I students who passed the Texas Assessment of Academic Skills tests in reading and math. The percentage of Title I students passing the Texas Assessment of Academic Skills Tests in math and reading was lower than the percentage of all middle school students passing the Texas Assessment of Academic Skills Tests in math and reading.

The year before the Title I inclusion program was started at the middle school, 1992-93, the Texas Assessment of Academic Skills Tests scores were lower than they were during the years of the Title I inclusion program at the middle school. In the 1992-93 school year, 50% of the eighth grade students in the middle school passed the Texas Assessment of Academic Skills Test in math. The teachers at the middle school were under a lot of pressure to raise these math scores the following year.

The middle school received money from the federal government under the Elementary and Secondary Education Act of 1965 during the 1993-94 school year. The Title I inclusion program was started at the north Texas middle school with these funds. Two Title I Learning Facilitators and one Title I nurse were hired to work with the Title I students to improve their academic skills and Texas Assessment of Academic Skill Tests scores in math and reading. The Learning Facilitators planned with the teachers of the Title I students. They taught along with the teachers in the math, science and social studies classrooms. The teachers were highly motivated to be effective in their teaching that year. The Title I nurse visited the homes of every Title I student and encouraged a wellness program for the Title I students. When the Title I students or their families needed health or social services in the community, the nurse made them appointments and provided transportation.

The first year of the program was very successful. Over 80% of all the north Texas middle school students passed the Texas Assessment of Academic Skills Tests in math and reading. Even though the Title I program did not include the students in the

seventh grade in 1993-94, their scores showed a favorable gain as their teachers demonstrated practices which were being encouraged in the Title I program.

During the following two years of the program, 1994-95 and 1995-96, the funds given to the north Texas middle school decreased. The program could no longer afford to pay the salaries for two Learning Facilitators and one Title I nurse. In 1994-95, the Title I nurse worked with the Title I program half-time. When one of the Learning Facilitators left in the fall of the 1994-95 school year, the position was filled by a teacher who acted as a Title I Learning Facilitator half of the day and department head of the language arts department for the other half of the day. The following year, 1995-96, the Title I nurse was eliminated completely and there was one-and-a-half Learning Facilitators for the entire year.

With less funds and fewer people, the workload of the Learning Facilitators became more difficult. In addition, the program was expanded during the second year, 1994-95. During the first year, only students from the eighth grade were included in the program. The Learning Facilitators worked with the students from both seventh and eighth grades during following two years of the program, 1994-95 and 1995-96. The percentage of Title I students passing the Texas Assessment of Academic Skills Tests in math and reading dropped in 1994-95. The following year, 1995-96, the TAAS test scores for the Title I students did not improved except at the eighth grade level on the TAAS test in math.

The scores of the Title I students improved each year when they were given the Shaw-Hiehle Math Test and the Gates-MacGinitie Reading Test. The percentage of students scoring at grade level was higher on the Shaw-Hiehle Math Test than on the Gates-MacGinitie Reading Test. The fact that the Title I students were struggling with reading may have affected the scores of these students when they took the Texas Assessment of Academic Skills Tests in math and reading which require some reading skills.

The north Texas middle school Title I inclusion program demonstrated that there is hope for Title I students learning in the classroom with other students. The Title I students were taught a challenging curriculum impacted with higher level thinking skills. They had been unsuccessful in the classroom but were now able to solve problems along with the other students in class.

One of the most important effects of the north Texas Title I inclusion program is that the benefits go beyond the classrooms. The learning continues the next year for both teachers and students and integrates throughout the entire campus. The behavior of both students and teachers were changed. Title I students learned how to get themselves started and the necessary steps to accomplish their learning tasks. All students worked together without distinguishing which were the Title I students.

The benefits of having a Learning Facilitator in the classroom working with the teacher was shared by all. There was a gain on the Texas Assessment of Academic Skills Test scores in math and reading to 80% or more for the middle school. The first year of

the program showed that the practices of the Learning Facilitators and the teachers were effective. The success of the program was lessened by the lack of funds provided in the second and third years of the program.

Recommendations for Practice

These recommendations may be of benefit to other schools involved in the process of implementing a Title I inclusion program:

1. A Title I inclusion program needs Learning Facilitators who are open to working with many teaching and learning styles. The facilitators need to work with the teachers planning lessons and scheduling themselves into the different classrooms as needed. The schedule should be very flexible, allowing teachers to adjust plans according to the needs of the classes. It should be the facilitators' job to monitor student progress and report the final results or the assessment and evaluation of the program.

2. A Title I program should focus on one grade level allowing two Learning Facilitators and the Title I nurse to meet the students' needs. The Title I Learning Facilitators would have fewer teachers to plan with and could get more involved with the content than they could when working with two grade levels.

3. Use schoolwide initiatives to continue the work of the facilitators throughout the building. When the entire school is practicing the same writing process, reading process and problem solving steps the learning is impacted. The students need the tools to "get started." They need to know how to use pneumonics, graphic organizers and process steps.

4. Do not pull-out Title I students, teach them challenging content along with the rest of the students. Include technology skills as a working tool. Use drill and practice to teach them the basics needed to accomplish higher level thinking skills.

5. Encourage teachers to limit their direct teaching time. Make the students the “workers” and the teachers the “facilitators. Use peer tutoring and cooperative learning .

6. Increase parent involvement, both at school and at home. Train them to analyze TAAS data, to know how to help their children with school work and to read with their children at home. Keep parents aware of teacher expectations and assignments. Report student progress regularly. Invite parents to attend workshops with the teachers.

Recommendations for Research

Further research would help substantiate or refute the findings that emerged from this investigation. This additional research would also add to the body of literature on Title I programs at the middle school level.

Specifically, replication of this study keeping track of individual students who took part in the program. Since the study was conducted in a school with such a diverse population, another study should be conducted to replicate this study using two Learning Facilitators and one Title I nurse serving seventh and eighth graders but one of the Learning Facilitators should be bilingual.

Further study of the Title I program might include use of the Academic Excellence Indicator System to track the progress of different groups to see if they are progressing at the same rate as the overall school population.

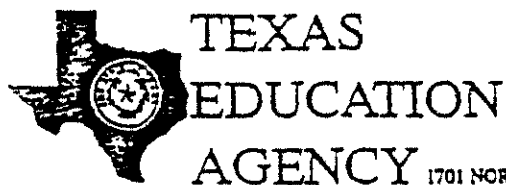
Another meaningful study would be to track only the scores of students who remain in the program for all three years. Students who start in the Title I program but master all Texas Assessment of Academic Skill objectives would be promoted out of the program but the Learning Facilitators would continue to track the progress of their Texas Assessment of Academic Skills test scores in the regular program. The number of students in each grade level served would have to be limited. It would be valuable to do a similar study in the elementary school having the program in grades three, four, and five.

Finally, a study of a Title I inclusion program in a middle school with two Learning Facilitators, and one Title I nurse per grade level would be valuable. They would move as a team with the grade. First they would be with the Title I students in the sixth grade. They would move with that group of Title I students to the seventh grade, and the next year with the same students to the eighth grade.

In conclusion, this study of the Title I inclusion program in the north Texas middle school demonstrates that when given adequate resources, a challenging Title I inclusion program can be successful in improving the performance of Title I students at meeting the state's content and performance standards. However, once these programs are started if the resources upon which the programs were developed are taken away, both the students and the programs will suffer.

APPENDIX A
STATE OF TEXAS 1994 SCHOOL REPORT CARD

State of Texas
1994 School Report Card



1701 NORTH CONGRESS AVENUE • AUSTIN, TEXAS 78701-1494 • (512) 463-9734

December 14, 1994

TO THE PRINCIPAL ADDRESSED:

Upon analyzing 1994 TAAS scores, I have found that _____ met the TAAS accountability indicator at the threshold of 65% or above. While your rating was not designated as recognized under the 1994 campus rating guidelines, it must be noted that this is a truly commendable level of performance. I congratulate you on your accomplishment.

Your school community should be proud of their efforts to achieve excellence and equity for all students. This level of success did not come easily and I encourage you to continue your hard work. The dedication and commitment of the educators at your campus has served your students well and I encourage you to celebrate this success.

Sincerely,

Lionel R. Meno
Commissioner of Education

* * * * *

Congratulations, Parents and Teachers:

received a Texas Successful Schools Award of \$10,601 for our students' significant gain performance on TAAS. Only 391 campuses out of 6,152 received this recognition.

Seventh grade scores were the best in the District!

Thank you for your support and encouragement that made this possible.

Principal

State of Texas 1994 School Report Card

The School Report Card gives you important information about your child's school. As you read it, remember that every school is different with its own special strengths and needs. The Texas Education Agency urges you to stay actively involved in your child's education. A more detailed report, the Academic Excellence Indicator System (AEIS) report, is available upon request from your school. Contact your school if you have questions about this report card.

Report for:

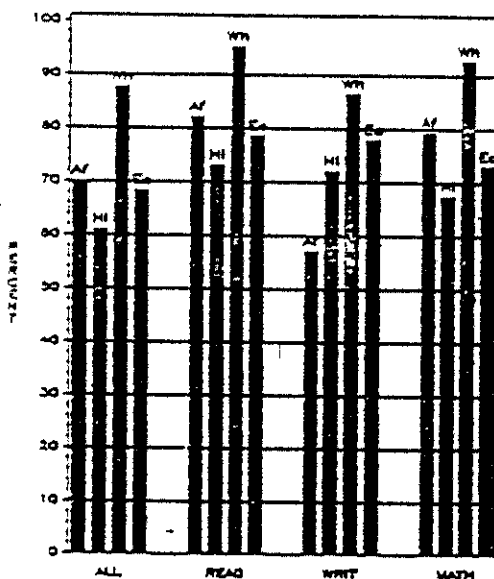
School Accountability Rating: Acceptable

District Accreditation Status: Accredited

Note: Received a TSSAS award for Significant Gain

1994 TAAS Percent Passing for All Grades Combined

School ratings are based on the percent of students passing each subject of the TAAS for all grades combined at the school, in addition to other requirements. The TAAS standards are:



Exemplary at least 90% passing
Recognized 65% to 89% passing
Acceptable 25% to 64% passing
Low-Performing less than 25% passing

	All Tests	Reading	Writing	Math
School (1994)	77.0*	86.6*	80.5*	83.0*
School (1993)	53.2*	79.3*	84.1*	56.8*
Group (1994)	53.2*	75.1*	70.7*	57.4*
District (1994)	70.6*	86.8*	87.1*	74.3*
State (1994)	55.6*	76.5*	79.0*	60.5*

State of Texas
 1994 School Report Card
 Page 2

Student Performance

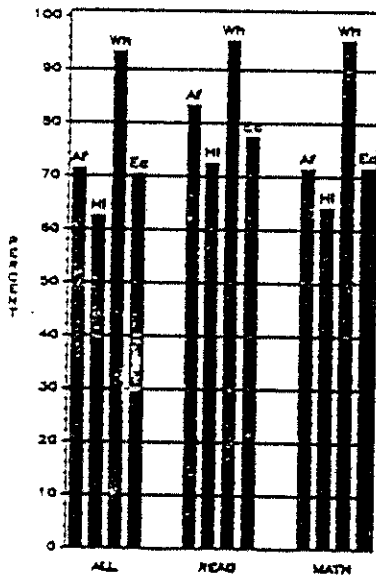
The TAAS (Texas Assessment of Academic Skills Test) is a standardized test that students in grades 3, 4, 5, 6, 7, 8 and 10 must take. The TAAS has tests in Reading, Math and Writing. Reading and Math are given at grades 3, 4, 5, 6, 7, 8 and 10. Writing is given at grades 4, 8 and 10 only. The graph shows what percent of students passed each subject of the TAAS in 1994. Student groups are denoted by letters within the graph and are read as:

- Af - African American
- Hi - Hispanic
- Wh - White
- Ec - Economic Disadvantaged

The table shows what percent of students passed each subject of the TAAS. It shows the percent who passed in the state, the district, the school group and the school. Two years are given for the school. "Group" is a set of 100 other Texas schools that are similar to this school.

TAAS results show the performance of non-special education students who were in the district as of late October in each school year. The graph(s) and table(s) that follow show TAAS results for each grade in the school.

* 1994 TAAS Percent Passing for Grade 6

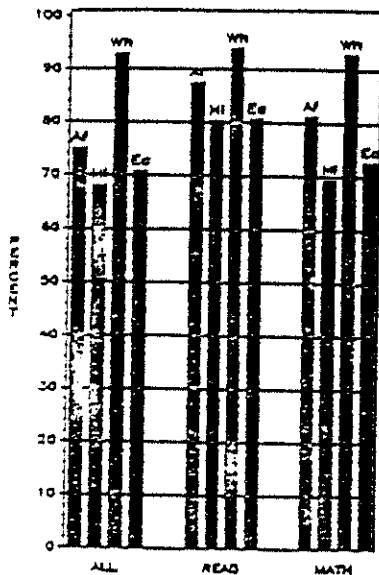


	All Tests	Reading	Writing	Math
School (1994)	78.8x	84.5x	n/a	80.6x
School (1993)	n/a	n/a	n/a	n/a
Group (1994)	53.4x	72.7x	n/a	58.3x
District (1994)	75.0x	87.4x	n/a	77.6x
State (1994)	56.6x	74.1x	n/a	61.1x

In the tables in this report, a dash (-) indicates that no students were in this classification; an asterisk () indicates that fewer than 5 students were in this classification; and a question mark (?) indicates that values were reported outside a reasonable range. In the graphs in this report, values based on fewer than 5 students were not graphed. "ALL" gives the % passing for all tests.

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1994 School Report Card
Page 3

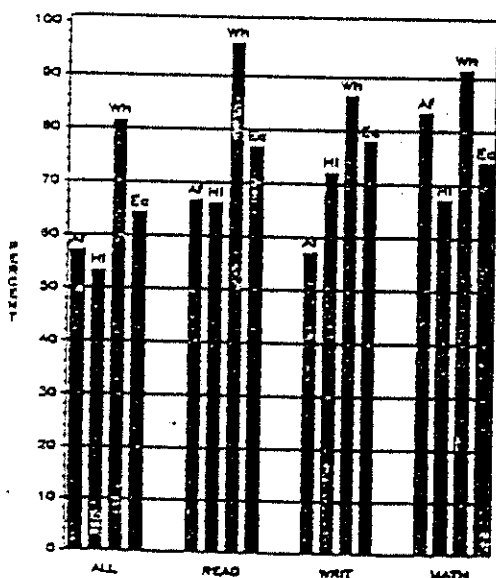
1994 TAAS Percent Passing for Grade 7



All Tests Reading Writing Math

School (1994)	82.9%	88.7%	n/a	84.3%
School (1993)	n/a	n/a	n/a	n/a
Group (1994)	55.8%	75.5%	n/a	58.8%
District (1994)	75.4%	89.1%	n/a	77.1%
State (1994)	56.5%	75.9%	n/a	59.7%

1994 TAAS Percent Passing for Grade 8



All Tests Reading Writing Math

School (1994)	70.8%	85.7%	80.5%	82.8%
School (1993)	53.2%	79.3%	84.1%	56.8%
Group (1994)	49.6%	77.5%	70.7%	57.1%
District (1994)	72.7%	88.7%	83.6%	80.2%
State (1994)	50.5%	77.2%	69.8%	58.6%

State of Texas
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 Page 4

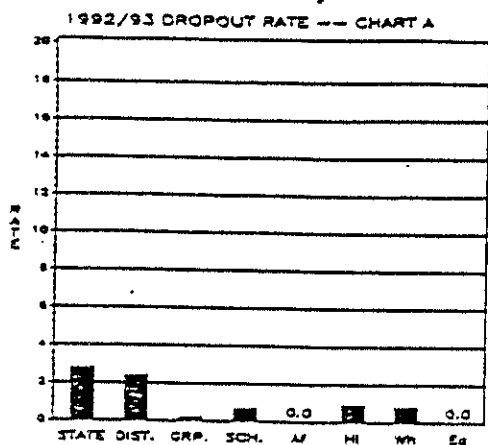


Chart A shows what percent of students dropped out in the 1992-93 school year. (In this chart, shorter bars are better.) It also shows what percent of students in the state and the school district dropped out and what percent of students in the school group dropped out. The goal of the state is to reduce the dropout rate to 1% or lower.

State of Texas
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Page 5

School Characteristics

<p>This section of the report card shows student characteristics for the school, the school district and the state. It also gives information on attendance, program enrollment and school finances.</p>																																															
<p>Total Students: 754 Grade Span: 08 - 08</p>																																															
<h3>Student Characteristics</h3> <table border="1"> <thead> <tr> <th></th> <th>School</th> <th>District</th> <th>State</th> </tr> </thead> <tbody> <tr> <td>± African-American</td> <td>6.0x</td> <td>6.7x</td> <td>14.3x</td> </tr> <tr> <td>± Hispanic</td> <td>37.5x</td> <td>21.7x</td> <td>35.5x</td> </tr> <tr> <td>± White</td> <td>48.9x</td> <td>61.2x</td> <td>47.7x</td> </tr> <tr> <td>± Other</td> <td>7.6x</td> <td>10.4x</td> <td>2.5x</td> </tr> <tr> <td>± Economic Disadvantaged</td> <td>45.9x</td> <td>26.4x</td> <td>45.1x</td> </tr> <tr> <td>± Limited English Proficient</td> <td>4.1x</td> <td>10.2x</td> <td>11.8x</td> </tr> <tr> <td>± Mobility</td> <td>22.1x</td> <td>19.3x</td> <td>21.1x</td> </tr> <tr> <td>Students per Teacher</td> <td>14.5</td> <td>16.4</td> <td>15.9</td> </tr> </tbody> </table>					School	District	State	± African-American	6.0x	6.7x	14.3x	± Hispanic	37.5x	21.7x	35.5x	± White	48.9x	61.2x	47.7x	± Other	7.6x	10.4x	2.5x	± Economic Disadvantaged	45.9x	26.4x	45.1x	± Limited English Proficient	4.1x	10.2x	11.8x	± Mobility	22.1x	19.3x	21.1x	Students per Teacher	14.5	16.4	15.9								
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APPENDIX B
TEXAS ASSESSMENT OF ACADEMIC SKILLS
RAW SCORE CONVERSION TABLE
READING

Texas Assessment of Academic Skills
Raw Score Conversion Table
Reading - Spring 1993
Grade 8 (1994 Standard)

Raw Score	Scale Score	Texas Learning Index (TLI)	Texas Percentile Rank	Normal Curve Equivalent (NCE)
0	470	8-10	1	1.0
1	640	8-13	1	1.0
2	760	8-15	1	1.0
3	840	8-18	1	1.0
4	890	8-20	1	1.0
5	940	8-22	1	1.0
6	970	8-24	1	1.0
7	1010	8-26	1	1.0
8	1040	8-29	1	1.0
9	1060	8-31	1	1.0
10	1090	8-33	1	1.0
11	1110	8-35	1	1.0
12	1130	8-36	1	1.0
13	1150	8-36	2	6.7
14	1170	8-40	2	6.7
15	1190	8-43	4	13.1
16	1210	8-45	4	13.1
17	1220	8-46	4	13.1
18	1240	8-48	5	15.4
19	1260	8-50	7	18.9
20	1270	8-51	7	18.9
21	1290	8-53	8	20.4
22	1310	8-56	10	23.0
23	1320	8-57	11	24.2
24	1340	8-59	12	25.3
25	1350	8-60	14	27.2
26	1370	8-62	16	29.1
27	1390	8-64	18	30.7
28	1400	8-65	19	31.5
29	1420	8-68	22	33.7
30	1430	8-69	24	35.1
31	1450	8-71	28	37.7
32	1470	8-72	30	39.0
33	1480	8-73	31	39.6
34	1500	8-75	35	41.9
35	1520	8-77	39	44.1
36	1540	8-79	43	46.3
37	1560	8-81	48	48.9
38	1580	8-82	51	50.5
39	1610	8-84	58	54.2
40	1630	8-85	61	55.9

* minimum expectations level

**Texas Assessment of Academic Skills
Raw Score Conversion Table
Reading - Spring 1993
Grade 8 (1994 Standard)**

<u>Raw Score</u>	<u>Scale Score</u>	<u>Texas Learning Index (TLI)</u>	<u>Texas Percentile Rank</u>	<u>Normal Curve Equivalent (NCE)</u>
41	1660	8-87	67	59.3
42	1690	8-89	74	63.5
43	1730	8-91	80	67.7
44	1770	8-92	83	70.1
45	1820	8-94	89	75.8
46	1900	8-95	94	82.7
47	2020	8-97	98	93.3
48	2190	8-99	99	99.0

APPENDIX C
TEXAS ASSESSMENT OF ACADEMIC SKILLS
RAW SCORE CONVERSION TABLE
MATHEMATICS

Texas Assessment of Academic Skills
Raw Score Conversion Table
Mathematics - Spring 1993
Grade 8 (1994 Standard)

Raw Score	Scale Score	Texas Learning Index (TLI)	Texas Percentile Rank	Normal Curve Equivalent (NCE)
0	410	8-6	1	1.0
1	580	8-8	1	1.0
2	710	8-10	1	1.0
3	790	8-13	1	1.0
4	840	8-15	1	1.0
5	890	8-17	1	1.0
6	930	8-19	1	1.0
7	960	8-21	1	1.0
8	990	8-23	1	1.0
9	1010	8-24	1	1.0
10	1040	8-27	1	1.0
11	1060	8-29	1	1.0
12	1080	8-30	1	1.0
13	1100	8-32	1	1.0
14	1120	8-33	1	1.0
15	1130	8-34	2	6.7
16	1150	8-36	2	6.7
17	1170	8-39	4	13.1
18	1180	8-40	4	13.1
19	1200	8-42	5	15.4
20	1210	8-43	6	17.3
21	1220	8-44	7	18.9
22	1240	8-46	8	20.4
23	1250	8-47	10	23.0
24	1260	8-48	11	24.2
25	1280	8-50	12	25.3
26	1290	8-52	14	27.2
27	1300	8-53	16	29.1
28	1320	8-55	17	29.9
29	1330	8-56	19	31.5
30	1340	8-57 **	21	33.0
31	1350	8-57 **	21	33.0
32	1370	8-60	25	35.8
33	1380	8-61	26	36.5
34	1390	8-62	27	37.1
35	1410	8-64	31	39.6
36	1420	8-65	32	40.1
37	1430	8-66	35	41.9
38	1440	8-67	37	43.0
39	1460	8-69	41	45.2
40	1470	8-70 *	44	46.8

continued on next page ...

* minimum expectations level

** These pairs of TLI scores appear to be the same as a result of rounding.

Texas Assessment of Academic Skills
Raw Score Conversion Table
Mathematics - Spring 1993
Grade 8 (1994 Standard)

Raw Score	Scale Score	Texas Learning Index (TLI)	Texas Percentile Rank	Normal Curve Equivalent (NCE)
41	1490	8-71	46	47.9
42	1500	8-72	47	48.4
43	1510	8-73	51	50.5
44	1530	8-75	55	52.6
45	1540	8-76	58	54.2
46	1560	8-77	60	55.3
47	1580	8-78	62	56.4
48	1600	8-79	66	58.7
49	1620	8-81	71	61.7
50	1640	8-82 **	75	64.2
51	1660	8-82 **	73	64.2
52	1680	8-84	82	69.3
53	1710	8-85	84	70.9
54	1740	8-86	88	74.7
55	1770	8-87	90	77.0
56	1810	8-88	92	79.6
57	1860	8-89	95	84.6
58	1930	8-90	97	89.6
59	2050	8-91	98	93.3
60	2210	8-92	99	99.0

** These pairs of TLI scores appear to be the same as a result of rounding.

APPENDIX D
TEXAS ASSESSMENT OF ACADEMIC SKILLS
TITLE I - EIGHTH GRADE
READING AND MATH TEXAS LEARNING INDEX AND SCALE SCORES
1992-1993 THROUGH 1995-1996

TAAS - 8th TU and Scale Scores

62	70	48	67	73	83	1630	1420
70	70	89	74	84	86	1290	1300
92	78	44	67	88	76	1470	1510
95	89	82	83	84	83	1400	1300
83	73	74	78	60	73	1690	1470
63	45	84	81	66	62	1520	1460
57	58	87	87	86	82		1420
76	66	76	76	73		1610	1440
97	82	74	67	79	69	1660	1280
84	72	87	81	86	79	1480	1380
95	85	78	57	90	89	1470	1340
40	57	78	57	62	86	1210	1370
60	68	69	77	83	60	1540	1300
62	82	80	70	77	60	1450	1350
90	57		65	81	81	1560	1370
92	73	97	84	70	79	1390	1430
72	77	59	42	75	76	1540	1350
60	75	80	88	88	78	1430	1290
78	72	69	69	66	83	1660	1300
79	75	87	68	75	72	1390	1300
88	81	46	54	59	62	1340	1300
11	81	85	71	64	59	1730	1580
67	64	74	67	64	68	1480	1470
67	65	78	72	79	76	1270	
81	75	91	82	79	81		1460
55	54	89	84	84	78	1770	1440
83	51	69	65	75	81	1370	1210
74	74	61	64	81		1390	1370
74	56	49	60	68	68	1310	1350
86	75	48	50	86	85	1580	1290
74	82	87	77	88	89	1310	1240
65	81	69	62	66	57	1390	1220
60	62	74	65	83	75	1190	1220
88	81	85	80	70	57	1270	
67	77	44	50	64	85	1390	1420
53	50	71	62	81	78	1610	1320
83	82	72	60	92	88	1450	1470
48	51	87	74	83	78	1540	1290
65	79	67	60	88	76	1320	1430
81	75	87	77	68	59	1390	1250
65	68	37	48	83	76	1430	1350
88	83	60	81	79	68	1500	1340
46	56	74	76	75	69	1310	1340
62	77	84	72	70	75	1630	1390
62	64	55	50	88	65	1690	1420
55	64	71	45	79	89	1240	1150
69	59	63	65	71	73	1420	1530
74	57	69	44	84	66	1660	1490
55	62	80	81	81	70	1540	1490
88	83	84	76	59	65	1390	1320
70	66	65	60	88	65	1500	1340

TAAS - 8th TLJ and Scale Scores

62	59	65	65	90	88	1390	1290
		69	69	79	70	1450	1380
70.6346	69.596	76	77	70	68	1580	1380
Average	Average	71	60	77	59	1290	1260
		85	58	71	76	1630	1440
READ	MATH	84	53	68	75	1520	1200
GR8.96	GR8.96	61	47	77	79	1260	1320
		78	65	83	72	1240	1240
70	72	80	85	68	83	1520	1330
MEDIAN	MEDIAN	87	82	83	81	1430	1280
				77	73	1390	
62	75	72.85	67.42623	71	66	1430	1420
MODE	MODE	Average	Average	83	83	1420	1290
				81	86	1350	1410
		74	67	84	73	1500	1380
		MEDIAN	MEDIAN	84	75	1400	1240
				62	85	1370	1290
		87	65	79	50	1350	1380
		MODE	MODE	62	70	1450	1260
				71	47	1520	1390
		Reading	Math	84	81	1480	1540
		Gr8.95	Gr8.95	92	79	1430	1390
				86	62	1630	1430
				77	62	1630	1490
				71	78	1240	1220
				73	76	1370	1300
				88	78		
				77	79		
				46	46		
				71	72		
				71	81		
				68	83		
				77	81		
				86	91		
				84	82		
71	70	73	67	76.4186	74.1428571	69.64	58.3
Average	Average	Average	Average	Average	Average	Average	Average
Reading	Math	Reading	Math				
GR8.96	GR8.96	GR8.95	GR8.95	77	76	69	57
				MEDIAN	MEDIAN	MEDIAN	MEDIAN
				84	76	64	57
				MODE	MODE	MODE	MODE
				READ	MATH	READ	MATH
				Gr8.94	Gr8.94	Gr8.93	Gr8.93

TAAS - 8th TLI and Scale Scores

1630	85	1420	65
1290	53	1300	53
1470	72	1510	73
1400	65	1300	53
1690	89	1470	70
1520	77	1460	69
		1420	65
1610	84	1440	67
1660	87	1280	50
1480	73	1380	61
1470	72	1340	57
1210	45	1370	60
1540	79	1300	53
1450	71	1350	57
1560	81	1370	60
1390	64	1430	66
1540	79	1350	57
1430	69	1290	52
1660	87	1300	53
1390	64	1300	53
1340	59	1300	53
1730	91	1580	78
1480	73	1470	70
1270	51		
		1460	69
1770	92	1440	67
1370	62	1210	43
1390	64	1370	60
1310	56	1350	57
1580	82	1290	52
1310	56	1240	46
1390	64	1220	44
1190	43	1220	44
1270	51		
1390	64	1420	65
1610	84	1320	55
1450	71	1470	70
1540	79	1290	52
1320	57	1430	66
1390	64	1250	47
1430	69	1350	57
1500	75	1340	57
1310	56	1340	57
1630	85	1390	62
1690	89	1420	65
1240	48	1150	36
1420	68	1530	75
1660	87	1490	71
1540	79	1490	71
1390	64	1320	55
1500	75	1340	57

APPENDIX E
TEXAS ASSESSMENT OF ACADEMIC SKILLS
TITLE I - SEVENTH GRADE
READING AND MATH TEXAS LEARNING INDEX AND SCALES SCORES
1993-1994 THROUGH 1995-1996

TAAS- 7th TLI and Scale Scores

80	83	81	71					1390	1370
75	60	58	85	73.622222	68.6			1450	1560
84	74		64	AVERAGE	AVERAGE			1410	1470
48	58	90	86					1270	1270
88	72	77	67	78	73			1430	1560
70	59	58	87	MEDIAN	MEDIAN			1600	1500
72		63	62					1350	1430
78	87	81	76	76	75			1330	1310
56	74	81	81	MODE	MODE			1550	1470
78	72	70	67					1410	1580
				READING	MATH			1330	1270
73			71	Gr7.94	Gr7.94			1500	1420
84	79	79	69					1370	1450
80	62	89	72					1630	1740
56	57	85	67					1550	1410
66	65	60	45					1520	1410
58	62	72	67					1550	1530
80	57	72	48					1350	1410
96	69	74	79					1290	1430
92	80	83	83					1310	1470
88	82	58	70						
43	35	83	89					READING	MATH
		54	65					Gr7.93	Gr7.93
		77	71						
74.80303	69.51563	79	66						
Average	Average	70	54						
		77	78						
78	71.5	68	67						
Median	Median	83	81						
		74	69						
82	57	75	72						
MODE	MODE	92	91						
READ	MATH	75.905405	70.48						
Gr7.96	Gr7.96	AVERAGE	AVERAGE						
		77	71						
		MEDIAN	MEDIAN						
		81	67						
		MODE	MODE						
		READ	MATH						
		Gr7.95	Gr7.95						

APPENDIX F
TITLE I PROGRAM BUDGET RECORDS

CHAPTER I BUDGET
1993-94

READING RECOVERY TEACHERS		
SCHOOL	AMOUNT	BAL 7/20/94
TOTAL	\$385,098	\$43,629.46
SECONDARY REMEDIATION TEACHERS		
	\$58,778	- \$60.38
TOTAL	\$264,941	\$2,951.42
Nurse :	\$18,687	\$1,556.96
TOTAL	\$37,374	\$3,113.77
Curriculum Supplies	\$500	\$500
Curriculum Travel	\$1650	\$928.90
TOTAL	\$2150	\$1,428.90

CHAPTER I PARENT WORKSHOPS

supplies	\$275	\$275.00
childcare	\$75	\$75.00
TOTAL	\$4,090	\$1,791.50
TEACHER STIPENDS		
Stipends	\$150	\$150
TOTAL	\$1,410	\$800.50
TOTAL	\$695,063	\$53,715.55

TITLE I WORKSHEET

School or Program _____ Schoolwide _____ Year _____
 Targeted Assisted Year 1995-96
 Campus No. _____ Grade Span K-2
 Total # of Children Enrolled 842
 # of Children Residing in Attendance Zone 868
 # of Residing Children Meeting
 Low Income Criteria 405 Low Income Percentage 46.66

Salaries - Teacher

# Personnel Units	<u>2 Instructors</u>	\$ <u>52,852</u>
Function	_____	
Teacher Stipends		\$ _____
Description	_____	
Substitute Teachers		\$ _____
Function	_____	
Temporary Clerical		\$ _____
Function	_____	
Consultants		\$ _____
Description	_____	
Supplies		\$ _____
Childcare		\$ _____
Function	_____	
Travel		\$ _____
Function	_____	
Other		\$ _____
Description	_____	
Description	_____	
Total		\$ <u>52,852</u>

APPENDIX G
LETTERS OF PERMISSION TO CONDUCT RESEARCH

January 26, 1998

Dear Mrs. Janet Restivo:

This is to inform you that your formal request to conduct research within the Carrollton-Farmers Branch ISD pursuant to your doctoral dissertation entitled, "An Analysis of a Title I Inclusive Program at a Middle School in North Texas 1991-96", is approved. We have on file your University of North Texas Application for Approval of Investigation Involving the Use of Human Subjects. As we make student records available for your use, we wish to restate our understanding that no individual students, no individual schools nor the district itself will be mentioned by name in your dissertation.

Research and Evaluation Coordinator



February 19, 1998

Janet Restivo
3107 Andrew Lane
Carroll ton, TX 75007

Re: Human Subjects Application No. 98-030

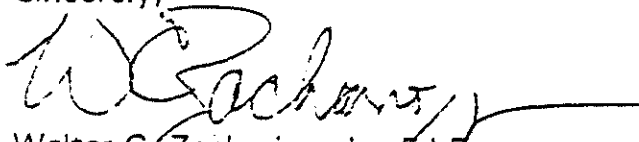
Dear Ms. Restivo:

As permitted by federal law and regulations governing the use of human subjects in research projects (45 CFR 46), I have conducted an expedited review of your proposed project titled "An Analysis of A Title I Inclusive Program at A Middle School In North Texas." The risks inherent in this research are minimal, and the potential benefits to the subjects outweigh those risks. The submitted protocol and informed consent form is hereby approved for use of human subjects on this project.

The UNT IRB must re-review this project prior to any modifications you make in the approved project. Please contact me if you wish to make such changes or need additional information.

If you have any questions, please contact me.

Sincerely,



Walter C. Zacharias, Jr., Ed.D.
Chair, Institutional Review Board

WZ:sb

cc: IRB Members

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