# FUNDS BUDGETED FOR EDUCATIONAL PROGRAMS IN TEXAS SCHOOLS DURING A PERIOD OF CHANGING ENROLLMENT

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This study analyzes budgets of Texas school districts experiencing declining enrollments, as opposed to districts with increasing or steady enrollments. This study identifies how schools are expending funds to meet those needs while dealing with enrollment changes. A total of 924 school districts are studied. The changes in average daily attendance from 1993-1994 to 2003-2004 are used to categorize each district as having increasing, stable, or decreasing enrollments. The total dollar amount expended is compared to the total number of students in each district to determine the amount expended per student. The amounts expended for special education career and technology education, bilingual education, and compensatory education are compared to the number of students being served by those programs to determine a dollar amount that can also be compared from the 1993-1994 and 2003-2004 school years. The perstudent expenditures for each educational program are compared to the overall perstudent expenditures in each enrollment category (increasing, stable, decreasing). The study reveals no clear pattern of change in the comparison of overall spending to individual program spending as district enrollments fluctuated.

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#### CHAPTER 1

## INTRODUCTION

As educators in the state of Texas strive for the attainment of higher educational goals in public schools, social and economic factors in the state have continued to shift. According to Texas Education Agency records, total enrollment for the state from the 1987-1988 school year through the 1999-2000 school year increased from 3,224,916 to 3,991,783. During this same period, the 20 different regions served by the state's education service centers experienced enrollment changes ranging from a loss of 3% to a gain of 45%. Five regions experienced an enrollment gain of 1% or less.

This variation in enrollment, at a time when the state gained more than 700,000 students, indicated that all school districts did not face the same challenges. This situation created a need to investigate these changes in enrollment in relation to the funds budgeted for educational programs for Texas schools.

School districts in the "urban triangle" (Dallas/Fort Worth, San Antonio, Houston) and the lower Rio Grande Valley continued to experience growing or steady school enrollments while student numbers in other districts declined. Special challenges developed for school districts experiencing declining levels of enrollment. Administrators faced staff concerns over possible effects of reorganization or the elimination of positions (Liebowitz, 1984). Many school administrators had difficulty evaluating potential future staffing options (Anderson & Mark, 1983). Small districts gave special attention to their sometimes unique circumstances by striving to provide quality educations and resisting pressures to merge with other school systems (Manzo, 1999;

Swift, 1982). Most districts experiencing a decline were forced to determine if any "frills" were being funded that could be eliminated without having a negative impact on instructional programs.

Although a period of enrollment decline presented opportunities for program reevaluation and long-range planning (Fredrickson, 1981), some school districts found
that they were unable to decrease educational costs at the same rates that their
enrollments were declining (Davis, 1982). Research showed that managing declines
was difficult because administrators were sometimes forced to deal with increasing
costs and staff reductions simultaneously (Berger, 1982). As school administrators
struggled to deal with shrinking enrollments and shrinking budgets, they found their
tasks complicated by lack of flexibility in the use of some funds. Funds for programs
such as special education were restricted to those specific programs. As a result, the
options available for reallocating budgeted funds were limited. State education funding
formulas did not accurately reflect enrollment decline effects on overall costs (Hyde,
1981). In comparison, some states did have formulas that included adjustments to
assist school districts during declines (King, 1983).

Texas used a weighted system to determine funding for career and technology education, special education, compensatory education, bilingual education, and gifted and talented education (42 Tex. Educ. Code Ann. § 151-156, 2007). This funding fluctuated with the enrollments in each program. These categorical funds provided limits in their use for paying teachers, teacher's aides, and purchasing other materials for those specific programs. As enrollments in these programs declined or increased, the funding adjusted accordingly.

The same was true for the basic per-student allotment generated by the attendance of all students. During a period of enrollment fluctuation, these funds would increase or decrease accordingly with average daily attendance. However, while there might have been reductions in overall funding as overall enrollment dropped, the percentage of students enrolled in these categorically funded programs did not necessarily decline at the same rate as the total enrollment. It cannot be assumed that enrollment in all programs increased or decreased proportionally with the overall enrollment. For example, a district could have 1,000 students in attendance with 100 of those students being enrolled in career and technology education (CATE) classes. The time these students spend in regular education classes would be funded by the basic per-student allotment. The time the 100 students spent in CATE classes would be funded by the weighted formula.

If the overall attendance dropped to 900 and students in CATE classes decreased to 90, funding of both types would drop 10% with the attendance levels. However, this is not necessarily always the case. If the overall attendance dropped to 900 but the CATE attendance remained at 100, the ratio of regular education funding and CATE funding would reflect this changed ratio. The result could be a decrease in overall funding but no decrease in CATE costs, thus creating a situation in which a higher percentage of the total budget might be available only for the categorically funded programs and a lower percentage available for general education costs, or vice versa. The relationship of these changes has an impact on educational funding and suggests that a thorough study should be conducted to examine fluctuation in the levels of funding for other educational costs.

## Rationale for the Study

This study investigated the changes in four budget categories compared to enrollments in educational programs in school districts in Texas. It was important to determine whether funding was at appropriate levels after enrollment changes occur, so that adequate funding was provided for every level of education. This was the only way to assure that demographic changes did not result in losses of educational opportunities.

Basic funding for schools was based on average daily attendance (ADA).

Programs such as special education, career and technology education, compensatory education, and bilingual education were assigned a greater weight than regular education through the Texas school finance formula, thus generating more dollars for school districts according to the number of students in these programs. These weighted funds covered the costs associated with these specific programs and not general education-related costs. This study examined how the changes in the amounts of monies provided by these weighted funds impacted school district budgets during periods of changing enrollments.

## Purpose of the Study

The purpose of this study was to determine how budgets of Texas school districts experiencing changing enrollments were influenced by the changes, as opposed to districts with steady enrollments. These school budgets had to meet the educational needs of the students being served. This study identified how schools were expending funds to meet those needs while dealing with enrollment changes.

#### Problem Statement

Texas public schools must provide quality educations for the students enrolled. Standards were raised and more subjects tested in an effort to assure that schools provide quality educations. However, at the same time that schools were expected to produce an increasingly better product, enrollment changes impacted the level of funding and the way the funds were budgeted (Texas Education Agency Summary of Finance, 1994-2004).

Some areas of the state experienced declines in enrollments while other areas experienced rapid growth. As the demographics changed in these areas, school officials have seen changes in the funds available per student for general education expenses as well as changes in the availability of funds for specific educational programs. This raised an important question: Did changes in funds budgeted for schools impact the availability of funds differently between growing and shrinking school enrollments? This issue must be resolved to assure proper funding for all students' educations in an ever-diversifying state.

## Research Question

This study described the changes in education funding by program in Texas public school districts between the years 1994 and 2004. One question guided the study:

Is there a difference in the composite change in per-student budgets for categorically funded education programs as compared to the overall per-student budget between districts whose average daily attendance has increased, decreased, or remained stable?

## **Definitions of Terms**

- Average daily attendance (ADA) -- The quotient of the sum of attendance for each day of the minimum number of days of instruction divided by the minimum number of days of instruction.
- Bilingual education -- A program that uses a student's native language to assist the student in learning the English language.
- Career and technology education (CATE)-- A program providing job skill related training to both regular education and special education students.
- Categorically funded programs -- Educational programs that are funded with monies that are to be used specifically for those programs. This funding is usually generated by the number of students who qualify for these programs or actual student contact hours in these programs.
- Compensatory education -- A program designed to meet the needs of educationally disadvantaged students.
- Declining enrollment -- The overall average daily attendance in a school district has declined or become smaller by a specific amount such as 5%, 10%, 20%, or more.
- Full time equivalent (FTE) -- Thirty hours per week of contact (classroom) time
  for one student for the duration of a school year. One full-time student equals one FTE.
   Six students for one hour per day (30 hours per week) or any combination equaling
  thirty student contact hours per week is one FTE.
- General education costs -- All costs associated with operating a school except those funded by specific categorical funds.

- Increasing enrollment -- The overall average daily attendance in a school district has increased or grown larger in number by 5%, 10%, 20%, or more.
- Nondiscretionary costs -- Costs incurred by a school district that are not optional
  and must be paid. The administration has no discretion as to whether or not these costs
  can be avoided or eliminated.
- Special education -- An educational program for students requiring a special instructional arrangement because of a disability.
- Stable enrollment -- The overall average daily attendance in a school district has neither declined nor increased by 5% or more.
- Weighted average daily attendance (WADA) -- The sum of average daily attendance and special weighted values assigned for students in special categorically funded programs.

#### Limitations

The purpose of this study was to determine the effects in funding of categorical programs by enrollment changes for typical Texas school districts. The typical characteristics sought were participation in the state funding system, tax levies on local property values, students who reside in homes with families or guardians, and large enough enrollments that attendance changes would be reflected in financial changes and not be masked by funding formulas designed to provide financial stability for the smallest districts. This resulted in the following limitations being placed on the sample group:

- This study was limited to public school districts in Texas with the following exceptions: charter schools, schools for the incarcerated, residential schools, school districts that did not have local tax bases.
- 2. This study was limited to those school districts that had a refined average daily attendance of 130 students or more for the 2003-2004 school year. Special elements in the state education funding system provide financial stability to the smallest schools that could minimize financial fluctuation when enrollment fluctuation may be occurring.
- 3. For purposes of this study, only total student numbers from educational programs were used. Example: Special education was not broken down into categories such as self-contained, speech, or homebound. Only the total of all adjusted special education FTEs were used.
- Programs analyzed were those with funding determined by weighted formulae:
   Compensatory education, special education, career and technology education,
   and bilingual education.
- Educational programs studied were limited to school districts that reported having students enrolled in specific programs during both the 1993-1994 and 2003-2004 school years.
- 6. Compensatory education funds reported in the study came from the funding amounts in the Texas Education Agency Summary of Finances rather than the amounts reported on school district budgets. Because of comingling of state and federal compensatory funds in some budgets, it was impossible to determine

only compensatory education per-student expenditures from school district budgets.

## Organization of the Study

This study included not only research involving the sample schools from which data were analyzed, but an overview of factors related to schools with changing enrollments including finance, management, and political considerations. Chapter 2 gives an overview of the literature on enrollment changes and factors to consider when dealing with those changes. It also includes pertinent school funding information.

Chapter 3 describes the study methodology and instrumentation. Chapter 4 describes the results of the study and analyzes the data. Chapter 5 focuses on evaluating the results of the study and provides recommendations for further study.

#### **CHAPTER 2**

#### REVIEW OF THE LITERATURE

Changing enrollment and its effects on school funding was the focus for a number of research studies conducted in the 1980s, indicating an important interest in the trend at that time. Prominent in the studies were decreases in funding, reductions in force, and administrative and political challenges presented in dealing with these issues. The research dealt with rural and urban schools. School districts with both declining enrollments and increasing enrollments were studied.

#### Trends

Changes in public school enrollments presented great challenges for administrators of local school districts, state lawmakers, and others involved in developing state education finance policy. According to a report from the Texas Education Agency (*Enrollment Trends in Texas Public Schools: Update 1999-00*, 2001), the enrollment in Texas public schools increased 24% from the 1987-1988 school year to 1999-2000, with a beginning enrollment of 3,224,916 that increased to 3,991,783. During this same period, the enrollment for the entire United States and its territories increased only 17% (*National Center for Education Statistics*, 2001).

The significant gains in Texas were not indicative of the trends in all areas of the state, however. While many areas of the state gained substantial numbers of students, several areas in the western and southern parts of the state experienced negligible gains or declines. The districts served by the Region 17 Education Service Center in Lubbock actually experienced a 3% loss in total enrollment. The gains and losses reported by region also were not indicative of the actual enrollment fluctuations of

individual school districts. This TEA report indicated that in many urban and suburban school districts, enrollments increased at much higher rates than the overall state average. Some rural areas experienced lower rates of growth while others declined in enrollments.

The same TEA report also showed trends in ethnicity and socioeconomic status of the student body population in Texas during this time frame. The number of Hispanic students increased 55% between the 1987-1988 and 1999-2000 school years, more than double the percentage increase in the total student enrollment. The number of African American students increased slightly less than the overall population at 22%. There was a drastic difference between these increases and the 3% percent increase of White/Anglo students during this same time. Economically disadvantaged students increased in number by 71% during this 12-year period.

Numbers indicating that the declines were not as great in Texas as other parts of the country were also found by Bruce and Muse (1983). They discovered that only 15.7% of the Texas rural schools studied reported declining enrollments while the national average was 36.7%.

Rural Policy Matters (May, 2000) reported that while certain rural populations were growing, most of that growth was in "recreational" counties and those that attracted many retirees. If a rural county had an agricultural base and high poverty rate, it may not have experienced population growth. Many rural counties and those not adjacent to metropolitan areas were experiencing declines. Texas student population growth was projected to gain another 8% (National Center for Education Statistics, 2002) between 2000 and 2012 at the same time some districts were projecting declines.

Between 1996 and 2001, at least 18% of rural schools in every state lost at least 10% of their enrollment. While the northern plains region, including Montana, Nebraska, North and South Dakota, and Wyoming, were hit the hardest by enrollment declines (*Montana Heritage Project*, 2002), rural schools in other parts of the United States also experienced significant losses, including North Carolina, Vermont, Maine, West Virginia, and Louisiana. *The Michigan Education Report* (Spring 2000) reported that enrollments were also declining in the Michigan Upper Peninsula.

## Managing Enrollment Change

Sackney, in *Managing Decline in Rural School Systems: Program Organization* and *Delivery* (1983), reported that decline had been a characteristic of rural schools for a longer period of time than in urban settings. His study found that during decline, rural school districts tended to cut back existing programs and services, and that these actions were usually postponed until no other option appeared to be available.

This resistance to making plans for retrenchment during decline could be found in schools of all sizes. In *How to Decide What to Cut* (1983), Minor reported that advice such as planning retrenchment decisions in advance, closing schools before instructional programs were cut, and using merit and equity criteria to reduce staff sounded good but was difficult to achieve because of conflicts among political expediency, feasibility, and the educational soundness of various options.

Research indicated that for a school administrator to successfully handle enrollment decline, he/she should possess certain skills. Dembowski, Gay, and Owings (1979) reported that administrators needed strong predictive abilities to handle planning in a period of decline. Behn (1983) found declining enrollment to be an opportunity to

develop managerial skills. He listed the opportunity to rethink organizational strategy, to rethink the measurement of managerial flexibility, to rethink equity, and to develop a new managerial style as possible positive effects of decline.

Rist (1983) wrote that superintendents who were managers of decline had to be unafraid to take risks, make cuts, and face up to conflicts, thus reaffirming that managing retrenchment caused by declining enrollment was difficult. On the other hand, she found that superintendents who were managing growth needed to identify needs, set objectives, and remain flexible while maintaining strong senses of direction. Taking an optimistic approach, Lasher (1989) stated that school leaders should view decline as opportunities to redesign their schools to create greater vitality and improved performances.

Planning for increased enrollment can also be a challenge when growth increases at a rate greater that what has been experienced in the past. Riley, former U.S. Secretary of Education (1996), reported that a record 51.7 million students were expected to enter the nation's classrooms in the fall of 1996, while 54.6 million were expected to be enrolled in 2006. He anticipated that 190,000 new teachers would be required along with 6,000 new schools. Preparing for increases such as these required educating the community as well as developing superior skills in managing change.

Bellon (1977) noted that long range planning required unity of purpose, but added that unity of purpose could be difficult to achieve, especially in school systems. A situation could arise where resources were scarce and enrollments could not be controlled. School districts could become battlegrounds where people lost sight of their

purpose (Effects of Resources and Enrollments on Growth and Decline in School Districts: Evidence From California and New York, Freeman & Hannan, 1981).

Different strategies have been successfully implemented to manage decline.

Some 30 management practices from 17 different states were listed by Zerchykov and Weaver (1983) as well as a synthesis of research evidence on many aspects of managing during declining enrollments in *Managing Decline in School Systems: A Handbook*.

Administrators need to be proactive rather than reactive, and they need to address the causes of problems rather than their effects. Keough (1978) emphasized a need for a keen sense of balance and proportion in the allocation of scarce resources as well as expertise in scheduling techniques in order to prescribe programs.

The ability of an administrator to simply say "No" was indicated as necessary by Culbertson (1977). The fiscal management of a school during decline often required limits on current spending with no new spending. Mazzoni and Muellar (1980) listed several pressures a school district must deal with when facing decline. They were:

- Fiscal stress together with the scarcity of resources because of competition from other public services and tax relief measures.
- Enlarged service demands from legal requirements to expand services to underserved populations and to extend fundamental rights to all employees and clients.
- Uncertain community support resulting from skepticism about school quality,
   changed societal expectations, anxieties about residential patterns and community
   maintenance, and public perceptions of increased taxes paying for reduced programs.

- School control controversies associated with federal and state assertiveness in school governance, teacher collective bargaining, and citizen efforts to influence educational decision making.
- Defeatist attitudes associated with job vulnerability, limited professional opportunities, shrunken resources, and the use of decline as a convenient scapegoat for real school ills.

A major area of consideration during a period of declining enrollment was the number of employees and the percentage of the school district's budget that funded the compensation of those employees. Also of concern was the ratio of teaching to nonteaching positions being funded. Expenditures such as maintenance, utilities, and transportation costs did not necessarily decline with enrollment. The purchase price of a school bus continued to increase regardless of enrollment. Anderson and Mark (1977) found that resources devoted to nonteaching functions steadily increased regardless of the direction of change in enrollment. Bidwell and Kasdarda, in *School District*Organization and Student Achievement (1975), suggested that this trend may be the result of the environment of public education growing more complicated and requiring more staff to deal with pressures from governments and parents. Hannaway (1977) suggested the same.

Increased testing and reporting requirements along with expanding government regulations made budget cuts difficult. Kimbrough and Hill (1981) stated that the growing administrative burden might have been caused by attempts on the part of the federal government to support special programs. The authors listed the requirement of more personnel to collect information, prepare reports, and coordinate various programs

as reasons for the growth of administrative costs in schools. Merseth (1982) reported that school districts responded differently to declines, depending on the community and political influences. Administrative staffing levels were influenced by external government requirements, but schools in large cities and rural towns responded somewhat differently.

Urban schools increased their administrative staff by creating new positions while smaller rural districts added responsibilities to existing positions. Prickett (1989) found that political activity and the election of new members to boards of education created new demands to generate more positions during periods of decline in rural areas. In a South Dakota study of rural schools, Heath and Vic (1993) found that efforts to combine the superintendency with the elementary or secondary principalship created some disadvantages. Taking part of a building-level administrator's time to devote to district central office responsibilities resulted in problems such as inadequate time for instructional leadership. This limited the benefit of this strategy for reducing administrative staff. Anderson and Mark (1983) reported that, during enrollment declines, reallocation of administrative personnel did finally commence after a first stage of teacher lay-offs. They found that the reversal in administrative growth was seen especially clearly in the ranks of administrative support personnel.

Researchers have reported findings of both positive and negative effects on school staffs as a result of enrollment declines. While some researchers believed that the job satisfaction of teachers would offset any extra responsibilities that might be required as a result of employing fewer faculty members, Cuban, in *Shrinking Enrollment and Consolidation: Political and Organizational Impacts in Arlington Virginia* 

1973-1978 (1979), found that staff contraction left fewer opportunities for advancement for teachers and administrators, causing frustration and resentment. Along with those concerns, there were decisions to be made when faculty positions were to be cut.

Rising enrollments also brought special needs in the area of planning and management. McCord (1997) listed several strategies for utilizing existing facilities, including innovative scheduling, varied attendance plans, offsite learning, year-round schooling, the use of portable buildings, and enlarged classes. O'Neil and Adamson (1993) had similar recommendations, along with alternative scheduling.

## **Educational Programs**

The state of Texas has provided funding for several educational programs that have higher costs associated with them because they apply greater weight to the funding for the time students spend in those programs. These programs are listed in 29 Tex. Educ. Code § 29.001. (2007). The education of students with learning disabilities was addressed in Subchapter A, Special Education Program, Sec. 29.001. Statewide Plan:

The agency shall develop, and modify as necessary, a statewide design, consistent with federal law, for the delivery of services to children with disabilities in this state that includes rules for the administration and funding of the special education program so that a free appropriate public education is available to all of those children between the ages of three and 21.

As Texas moved toward being a minority-majority state, educating the growing number of Spanish-speaking students became an issue of increasing importance.

Texas law addressed this in Subchapter B, which provided for bilingual education and special language programs by explaining:

The agency shall establish a procedure for identifying school districts that are required to offer bilingual education and special language programs in accordance with this subchapter.

As efforts to provide quality educations for *all* students were pursued, extra focus on the instruction needed to compensate for any possible barrier to student success was of vital importance. The state of Texas provided supplemental funding to address these needs in Subchapter C, which outlined compensatory education programs. It explained how students would be served if they were performing behind grade level, were in danger of dropping out, or were dealing with other circumstances that increased the need for remedial assistance.

Subchapter F, § 29.181, explained the career and technology (vocational) education program, stating that:

Each public school student shall master the basic skills and knowledge necessary for: (1) managing the dual roles of family member and wage earner; and (2) gaining entry-level employment in a high skill, high-wage job or continuing the student's education at the postsecondary level.

The state's plan for career and technology education was given as:

- (a) The agency shall prepare and biennially update a state plan for career and technology education that sets forth objectives for career and technology education for the next biennium and long-term goals for the following five years.
- (b) The state plan must include procedures designed to ensure that:
- (1) all secondary and postsecondary students have the opportunity to participate in career and technology education programs;
- (2) the state complies with requirements for supplemental federal career and technology education funding; and
- (3) career and technology education is established as a part of the total education system of this state.

## Purpose of Programs

These educational programs, among other things, are attempts to address student attrition. Attrition, or the percent change in grade level enrollment between a base year and an end year, has historically been greater for Hispanic and Black students than for Whites/Anglos. Males generally have a higher attrition rate than females.

Texas School Holding Power Improves--But Progress is Slow, Texas Public School Attrition Study, 2003-2004 (Johnson, 2004) stated that between the 1985-86 and 2003-2004 school years, more than 2 million students have been lost from public school enrollment, costing the state of Texas about \$500 billion in forgone income, lost tax revenues, and increased job training, welfare, and criminal justice cost. The report stated that from the 1985-1986 to 2003-2004 school years, attrition rates have fluctuated from a low of 31% in 1988-1989 and 1989-1990 to a high of 43% in 1996-1997. Information from the National Center for Education Statistics in its publication, Status Dropout Rates, by Race/Ethnicity (2003), indicated higher dropout rates for 16-to 24-year-old African American and Hispanic students nationally.

Average mathematics scale scores in 2000 also indicated a correlation between the need for additional compensatory and/or bilingual assistance and some of these same factors.

Table 1
Poverty and Student Dropout Rates

The National Center for Educational Statistics Poverty and Student Dropout Rates			
Year	White %	Black %	Hispanic %
1972	12.3	21.3	24.3
1973	11.6	22.2	33.5
1974	11.9	21.2	33.0
1975	11.4	22.9	29.2
1976	12.0	20.5	31.4
1977	11.9	19.8	33.0
1978	11.9	20.2	33.3
1979	12.0	21.1	33.8
1980	11.4	19.1	35.2
1981	11.4	18.4	33.2
1982	11.4	18.4	31.7
1983	11.2	18.0	31.6
1984	11.0	15.5	29.8
1985	10.4	15.2	27.6
1986	9.7	14.2	30.1
1987	10.4	14.1	28.6
1988	9.6	14.5	35.8
1989	9.4	13.9	33.0
1990	9.0	13.2	32.4
1991	8.9	13.6	35.3
1992	7.7	13.7	29.4
1993	7.9	13.6	27.5
1994	7.7	12.6	30.0
1995	8.6	12.1	30.0
1996	7.3	13.0	29.4
1997	7.6	13.4	25.3
1998	7.7	13.8	29.5
1999	7.3	12.6	28.6
2000	6.9	13.1	27.8
2001	7.3	10.9	27.0

Mathematics Achievement Tables (2003) showed differences in fourth grade mathematics scale scores of students who never, sometimes, or always spoke a language other than English in the home as well as those eligible and not eligible for free and reduced price lunches. Eligibility was determined by the percentage of the student body eligible for free or reduced price lunches. In schools with fewer than 10% of students qualifying for free/reduced price lunches, students from homes that never spoke a language other than English in the home had scores of 244. If students sometimes spoke another language at home, the score was 243. If a language other than English was always spoken in the home, the scale score was 240. Students from this same group who did not qualify for free/reduced price lunches had scale scores of 244.

In schools with 11-25% of students qualifying for free/reduced price lunches, students from homes that never spoke a language other than English had scores of 235, students from homes where a language other than English was sometimes spoken had scores of 236, and students from homes where a language other than English was always spoken had scores of 219. In these same schools, those students eligible for free/reduced price lunches had scores of 218 and those not eligible for such lunches had scores of 238.

In schools where 26-50% of students qualified for free/reduced lunches, students from homes that never spoke a language other than English had scores of 230, those from homes that sometimes spoke another language had scores of 228, and those from homes that always spoke a language other than English had scores of 219. From this

same category, students eligible for free/reduced price lunches had scores of 219 while those not eligible had scores of 233.

Schools where 51-75% of the students qualified for free/reduced price lunches had scores of 220 if another language was never spoken in the home, 217 if another language was sometimes spoken, and 209 if a language besides English was always spoken in the home. This same category had scores of 209 for students that were eligible for free/reduced price lunches and scores of 228 if they were not eligible.

In schools where more than 75% of the students qualified for free/reduced price lunches, those from homes where a language other than English was never spoken had scores of 207, those from homes where another language was sometimes spoken had scores of 209, and those from homes where a language other than English was always spoken had scores of 208. Those eligible for free/reduced price lunches had scores of 204 while those not eligible had scores of 212.

With few exceptions, the student scores were lower for students from homes where a language other than English was spoken and from lower income families. This clearly indicated a need for extra assistance for these students.

Students with learning disabilities and other handicapping conditions were served through special education programs. The *Thirteenth Annual Report to Congress on the Implementation of Education of the Handicapped Act* (1990) listed the number of students being served in special education and their handicapping condition at that time. At that period of time, which just preceded the time period proposed to be used in this study, the Education of All Handicapped Children Act (EAHCA) of 1975 was replaced with the Individuals with Disabilities Education Act (IDEA) of 1990, according

to *Delivering Special Education: Statistics and Trends* (1991). The report to Congress listed the number of students served by special education as:

- 2,064,892 (48.5%) with specific learning disabilities,
- 976,186 (22.9%) with speech or language impairments,
- 566,150 (13.3%) with mental retardation,
- 382,570 (9%) with serious emotional disturbances,
- 87,956 (2.1%) with multiple disabilities,
- 58,164 (1.4%) with hearing impairments,
- 47,999 (1.1%) with orthopedic impairments,
- 53,165 (1.2%) with other health impairments,
- 22,960 (.05%) with visual impairments, and
- 1,634 (.00038%) with deafness or blindness.

## Funding Issues

McLaughlin (1996) suggested the possibility of better serving students by combining special education, bilingual and federal Title I funds. Consolidating these resources could offer more flexibility in the way in which students were served, thus providing more options in a period of changing enrollment. However, great care might have to be taken to assure that funds were being utilized in a legal manner.

The issue of declining enrollment trends has been studied in other states. New Mexico enrollment declines were analyzed in several studies. With geographic and socioeconomic characteristics similar to some areas with enrollment decline in West Texas, these findings were very relevant. Swift (1982) discussed the 19 smallest school districts in New Mexico. Staff housing and community resources, salary comparability,

quality educational programs, certification and staff development, and consolidation were all areas of concern with these districts.

Beeson (2001) listed enrollment decline as a major challenge facing principals in rural schools, along with consolidation and busing, teacher shortages, funding inequities, and declining facilities. She reported that since most school funding formulas were based on average daily enrollment, more often than not, rural schools with declining enrollments were forced to cut programs, staff, or both. Beeson and Strange (2000) wrote that in 22 states, more than half of all rural schools lost students between the 1994 and 1997 school years. Enrollment decline was also mentioned as often being associated with challenging budget situations according to Ryzewic (1981). She reported that decline was probably going to create a situation of forced choices such as decisions to cut programs or staff, while growth usually had less of a negative effect. The inability to reduce nondiscretionary costs added more stress to already difficult situations. With legal constraints and public accountability limiting the actions school districts could take in dealing with declines, they did not have the same freedom to adapt as did organizations operating in a free-market structure. Edelman and Knudson (1990) wrote, "Most studies showed that declining enrollment led to higher expenditures per pupil in the long run, even with the added ability of a school district to make adjustments" (p. 321). They also reported that, "Total expenditures per pupil for education have unambiguously increased during the last 15 years for schools with decreasing as well as increasing enrollments. These cost increases are associated with the rising price of inputs for education (teacher pay, transportation costs, energy costs, etc.)" (p. 319).

King (1983), another New Mexico researcher, studied different funding adjustments that were being introduced for schools with declining enrollments across the country during the late 1970s and early 1980s. King found there was a definite trend toward adjustments during this period. In 1975, only 12 states had financial provisions for declining enrollment. In 1978, the number of states with policies addressing the problem grew to 19, and in 1981, there were 28 states with adjustments in their state funding formulas for enrollment decline. Davis (1982), another New Mexico researcher, recommended studying possible alterations to the funding formula, specifically to recognize the difficulty of reducing fixed costs during dramatic enrollment declines resulting from severely altered economic conditions. King (1982) also recommended considering the establishment of a Declining Enrollment Commission, composed of educational leaders throughout the state (New Mexico), to allocate supplemental funds to school districts experiencing major declines in enrollment.

The need for special consideration for Minnesota school districts that were losing students was suggested in the report *School Finance*, *Office of Legislative Auditor* (February 2000). This indicated declining enrollment was a possible factor in the number of schools that were experiencing declining fund balances.

The state of Texas (as of 2002-2003) made provisions in law for some uncontrollable drops in enrollment and funding. Tex. Educ. Code § 42.005 provided for adjustments in calculating average daily attendance (ADA) if there were greater than a 2% loss in ADA because of a reduction at a military base. Subsection C provided for adjustments if a district had a large population of migrant students. Subsection D offered protection for ADA decreases resulting from natural disasters. Section 42.2521

provided financial protection for school districts experiencing great losses of taxable value from the previous year. The Texas Education Code did not, however, contain any provisions for a school that was experiencing a gradual steady decline in the population of school age children, such as that experienced by many rural schools.

Another financial consideration was funding for specific education programs.

Alexander and Salmon (1995) explained how a weighted per-pupil system funded education. They wrote,

This procedure is based on the assumption that pupil-teacher ratios are lower and operating and capital outlay costs are greater for special education programs. When the weighting procedure is used, the weight of 1 is assigned to general education pupils at certain grade levels that have the lowest cost per pupil. The cost per full time equivalent (FTE) pupil for the high cost programs is then computed in relation to the cost per pupil of the lowest cost pupils. A weighted system such as this was necessary to prevent even greater stress on schools during declines (p. 213).

Cibulka (1983) found that in the 10 districts he studied, costs for disadvantaged and handicapped students offset staff reductions in other areas. As of 2003, 42 Tex. Educ. Code specified the weights to be used in determining the funding for students in each of nine special education categories, two categories of compensatory education, bilingual education, career and technology education, and gifted and talented education.

Interesting comparisons of enrollment changes and per-pupil spending levels were reported by Alexander (1997). These indicated an inconsistent relationship between changes in enrollment and expenditures. Data on expenditures showed that 12 states were reported to have had substantial increases in per-pupil spending while having decreases or small increases in average daily attendance: Connecticut, Indiana, Kentucky, Maine, Michigan, New Jersey, New York, North Carolina, Ohio, Pennsylvania, Rhode Island, and West Virginia. Small increases in per-pupil spending

and large increases in average daily attendance were reported for 11 states: California, Colorado, Florida, Hawaii, Idaho, Kansas, Maryland, Minnesota, Oregon, Texas, and Utah.

Large per-pupil spending increases along with large enrollment increases occurred in Georgia, Nevada, New Hampshire, and Washington. Small per-pupil spending with a decrease of only a small increase in average daily attendance occurred in six states: Alaska, Illinois, Iowa, Montana, Oklahoma, and Wyoming. Eleven states were reported to have had low per-pupil spending in 1982-1983 and large subsequent increases in the following years: Arkansas, Georgia, Indiana, Kentucky, Maine, Nevada, Ohio, New Hampshire, North Carolina, South Carolina, and West Virginia. In 1982-1983, high per-pupil spending levels with small subsequent increases occurred in Alaska, Colorado, Hawaii, Illinois, Kansas, Maryland, Minnesota, Montana, Oregon, and Wyoming. In 1982-1983, low per-pupil spending and small subsequent increases occurred in Idaho, South Dakota, and Utah.

In 1982-1983, high per-pupil spending levels with large subsequent increases were experienced in seven states: Connecticut, Michigan, New Jersey, New York, Pennsylvania, Rhode Island, and Wisconsin. Economic growth and spending increases were also reported for the period. Large increases in personal per-pupil income and large growth in per-pupil spending occurred in the following 13 states: Connecticut, Georgia, Maine, Michigan, New Hampshire, New Jersey, New York, North Carolina, Ohio, Pennsylvania, Rhode Island, South Carolina, and Virginia. Small increases in personal per-pupil income and low growth in per-pupil spending occurred in Alaska, California, Colorado, Idaho, Kansas, Montana, North Dakota, Oklahoma, Utah, and

Wyoming. Small Increases in personal per-pupil income and large increases in per-pupil spending occurred in just two states: Nevada and Washington. Also, only two states experienced large increases in per-pupil income and small increases in per-pupil spending: Hawaii and Maryland.

Richard Rothstein's *Where's the Money Going? Changes in the Level and Composition of Education Spending, 1991-96* (1997) utilized numbers from the Digest of Education Statistics (1996) and his previous report written with Miles, *Where's the Money Gone? Changes in the Level and Composition of Education Spending* (1995), to analyze spending in nine school districts, including Anne Arundel, MD; Bettendorf, IA; Boulder, CO; Claiborne, TN; East Baton Rouge, LA; Falls River, MA; Los Angeles, CA; Middletown, NY; and Spring Branch, TX.

This report stated that from 1967 to 1996, all nine districts showed an average decrease, in the percentage of the budget going to regular education costs, of 80.1% to 56.8%. During this same time period, the percentage of budgets going to special education costs increased from 3.6% to 19%. This analysis led Rothstein to voice a concern: did the increase in special education funding come at the expense of regular education funding, since 40% of the net new money during this time went to special education while only 23.3% of the net new money went to regular education? Vocational education spending also increased from 1.4% to 2.7%, while bilingual education spending jumped from 0.3% to 2.5%. However, these same years saw a decrease in percentage of the overall budgets for compensatory education from 5% to 3.5%. A finding of particular interest in the 1997 study showed the percentage of the total special

education budget of Spring Branch ISD, TX, increasing from 2.9% in 1967 to 12.7% in 1991, then declining to 11% in 1996.

These trends were also observed by Goldenberg, Kunz, Hamburger, and Stevenson (2003) when they reported,

Rising costs for education in America is largely related to significant increases in services for special populations- those with disabilities and those with limited English proficiency. Additional substantial cost increases over the years are related to nutritional programs, deteriorating schools and the need to provide additional social services through the school, mostly to poor students. These student populations are unlikely to be those that increase standardized test scores, scores on which the schools are frequently evaluated.

Funding for these categorical programs could be a special challenge for rural schools. Salmon (1990) wrote that "often, rural school districts suffer from the inability to provide necessary instruction and support personnel in a cost-efficient manner due to the small incidence of identified clients" (p. 130). He added, "Without question, the categorical funding program that most favors rural school districts, and all other categories of school districts, is full state assumption or reimbursement of costs incurred" (p. 130).

# Special Education Funding

States offered a variety of funding systems to meet the requirements of the Individuals with Disabilities Education Act (IDEA) of 1990. The formulas listed by Parrish (1995) included: (1) pupil weights, which offered two or more categories of student based funding for special programs, expressed as a multiple of regular education aid, (2) resource-based funding based on allocation of specific education resources where classroom units were derived from prescribed staff/student ratios by disabling condition or type of placement, (3) percent reimbursement funding based on a percentage of

allowable or actual expenditures, and (4) flat grants with a fixed amount per student or per unit.

Examples of each of these funding methods were reported by Parrish, O'Reilly, Duenas, and Wolman (1997). As an example of a weighted system, the state of Oregon applied a special weight of 2.0 to all eligible special education students in the state. North Carolina's system was used to demonstrate the use of flat grants. There, the state was reported to add special education funds to basic education aid which was based on average daily membership (ADM). Funds for exceptional children (special education and academically gifted) were distributed per child based on the available state funds for this program divided by the number of qualifying students on the April 1 headcounts. The counts were limited to 12.5% of the average daily membership for children with disabilities and 3.9% for academically gifted children.

Resource-based funding was shown in an example from Missouri's system. The state distributed special education funds based on a flat grant per approved class of students. These funds were in addition to basic foundation funds. They were distributed in the following manner: \$14,050 for each approved class of children, \$7,340 for each professional staff member other than classroom teachers, \$3,670 for each full-time aide, \$1,530 for each homebound student, \$1 for each child under the age of 21 from the annual census of students with handicaps, and programs for 3- to 4-year-olds reimbursed at 100% of approved costs.

Rhode Island's funding system used a percent reimbursement system. Their formula was designed to support 100% of all additional or excess costs required to educate special education students. The program (1) calculated the average cost of

educating students for each district; (2) calculated the per-pupil cost for educating special education students in 10 special education program placements; (3) subtracted out the average per-pupil costs and assigned those expenses to be reimbursed in operation aid; and (4) allowed additional or excess costs falling within 110% of the state median for that year.

Special education funding in Texas was based on a weighted system. According to the Tex. Educ. Code § 42.151 (2003), special education students were funded at a specific weight, then multiplied by the basic adjusted allotment for that student. The adjusted basic allotment was based on a student full-time equivalent (FTE), which was based on 30 contact hours per week. A special education student being educated in mainstream classes was funded at a weight of 1.1 times the basic allotment for that student. Other special education weights were: 5.0 for homebound students; 3.0 for hospital class; 5.0 for speech therapy; 3.0 for resource room; 3.0 for self-contained, mild and moderate, regular campus; 3.0 for self-contained, severe, regular campus; 2.7 for off-home campus; 1.7 for nonpublic day school; and 2.3 for vocational adjustment class. A special instructional arrangement was provided for students in residential care and treatment facilities other than a state school, and whose parents or guardians did not reside in the district providing educational services. The funding weight for this arrangement was 4.0 for students who received educational services on a local school district campus. A student residing in a state school had a funding weight of 2.8.

Some people have asked if special education funding formulas should be "placement-neutral" as an incentive to serve children with disabilities through inclusive settings. Parrish (1995) reported findings indicating that some states sought formula

changes to lessen what might be seen as incentives to place students in more restrictive environments. Placement-neutral funding would distribute special education funds to schools strictly on the basis of school enrollment, as opposed to a system such as weighted funding, which funded students with disabilities at a higher level of funding.

A 1997 IDEA working group proposed that states be mandated to implement placement-neutral special education funding formulas to encourage the practice of serving students with disabilities in regular classrooms rather than moving them to special education classrooms for part of the day. The *Special Education Report* (1997) contrasted discussions by another IDEA group that highlighted promises as well as pitfalls of "placement neutral funding." Pitre (1998) wrote,

Some school districts had their special education funding allotments reduced when the legislature enacted the current weights (Senate Bill 7). In changing the weights, the state of Texas was trying to encourage the placement of students in less restrictive environments, particularly mainstream. That shift did not occur (p. 121).

O'Reilly (1995) found no support for the assertion that special education funding formulas that provided more funding for education of students in settings other than the regular classroom actually encouraged placements into the higher-funded options. In this study, O'Reilly looked at the data from 10 states. Seven were high users and three were low users of separate placements (placements other than in the regular classroom). He found the three low-use states used a percentage reimbursement formula, which was normally considered placement-neutral. However, in the seven high-use states, he found no pattern that would indicate that the type of funding formula alone dictated decisions to use more restrictive placements. In fact, he found patterns of high and low use of separate placements related to geographic regions, in that the

density of population could be associated with use of separate placement. Parrish (1995) suggested that state and federal fiscal policies that fully considered the desired balance needed between the least restrictive environment (LRE) and the continuum of services requirements under IDEA might be needed.

# **Vocational Education Funding**

As with the funding of special education, vocational education costs often exceeded the costs for regular education classes. Klein (2001) stated that state funding methods for vocational education fell into four broad categories: foundation grant programs, unit cost funding, weighted adjustments, and performance based outcomes.

As of the date of the report, 20% of the states (Arkansas, Nebraska, Nevada, New Hampshire, New Jersey, New Mexico, Oregon, South Dakota, Wisconsin, and Wyoming) did not provide funding in addition to the foundation program to fund vocational education. The amount provided in the foundation funding program, which was based on FTE or average daily membership units, was required to cover the costs of vocational education. This was not to say that the cost of vocational education was not taken into consideration when determining foundation funding levels. In fact, some of these states had levels of funding that exceeded that provided for vocational students in traditional programs in many states.

Funding by FTE was one of several different methods of unit cost funding utilized. For example, a district that enrolled 5% of the state's FTE vocational students would be eligible for 5% of the state funds allocated for vocational education. States that allocated most of their vocational funds based on student participation levels (with variations of funding mechanisms) were Arizona, California, Connecticut, Hawaii,

Maryland, Massachusetts, Montana, New York, North Carolina, Rhode Island, Utah, Vermont, Washington, and West Virginia. Funding by instructional unit, which considered the total number of vocational students divided by the average class size, was used in Alabama, Delaware, Kentucky, Mississippi, Tennessee, and Virginia. A third example of unit-cost funding was cost reimbursement, used in Colorado, Idaho, lowa, Maine, Michigan, North Dakota, Oklahoma, and Pennsylvania by reimbursing districts for all or a percentage of costs associated with providing vocational education.

Weighted funding was accomplished by inflating the number of FTE students in vocational education classes. Klein wrote that the Texas system provided the clearest system of how weighted formulas operate for its career and technology classes. Other states utilizing weighted funding included Alaska, Florida, Georgia, Illinois, Indiana, Kansas, Louisiana, Ohio, and South Carolina.

The final vocational education funding method listed, performance funding, was said to be used in Indiana and Missouri. This method based funding on student participation in vocational programs, performance outcomes, or both. While this method was not widely used, a national survey indicated interest in switching to this method.

Determining the superior method of funding vocational education could be difficult. Swift (1993) wrote that,

Insufficient data were developed to determine a dollar amount for the additional cost of vocational education or a ratio of cost of vocational education to the cost of regular education, although the data pointed to supplies and materials, student organizations, space, and equipment as increasing the cost of vocational education (p. v).

A report by the Ohio State Legislative Office of Education Oversight (LOEO) (2002) raised questions about state vocational funding. It stated that, "LOEO has found

little evidence to support Ohio's current configuration of supplemental funding weights for CTE" (p. 1).

The level of funding for vocational education (career and technology education) in Texas continued to be based on a weighted formula included in the foundation payment to each school district. As explained in Tex. Educ. Code, § 42.154(a) (2003),

For each full time equivalent student (FTE) in average daily attendance in an approved career and technology education program in grades nine through 12 or in career and technology education programs for students with disabilities in grades seven through 12, a district is entitled to an annual allotment equal to the adjusted basic allotment multiplied by a weight of 1.35 (no page numbers).

Rothstein (2004) wrote that, "Children's social and economic backgrounds influence their learning. Children from literate homes enter school with greater vocabularies than do children unfamiliar with books" (p. 6). Additional funding is required to upgrade educational programs for students who enter school with less exposure to literacy. Ogden, Thompson, Russell, and Simons (2003) reported that supplemental instruction had positive short- and long-term impacts on conditional students, and no impact on traditional students.

To address the needs of disadvantaged students, the state of Texas provided additional funding for compensatory education. Compensatory education in Texas was funded by utilizing a weighted system to determine an amount and then including that in each district's foundation funds. According to Tex. Educ. Code § 42.152(a) (2003),

For each student who is educationally disadvantaged or who is a student who does not have a disability and resides in a residential placement facility in a district in which a student's parent or legal guardian does not reside, a district is entitled to an annual allotment of the adjusted basic allotment multiplied by 0.2, and by 2.41for each full time equivalent student who is in a remedial support program under Section 29.081 because the student is pregnant.

# Bilingual Education Funding

Bilingual education, sometimes controversial, was addressed (or not) through different approaches across the country. Garcia and Morgan (1997) listed 11 states that mandated bilingual education: Alaska, California, Connecticut, Illinois, Massachusetts, New Jersey, New York, Texas, Washington, and Wisconsin. On the other hand, Arkansas, Delaware, and Nebraska reportedly prohibited bilingual education.

Twenty-five states were reported to have laws that were not program specific for limited English proficiency (LEP) programs: Arizona, Colorado, Florida, Georgia, Hawaii, Idaho, Iowa, Kansas, Maine, Maryland, Michigan, Minnesota, Missouri, Nevada, New Hampshire, New Mexico, North Carolina, Ohio, Oklahoma, Oregon, Pennsylvania, Rhode Island, Tennessee, Utah, and Virginia. Eleven states had no laws regarding LEP programs: Alabama, Kentucky, Louisiana, Mississippi, Montana, North Dakota, South Carolina, South Dakota, Vermont, West Virginia, and Wyoming.

Twenty-eight states fund all LEP programs: Alabama, Alaska, Arizona, Arkansas, California, Connecticut, Florida, Hawaii, Idaho, Illinois, Indiana, Iowa, Kansas, Maryland, Massachusetts, Minnesota, Nebraska, New Jersey, New York, North Dakota, Oklahoma, Rhode Island, Texas Utah, Washington, West Virginia, and Wisconsin. Two states, Michigan and New Mexico, fund only bilingual education programs and Virginia funds only nonbilingual programs. Nineteen states offer no funding for LEP programs: Delaware, Georgia, Kentucky, Louisiana, Maine, Mississippi, Missouri, Montana, Nevada, New Hampshire, North Carolina, Ohio, Oregon, Pennsylvania, South Carolina, South Dakota, Tennessee, Utah, Wyoming.

The level of funding for bilingual education in Texas was determined by applying a weighted system for students being served, and then including the weighted amount in each school district's foundation funds. Tex. Educ. Code § 42.153(a) (2003) specified that, "For each student in average daily attendance in a bilingual education or special language program under Subchapter B, Chapter 29, a district is entitled to an annual allotment equal to the adjusted basic allotment multiplied by 0.1" (no page numbers).

The financial aspects of declining enrollment could be made even more challenging by geographic variations in costs from factors beyond the control of the school districts. Some states have made attempts to address this issue through the development of an adjustment in the school funding mechanism. In 1984, the State of Texas adopted a price differential index to accomplish this difference. In 1991-1992, it was replaced by the cost of education index (CEI) (Charles A. Dana Center, 2000). The factors considered in the development of the CEI were (1) competitive beginning average teacher salary, (2) location in a county with fewer than 40,000 people, (3) percentage of low-income pupils, (4) district type, and (5) district size in terms of average daily attendance. The CEI study for Texas was completed in December 1990, and as of 2002-2003 the same data was still being used (Casey, 2000).

Other studies have indicated that adjustments for these factors may be appropriate. Degrow (1989) concluded that using county per-pupil expenditure and per capita personal income as dependent variables in calculating the education price index would benefit the greatest number of Arizona schools. Walling (1985) listed several ideas for state initiatives to improve equalization. Among these suggestions was the use of cost of education indices because of regional variations in expenditures.

Most recommendations for cost indexes included the consideration of several factors. A sole factor may not be enough to determine a relationship. Brewer (1993) discovered this to be true when he found no significant relationship between school district size and teacher cost per student FTE.

#### Political Considerations

The general population's views and opinions on the public education system had a large impact on legislative actions that affect the funding and operation of schools.

This has included curriculum, testing and evaluation, the system of funding, the sources of funding, and regulations from federal to state to local governments. Rothstein (1997) wrote that,

Everyone from education experts to casual observers frequently speak of the inefficiency of U.S. elementary and secondary education. The claim rests in part on a belief that taxpayers have poured vast new resources into public education but have little in the way of results to show for this investment (p. 8-9).

After allowing for inflation, the amount spent on each pupil in America's schools has increased unabated for a century, with steady growth at about 3.5% a year. Despite increasingly large amounts of resources devoted to schools, student performance has shown few tangible improvements....Our schools are demonstrably inefficient. (p. 8).

Rothstein found, however, that Hanushek did not really allow for inflation. He found that schools had a higher proportion of labor and less technology than industry. This resulted in a level of productivity that could not be compared to industry. Price reductions from technological improvements were not available to schools.

Using a modified service sector index called the net services index (NSI) to adjust school expenditures for inflation (treating the school as a service industry rather than manufacturing), he found that the increase in public spending had not been near

as excessive as reported. For instance, the amount spent per pupil in 1967 was \$687.00.

According to the consumer price index (CPI), that translated into \$3,229 in 1996 dollars. However, using the more comparable net services index (NSI), it would be \$4,053 in 1996 dollars. Using the more appropriate NSI, Rothstein found that, "The increase in school expenditures between 1967 and 1996 was only 62% of the amount indicated using the CPI" (p. 8-9). For example: If current spending were \$5,400 per student, this would have been an increase of \$2,171 above the CSI value of \$3,229. However, it would have been an increase of only \$1,347 above the NSI value of \$4,053. This implied that the spending changes shown in this study may not have had as great an impact as it appeared, judging strictly from dollar amounts.

Political considerations when dealing with the unpleasant decisions associated with declining enrollments could also result in challenges that were more difficult than they appeared. While existing literature stated that declining enrollments could be viewed as opportunities to be innovative, Boyd (1979) found that decline was handled in many situations very conservatively. According to Pennings and Goodman (1977), each politically influential group had a demand threshold that had to be reached in return for its support. The ability to do this was determined by the skill of the administrator. The skills that might be required included the ability to become political conflict managers and statesmen rather than just managers (lannacone, 1979) and the ability to engage in cooperative and competitive intergovernmental relations (Mueller, 1977).

In times of declining enrollments, which usually translated into times of declining funds, there was often much rhetoric about becoming more efficient or "leaner" and

cutting out costly expenditures and programs that were not necessary. Berman and McLaughlin (1978) found that there were value conflicts in public school systems. They wrote that political considerations would often outweigh concerns for programs oriented toward improving the overall quality of educational delivery and that these programs could succumb to pressure from special interests. Andrews (1983) reported that declining enrollment changes the nature of school district's relationships to communities, frequently in the direction of overt politicization. He found that declining enrollment changed decision-making patterns in districts, calling for representational behavior on the part of superintendents different from the conservative and protective-of-the-status-quo style of the past. Knepp (1983) found that decisions on budgetary reductions and related problems appeared to be better received by the community and staff when the process included a study by a representative group, a widespread communication effort, and an adequate amount of time given to hearings and deliberations prior to final decisions being made.

Community involvement could also be extremely important when considering new expenditures necessitated by growth. Smith (1996) wrote that school planners facing new school construction may experience sticker shock from high construction costs and accommodation for technology. Abramson (1994) wrote that for these reasons, more money was being spent to retrofit existing buildings in an effort to avoid the increasing price of new construction.

#### Summary

The trend of declining school enrollments in certain areas continued simultaneously with enrollment increases in some urban and suburban areas meant that

all school districts were not dealing with the same situation. While dealing with enrollment growth could be a challenge, it was not the same challenge as dealing with enrollment decline. Vital questions emerged from both situations: If a school district's overall average daily attendance declined, did the number of full-time-equivalent students in special education or career and technology training decrease at the same rate? Did such students increase at the same rate if a district's enrollment increased? If overall funding dropped from declining enrollment, and special education expenses did not drop, was there adequate funding for regular education costs?

A system that provided special program funding that was based on the number of students enrolled in the program was designed to assure adequate funding for that program. However, did those funds mask the financial toll being taken on regular education during a period of decline by making the average per-student funding amount appear to be more than the amount actually available for regular education per-student expenses?

The same question could be asked about districts with increasing enrollments. Did the state education funding plans meet the needs of students in districts that experienced declining enrollment? It is important that students in schools with declining enrollments not get shortchanged because of changes beyond the control of school administrators and boards. Hopefully, the needs of students in schools with declining enrollments would not be overshadowed by the larger numbers of students in growing schools, nor by the political influence that grew in some areas as rapidly as it diminished in others.

## **CHAPTER 3**

## METHODS AND INSTRUMENTATION

The purpose of this study was to determine if a statistically significant relationship existed between overall Texas school district budgets and the funds budgeted for students enrolled in career and technology education, bilingual education, compensatory education, and special education during increasing, stable, or declining enrollments. This information was essential in determining if enrollment changes affected the quality of education for students.

#### Research Question

Is there a difference in the composite change in per-student budgets for categorically funded education programs as compared to the overall per-student budgets between districts whose average daily attendances have increased, decreased, or remained stable?

The null hypothesis was that there is no difference in the composite change in per-student budgets for categorically funded education programs as compared to the overall per-student budget between districts whose average daily attendances have increased, decreased, or remained stable.

## Population

The study included 942 Texas school districts that had average daily attendances of more than 130 students. A minimum ADA of 130 was selected because funding formulas used for smaller schools were not based on exact attendance figures and could possibly provide unclear enrollment data, making it difficult to determine exact increases and decreases. Charter schools, schools for incarcerated students, and

school districts located entirely on military bases were not included. Information was obtained directly from the Texas Education Agency.

#### Data Collection

Data were collected from the Texas Education Agency summary of finances for the 942 districts from the 1993-1994 and 2003-2004 school years. The amounts of total funds budgeted along with the amounts of funds budgeted for career and technology education, compensatory education, bilingual education, and special education were collected for each school district.

## Data Analysis

After the data were collected, the total amount budgeted for each district was divided by the number of students in average daily attendance to determine the perstudent amount budgeted. The amount in the budget for each educational program was divided by the total number of students or full time equivalents from each of the four educational programs to determine the per-student amount budgeted for those programs. Full time equivalents (FTEs) were used for special education and for career and technology education program students; the number of qualifying students was used for compensatory education; and average daily attendance (ADA) of bilingual education students was used. This procedure was applied to the data collected for both the 1993-1994 and the 2003-2004 school years.

The per-student amounts from 2003-2004 were divided by the per-student amounts from 1993-1994. The change in the per-student amount from the total budget was then compared to the change in the per-student amount from the individual

program budgets to determine the change in per-student individual program budgets from the overall per-student budget.

For each of the 942 school districts, the percentage of the total 1993-1994 budget that was appropriated for each of the four programs was determined. The same calculation was done for each district for the 2003-2004 school year. Districts were then categorized by enrollment change over the 10-year period. Those with an increase of more than 5% were classified as increasing. Those with enrollments increasing or decreasing 5% or less were classified as stable. Those with a decrease of more than 5% were classified as decreasing. The data was then analyzed using a change of 10% and 20% as the dividing lines between stable and increasing or decreasing districts. Finally, the data was analyzed using 5%, 10%, 15%, and 20% as the dividing lines for both increasing and decreasing districts. The independent variables (IV) were identified as the group in which a district was classified.

It was then determined if the schools in each category had experienced changes in the percentages of the total budget allocated for each of the four educational programs, and how that change compared to the percentage of change in enrollment for the 10-year period. The four dependent variables (DV) were the percentage of change between the 1993-1994 and 2003-2004 school years for each individual program budget, as compared to the overall budget.

A quantitative study was conducted using two multivariate tests. The statistical significance of the dependent variables was determined through the use of multivariate analysis of variance or MANOVA, which not only determined the statistical significance of dependent variables, but allowed multiplicity of variables. This met the needs of this

study, which contained four dependent variables. A p value of less than or equal to .05 was considered statistically significant for each of the four dependent variables, thus causing a rejection of the null hypothesis.

The independent variable was represented by Y, and the dependent variables were represented by X. In this case aY1 + bY2 + cY3 produced a synthetic variable Y hat. This Y hat = dX1 + eX2 + fX3 + gX4 + h. This combination of the variables best explains the variance in the grouping variables.

# Summary

This thorough breakdown of the data from the independent variables offered a complete analysis leaving little possibility of any possible findings remaining unobserved.

#### CHAPTER 4

## ANALYSIS AND RESULTS

#### Introduction

Is there a difference in the composite change in per-student budgets for categorically funded education programs as compared to the overall per-student budgets between districts whose average daily attendances have increased decreased, or remained stable? The purpose of this chapter is to answer that question by grouping Texas school districts into the three categories described and by analyzing the funds reported as budgeted in the 1993-1994 and 2003-2004 school years. The specific programs studied were special education, career and technology or vocational education (CATE), compensatory education, and bilingual education. The total study sample included 942 Texas independent school districts (ISDs).

## **Procedures**

The school districts studied were categorized into three groups based on enrollment change over the 10-year period being studied. The total average daily attendance (ADA) for each school district for the 1993-1994 school year was compared to the ADA for the 2003-2004 school year to determine if there were any changes. For instance, Rogers ISD had an overall ADA of 783.615 for 1993-1994. The ADA for 2003-2004 was 816.537. This was 1.0420 times the size of the 1993-1994 amount, which was an increase of 32.922 or 4.2012%.

The ADA change was determined for each of the 942 districts, which were ranked from the district with the greatest decrease to the district with the greatest increase. The districts were then divided into three categories (Table 2). Districts with

an ADA increase of more than 5% were categorized as increasers. Districts experiencing an increase or decrease no greater than 5% were categorized as stable. Districts with decreases of greater than 5% were categorized as decreasers.

There were 498 districts with increasing enrollments. The increases ranged from Dalhart ISD's increase of 5.09% to Frisco ISD's dramatic increase of more than 608%. There were 186 districts classified as having stable enrollments. The changes ranged from Nueces Canyon Consolidated ISD's decline of 4.98% to Burkburnett ISD's increase of 4.92%. There were 258 districts falling into the decreaser category. The decreases ranged from Terrell County ISD's decrease of 40.78% to Hallettsville ISD's decrease of only 5.07%.

Table 2

Ranges of Enrollment Change

Enrollment Category	Number of Districts	Low range	High range
Increasing	498	5.09%	608.28%
Stable	186	(4.98%)	4.92%
Decreasing	258	(40.78%)	(5.07%)

(Negative numbers appear in parentheses.)

The total expenditures from the 942 school districts were divided by the overall ADA to determine the total per-student expenditures. This was done for the 1993-1994 and the 2003-2004 school years. The expenditures for each district from 2003-2004 were divided by the expenditures for each district from 1993-1994 to determine the percentage change over the 10-year period. As an example, Bonham ISD's 1993-1994 total expenditures added up to \$5,984,736 and its ADA was 1,765.756. This resulted in per-student spending of \$3,389.33. For the 2003-2004 school year, Bonham ISD's total

expenditures of \$8,879,967 were divided by its ADA of 1851.369, resulting in perstudent spending of \$4,796.43. This figure (\$4,796.43) was 1.4151 times the 1993-1994 per-student amount (\$3,389.33) for an increase of 41.51%.

After this change in the overall amount expended per student was determined, a similar process was used to determine the amount spent from funds budgeted for specific programs per student enrolled in special education, career and technology education, compensatory education, and bilingual education. For example, the same school district, Bonham ISD, reported CATE expenditures of \$107,958 and a full-time equivalent (FTE) CATE enrollment of 51.37 in 1993-1994. Dividing the CATE FTEs into the CATE expenditures resulted in a total of \$2,101.57 spent per CATE FTE in 1993-1994. For 2003-2004, expenses of \$140,591 were divided by 103.995 FTEs, resulting in a total of \$1,351.90 spent per CATE FTE in Bonham ISD. The 2003-2004 CATE per-FTE expenditures divided by those from 1993-1994 resulted in a quotient of 0.6432, which was a 35.67% decrease in CATE per-FTE spending.

At this point a comparison can be made between the overall change in perstudent spending and the change in the CATE spending per FTE. If the overall perstudent spending increased 41.5%, and the CATE spending per vocational student decreased by 35.67%, the range between the two changes is 77.17% with overall student spending climbing at a rate far above that of career and technology education.

This process similarly compared each educational program budget compared to its respective overall budget. The amounts used were the totals from all the three categories (increasing, stable, decreasing) created from each of the 942 schools in the study. Multivariate analysis of variance was used to determine the statistical

significance of the dependent variables, which were the four educational categories: special education, career and technology education, compensatory education, bilingual education. A p value of less than or equal to .05 was considered significant.

# **Increasing Enrollment**

This study first examined the school districts with increasing enrollments. These districts had combined total expenses of \$6,798,017,817 for the 1993-1994 school year. They also had combined total ADA of 2,248,457.282 that year. This was \$3,023.41 expended per student. The same group of schools had combined expenses of \$15,021,732,916 in 2003-2004. That amount divided by a combined ADA of 2,966,021.55 resulted in \$5,064.60 cost per student. The 2003-2004 per-student expenditure divided by the 1993-1994 per student expenditure showed the 2003-2004 amount to be 1.6761 times the size of the 1993-1994 amount, or an increase of 67.6128% from 1993-1994 to 2003-2004.

FTE students enrolled in special education classes in 1993-1994 numbered 293,023.0999, with total expenditures of \$904,132,916, making the per-student expenditure for the program \$3,085.53. There were 356,615.8215 FTEs for 2003-2004 for which \$2,221,656,949 was spent. This resulted in per-special-education-student expenditure of \$6,229.83, an increase of 2.01904 times, or 101.1904%, the 1993-1994 amount. This was substantially higher than the 67% increase in the overall spending from 1993-1994 to 2003-2004.

FTEs in career and technology education in 1993-1994 were 64,588.879. With CATE expenditures totaling \$260,647,873, the CATE expenditure per CATE student were \$4,035.49. The 2003-2004 school year saw 118,533.767 FTEs in CATE with

program expenditures of \$554,975,864. The expenditures divided by FTEs showed an amount spent per CATE student of \$4,682.00. Dividing the 2003-2004 per CATE student amount by the 1993-1994 amount indicated a change of 1.1602, an increase of 16.02%.

The compensatory education enrollment is calculated in a somewhat different manner than the full time equivalent (FTE) system used for special education and career and technology education. Compensatory education enrollment is determined by the number of students from low socioeconomic backgrounds, rather than the amount of time in a particular instructional placement. Another difference occurs in compensatory education financial reporting. In some situations school districts may comingle state compensatory funds with federal funds allocated for similar purposes. As a result, it was not possible to determine accurate expenditure amounts for a comparison of 1993-1994 and 2003-2004. For this reason state compensatory funding was studied rather than expenditures.

For the 1993-1994 school year, compensatory education funding was \$489,373,830 with a compensatory education enrollment of 1,022,776.9. This was an average of \$478.47 per enrolled compensatory education student. In 2003-2004, compensatory education enrollment was 1,563,079.9 with funding of \$774,378,213.4, which was \$495.41 per compensatory education student. Dividing the 2003-2004 per student amount by the 1993-1994 amount showed a relatively small change of 1.0354 or an increase of only 3.54%.

Bilingual education was funded on the ADA of bilingual education students. In 1993-1994, bilingual education expenditures for all the increasing school districts

combined were \$239,203,512; bilingual education student ADA was 245,826.813. This was \$973.05 per bilingual student. Ten years later, bilingual education expenditures increased to \$746,689,196 which, when divided by the ADA of 438,499.023, was \$1,702.82 per bilingual education student, a change of 1.7499 (74.99%).

The school districts categorized as increasers, while all experiencing increases in the levels of expenditures for educational programs, exhibited considerable variation in those increases (Tables 3 & 4).

Table 3

Budget Changes in Increasing Enrollment Districts

Program	Expenditures	Students	Amount Per Student
1993-1994			
Overall	\$6,798,017,817	2,248,457	\$3,023
Special Ed	\$904,132,916	293,023	\$3,085
Career & Tech	\$260,647,873	64,588	\$4,035
Comp Ed	\$489,373,830	1,022,776	\$478
Bilingual Ed	\$239,203,512	245,826	\$973
2003-2004			
Overall	\$15,021,732,916	2,966,021	\$5,064
Special Ed	\$2,221,656,949	356,615	\$6,229
Career & Tech	\$554,975,864	118,533	\$4,682
Comp Ed	\$774,378,213	1,563,079	\$495
Bilingual Ed	\$746,689,196	438,499	\$1,702

Table 4

Changes in Per-Student Spending for Increasing Enrollment Districts

Program	1993-1994	2003-2004	Change	% Increase
Overall	\$3,023.41	\$5,064.60	1.67	67%
Special Ed	\$3,085.53	\$6,229.83	2.01	102%
Career & Tech	\$4,035.49	\$4,682.00	1.16	16%
Comp Ed	\$478.47	\$495.41	1.03	3%
Bilingual Ed	\$973.05	\$1,702.82	1.74	75%

## Stable Enrollment

The 186 stable enrollment districts showed considerably less variation in the amount of change in overall enrollment. With a maximum increase or decrease of only 5%, smaller variations in spending patterns were expected. In several categories this proved to be the case. In others, it did not. The stable districts had total combined expenditures of \$1,572,941,530 in 1993-1994. When divided by the total combined ADA of 509,661.013, total expenditures per student were \$3,086.25. For the 2003-2004 year the expenditures totaled \$2,579,089,412. With an ADA of 510,106.17, the total expenditure per student was \$5,055.98, a change of 1.6382 or an increase of 63.22%.

In 1993-1994 funds budgeted for special education in the stable school districts were \$209,614,764 with FTEs of 66,546.4476. This was \$3,149.90 per FTE. A decade later, expenditures of \$360,915,048 divided by FTEs of 70,708.1551 with each FTE being allotted \$5,104.29, resulted in a change of 1.6204 or an increase of 62.0460%.

The area of career and technology education saw less of an increase during this period. Expenditures in 1993-1994 were \$62,524,502 with FTEs totaling 15,702.951.

This was \$3,981.70 per FTE. This number increased to \$4,825.37 in 2003-2004 with

expenditures of \$110,262,965 divided by FTEs of 22,850.673. The result was a change of 1.2118 or an increase of only 21.1885%. This was considerably lower than the special education change for stable schools but higher than the 16% increase in CATE funds for schools with increasing enrollments.

Compensatory education funding for stable schools for 1993-1994 was \$137,996,232 with an enrollment of 282,740.7. This was per student funding of \$488.06. For the 2003-2004 school year, funding was \$174,313,083 with enrollment at 335,688.5. This resulted in \$519.27 in funding per compensatory education student. The difference in the amount reported was a change of 1.0639 or an increase of 6.39%.

Bilingual education funds budgeted for 1993-1994 equaled \$42,015,447; ADA was 52,911.99. This resulted in per-ADA expenditure of \$794.06. In 2003-2004, bilingual expenditures increased to \$87,182,470. Divided by an ADA of 64,631.791, this expenditurewas \$1,348.91 per bilingual student, a change of 1.6987 or an increase of 69.87%.

When compared to the increasing enrollment school districts, the stable enrollment districts had increases in career & technology education and bilingual education. There was an increase that occurred in special education funding for increasing districts and in compensatory education funding for stable districts (Tables 5 & 6).

Table 5

Budget Changes in Stable Enrollment Districts

Program	Expenditures	Students	Amount Per Student
1993-1994			
Overall	\$1,572,941,530	509,661	\$3,086
Special Ed	\$209,614,764	66,546	\$3,149
Career & Tech	\$62,524,502	15,702	\$3,981
Comp Ed	\$137,996,232	282,740	\$488
Bilingual Ed	\$42,015,447	52,911	\$794
2003-2004			
Overall	\$2,579,089,412	510,106	\$5,055
Special Ed	\$360,915,048	70,708	\$5,104
Career & Tech	\$110,262,965	22,850	\$4,825
Comp Ed	\$174,313,083	335,688	\$519
Bilingual Ed	\$87,182,470	64,631	\$1,348

Table 6

Changes in Per-Student Spending for Stable Enrollment Districts

Program	1993-1994	2003-2004	Change	% Increase
Overall	\$3,086	\$5,055	1.63	63%
Special Ed	\$3,149	\$5,104	1.62	62%
Career & Tech	\$3,981	\$4,825	1.21	21%
Comp Ed	\$488	\$519	1.06	6%
Bilingual Ed	\$794	\$1,348	1.69	70%

# **Decreasing Enrollment**

The 258 school districts categorized as decreasers actually experienced a decrease of over 62,000 students. They had a total ADA of 532,036.813 with total expenditures of \$1,753,207,129 for the 1993-1994 school year. Ten years later, the ADA in these districts had decreased to 469,625.648 with expenditures of

\$2,449,131,840. This was an increase in per student spending from \$3,295.27 to \$5,215.07or 1.58 times the 1993-1994 expenditures, an increase of 58%.

During this time period, special education FTEs also decreased from 72,917.6046 to 66,257.5202, a decrease of almost 10% over the decade. Expenses for the program went from \$241,797,429 to \$359,369,495. This was an increase in spending per FTE from \$3,316.03 to \$5,423.82 or a 63.5% increase. This was not dramatically different from the overall spending increase per student. The changes in per student budgets for decreasing enrollment schools are shown in Table 7.

During this same time period, enrollment in CATE programs in the decreasing schools actually increased. Combined district FTEs for 1993-1994 were 18,869.032. For 2003-2004, this number was up to 22,818.908. Combined district CATE expenditures went from \$82,779,284 in 1993-1994 to \$114,660,101 in 2003-2004 for a change in the per-FTE budget of \$4,387.04 to \$5,024.78, an increase of 14.5%.

Compensatory education enrollment also increased during this decade, although not as much as CATE. During the 1993-1994 school year, compensatory education enrollment was at 318,446.2 with funding at \$160,294,343. This was \$503.36 per compensatory education student. In 2004, the enrollment reported was 331,757 with funding of \$177,174,159.4. This was \$534.04 per enrolled compensatory education student. The change for was 1.060 times the amount from 2003-2004 or an increase of 6%.

Declining districts saw the number of bilingual education students increase by approximately 5%. In 1993-1994, the bilingual ADA for these districts was 30,614 with budgeted expenditures of \$47,388,686 or \$1,547.94 per bilingual student based on

ADA. In 2003-2004, the bilingual ADA increased to 32,168.365 with expenditures at \$54,992,341 or \$1,709.51 per ADA, resulting in an approximate increase of 10% in spending per bilingual student. Table 8 shows these changes in per-student spending for decreasing enrollment districts.

Table 7

Budget Changes for Decreasing Enrollment Districts

Program	Expenditures	Students	Amount Per Student
1993-1994			
Overall	\$1,753,207,129	532,036	\$3,295
Special Ed	\$241,797,429	72,917	\$3,316
Career & Tech	\$82,779,284	18,869	\$4,387
Comp Ed	\$160,294,343	318,446	\$503
Bilingual Ed	\$47,388,686	30,614	\$1,547
2003-2004			
Overall	\$2,449,131,840	469,625	\$5,215
Special Ed	\$359,369,495	66,257	\$5,423
Career & Tech	\$114,660,101	22,818	\$5,024
Comp Ed	\$177,174,159	331,757	\$534
Bilingual Ed	\$54,992,341	32,168	\$1,709

Table 8

Changes in Per-Student Spending for Decreasing Enrollment Schools

Program	1993-1994	2003-2004	Change	% Increase
Overall	\$3,295	\$5,215	1.58	58%
Special Ed	\$3,316	\$5,423	1.63	63%
Career & Tech	\$4,387	\$5,024	1.14	14%
Comp Ed	\$534	\$534	1.06	6%
Bilingual Ed	\$1,547	\$1,709	1.10	10%

When these numbers were determined, a comparison was made by taking the change between the total 1993-1994 budgeted amount and the total 2003-2004 budgeted amount and comparing this to the difference between the change in budgeted amounts for each of the four educational programs. This process was repeated for each of the three enrollment groups. The results are shown on Table 9.

Table 9

Per-Student Budget Amount Comparisons

Category	Overall Change	Program Change	Difference	% Change		
Special Education						
Increasers	1.67	2.01	0.340	34.0%		
Stable	1.63	1.62	(0.01)	(1%)		
Decreasers	1.68	1.63	(0.05)	(5%)		
Career and Techno	logy Education					
Increasers	1.67	1.16	(0.510)	(51.0%)		
Stable	1.63	1.21	(0.420)	(42.0%)		
Decreasers	1.68	1.14	(0.540)	(54.0%)		
Compensatory Edu	cation					
Increasers	1.67	1.03	(0.640)	(64.0%)		
Stable	1.63	1.06	(0.570)	(57.0%)		
Decreasers	1.68	1.06	(0.620)	(62.0%)		
Bilingual Education						
Increasers	1.67	1.74	0.070	7.0%		
Stable	1.63	1.69	0.060	6.0%		
Decreasers	1.68	1.10	(0.580)	(58.0%)		

(Negative numbers appear in parentheses.)

The percentages that per-student program expenditures differ from overall perstudent expenditures are exhibited by enrollment category and instructional category. For example, when looking at special education in increasing-enrollment school districts, I found that the change in per-student expenditures increased by 2.0190 or an increase of 102%. Comparing this to the overall per-student change for increasing school districts showed a difference of 1.6751, a 68% increase. The difference in the two is 0.343916567, an increase of 34%, which means that per-student special education costs increased at a rate that was 34% greater than the rate of increase for overall per-student costs.

Quite a variation can be seen in the funding changes for special education programs, ranging from a 34% increase in increasing-enrollment districts, a 1.8% decrease in stable districts, and a 5.3% decrease in decreasing-enrollment districts. Career and technology education exhibited more consistency, with 51% less funding for increasing-enrollment districts, 43% less funding for stable districts, and 54% less funding for decreasing-enrollment districts. In the area of compensatory education, the research indicated great similarities in districts of all enrollment categories, which had funding declines of 64%, 57%, and 63% respectively.

Bilingual education budgets had consistency within the first two enrollment categories, varying less than 1% from the overall. Increasers had 0.07% more funding and stable enrollment districts had 0.06% more funding. Decreasing enrollment districts showed a decline of 0.58% in funding. Bilingual education along with special education were the only instructional program that came close to having budget changes staying so closely in line with overall budget changes in at least two enrollment categories.

When evaluating these findings from a statistical standpoint, there were one independent variable and four dependent variables. The independent variable was increasing, stable, and decreasing enrollments. The four dependent variables were

special education, career and technology education, compensatory education, and bilingual education budget changes. The MANOVA results for the four dependent variables (Table 10) indicated p values of .996 for special education, .474 for career and technology education, .561 for compensatory education, and .332 for bilingual education. While bilingual education had the lowest p value, it was higher than p= .05.

Table 10 *Univariate* f-tests for Dependent Variables

Variable	Sq. Mul. <i>R</i>	Adj. R²	HMS
Special Ed	0.00000	0.00000	29346.80613
CATE	0.00055	0.00000	1825332.58700
Comp Ed	0.00036	0.00000	265.65521
Bilingual Ed	0.00100	0.00000	239421623.90000
Variable	MSE	f	р
Special Ed	1359250367.00000	0.00002	.996
CATE	3552482.50000	0.51382	.474
Comp Ed	785.70112	0.33811	.561
Bilingual Ed	253895127.80000	0.94299	.332

When attempting to determine statistical relationships, there appeared to be a small-effect size. As illustrated on Table 11, the Wilk's  $\Lambda$  test determined a value of .99788. This indicated that there was very little relationship between variables.

Table 11

Multivariate Test of Significance (Wilk's  $\Lambda$ )

Value	Exact f	Hdf	Error <i>df</i>	Significance of f
.99788	0.49682	4.00	937.00	0.738

Several observations were made while compiling the data. Out of 499 increasing enrollments districts, 14 more districts reported career and technology FTEs in 2003-

2004 than in 1993-1994. Of the 186 stable enrollment districts, two additional districts reported CATE FTEs in 2003-2004, and of the 258 decreasing districts, four appeared to have added CATE classes by 2003-2004. However, there were no districts in any of the three enrollment classifications that appeared to have completely dropped career and technology classes.

Students who qualified for compensatory education were reported in almost every district studied, with three exceptions. Highland Park ISD, an affluent school district in the Dallas area, had no qualifying students reported in 1993-1994 or 2003-2004. Sabine Pass ISD and Ft. Davis ISD, both small districts, reported no qualifying students in 1993-1994, but did report qualifying students in 2003-2004. A possible explanation could be the lack of a school cafeteria: Compensatory education funding was based on the number of students qualifying for free and reduced lunches. There were a small number of rural schools where all students brought their lunches to school, and the schools did not operate cafeterias. This could have caused the districts to fail to report the number of students who would have otherwise qualified for free/reduced price lunches.

Greater changes were observed when taking a closer look at bilingual education. Of the 499 increasing-enrollment school districts, 92 reported no bilingual education ADA in 1993-1994. This number dropped to 30 in 2003-2004. Actually, only 26 of the original schools with no bilingual students reported none 10 years later. They were joined by four additional districts that reported having qualifying students in 1993-1994. These four districts had a bilingual education ADA in 1993-1994 of 2 students or fewer.

The numbers may represent the only bilingual education students in the community, and it could be that there were no students to be served 10 years later.

The 186 stable districts included 31 districts that had no bilingual education students reported in 1993-1994. This number shrunk to 13 districts in 2003-2004, with all 13 reporting no bilingual education ADA 10 years earlier.

The 258 decreasing-enrollment districts included 18 districts with no bilingual education students reported in 1993-1994. Of those 18, only 13 districts still reported no bilingual education ADA 10 years later. However, six districts that previously had bilingual education students reported none for 2003-2004, for a total of 19 districts having no bilingual education ADA for the 2003-2004 school year.

# Regrouping for 10% Change

Finding no statistical significance with the school districts in the study classified as increasers, stable, or decreasers based on a change of 5% or more, the same districts were regrouped into the same three categories using a 10% change as the dividing line, and then again using a 20% change as the dividing line. This was done in hopes that broadening the stable group and narrowing the increasing and decreasing groups might have an effect on the findings.

The new groups consisted of the same three categories. The increasers consisted of 411 school districts (down from 498) ranging from Newcastle ISD with an increase of 10% to Frisco ISD with its spectacular 608% increase. The stable group consisted of 347 school districts (up from 186) and ranged from the Vernon ISD with a decrease of 9.9% to Lometa ISD with an increase of 9.9%. The decreasers consisted of

184 school districts, ranging from Terrell County ISD with a decrease of 40.8% to Dekalb ISD with a decrease of 10.1%.

The 411 increasing districts had total expenditures in 1993-1994 of \$5,551,154,223 and a total ADA of 1,836,058.839. This was \$3,023.40 expended per student. In 2003-2004, these districts had expenditures of \$12,732,116,700 budgeted for an ADA of 2,524,777.468. This was \$5,042.86 expended per student. The 2003-2004 per student expenditures divided by the 1993-1994 per student expenditures equaled 1.6679 or an increase of 66.79%.

The special education FTEs were 235,033.2268 with special education expenses of \$744,734,377 in 1993-1994, making the per-FTE expenditures \$3,168.63. Ten years later, special education FTEs were at 301,928.4143 with expenditures of \$1,878,095,747. This was \$6,220.33 spent per special education FTE, an increase of 96.30%.

Career and technology FTEs for 1993-1994 added up to 51,840.735, while total expenses came to \$205,204,380, making the per-FTE expenditure \$3,958.36. For the 2003-2004 school year, career and technology FTEs increased to 99,479.121 while expenditures budgeted increased to \$460,432,956, making the per-student FTE career and technology spending \$4,628.36. Dividing the 2003-2004 per student expenditures by the 1993-1994 expenditures resulted in a change of 1.16928, an increase in per-FTE spending of 16.928%.

Compensatory education enrollment for the increasing-enrollment school districts was 785,656.9 for the 1993-1994 school year. With compensatory education funding at \$371,213,193, the per-student funding was \$472.48. In 2003-2004 the compensatory

education qualifying students had increased to 1,253,201.6; compensatory education funding increased to \$623,354,948 for per-student funding of \$497.40. Dividing the 2003-2004 per-student total by the 1993-1994 per-student total showed a change of 1.0527, an increase of 5.27%.

The 1993-1994 ADA for bilingual education students was 187,958.33 with total expenditures of \$152,594,225, a per-ADA expenditure of \$811.85. The 2003-2004 bilingual education ADA of 360,699.805 divided into expenses of \$525,918,168 resulted \$1,458.04 in per-ADA expenditures. Dividing the 2003-2004 per-ADA expenses by the 1993-1994 per-ADA expenses showed a change of 1.7959, a 79.59% increase. Tables 12 and 13 display these changes for comparisons between each program, and for comparison with Tables 3 and 4, which show the same information from the districts with increasing enrollment based on a 5% change.

Table 12

Budget Changes in Increasing Enrollment Districts (10%)

Program	Expenditures	Students	Amount Per Student
1993-1994			
Overall	\$5,551,154,223	1,836,058	\$3,023.40
Special Ed	\$744,734,377	235,033	\$3,168.63
Career & Tech	\$205,204,380	51,840	\$3,958.36
Comp Ed	\$371,213,193	371,213,193	\$472.48
Bilingual Ed	\$152,594,225	187,958	\$811.85
2003-2004			
Overall	\$12,732,116,700	2,524,777	\$5,042.86
Special Ed	\$1,878,095,747	301,928	\$6,220.33
Career & Tech	\$460,432,956	99,471	\$4,628.43
Comp Ed	\$623,354,948	1,253,201	\$497.40
Bilingual Ed	\$525,918,168	360,699	\$1,458.04

Table 13

Changes in Per-Student Spending for Increasing Enrollment Districts (10%)

Program	1993-1994	2003-2004	Change	% Increase
Overall	\$3,023.40	\$5,042.86	1.66	66%
Special Ed	\$3,168.63	\$6,220.33	1.96	96%
Career & Tech	\$3,958.36	\$4,628.43	1.16	16%
Comp Ed	\$472.48	\$497.40	1.05	5%
Bilingual Ed	\$811.85	\$1,458.04	1.79	79%

The school districts in the stable category (using 10%) had total collective expenditures of \$3,725,464,905 in 1993-1994 and a total ADA of 1,203,147.85, resulting in per-student expenditure of \$3,096.43. The total expenditures for 2003-2004 were \$6,211,722,070 for an ADA of 1,213,633.504. This was \$5,118.28 per ADA. The resulting change was 1.6529, an increase of 65.29%.

Total special education expenses were \$501,712,799 with 164,072.68 FTEs, resulting in expenditures budgeted per-FTE of \$3,057.86 in 1993-1994. In 2003-2004, special education expenses were \$910,865,800. The FTEs totaled 161,916.73, resulting in per-FTE expenditures of \$5,625.51. This was a change of 1.8396, an increase of 83.96%.

Career and technology FTEs in stable schools for 1993-1994 totaled 37,787.593 with expenditures of \$157,871,773, resulting in per FTE expenditures of \$4,177.8732. In 2003-2004, the career and technology FTEs increased to 53,512.311 with expenditures increasing to \$259,319,711. This was \$4,845.98 expended per FTE, an increase of 15.99%.

Compensatory education enrollment in stable schools for 1993-1994 was 689,854.2 with funding of \$336,441,568 and per-student funding total of \$487.69. The funding for 2003-2004 increased to \$419,211,313.7 as enrollment increased to 829,514.8, resulting in per-student funding of \$505.36, which was an increase of 3.6230%.

Bilingual education expenditures in stable schools were \$162,907,442 with ADA of 127,055.782, resulting in per-student expenditures of \$1,282.17 for bilingual education for 1993-1994. Ten years later, the bilingual education expenses increased to \$351,956,953, while the ADA increased to 162,545.663. This resulted in per-ADA expenditures of \$2,165.28, a change of 1.6887 (68.87%). Tables 14 and 15 illustrate these changes from the 10% group and can be compared to findings from the stable category for the 5% groups.

Table 14

Budget Changes in Stable Enrollment Districts (10%)

Program	Expenditures	Students	Amount Per Student
1993-1994			
Overall	\$3,725,464,905	1,203,147	\$3,096.43
Special Ed	\$501,712,799	164,072	\$3,057.86
Career & Tech	\$157,871,773	37,787	\$4,177.87
Comp Ed	\$336,441,568	689,854	\$487.69
Bilingual Ed	\$162,907,442	127,055	\$1,282.17
2003-2004			
Overall	\$6,211,722,070	1,213,633	\$5,118.28
Special Ed	\$910,865,800	164,072	\$5,625.51
Career & Tech	\$259,319,711	53,512	\$4,845.98
Comp Ed	\$419,211,313	829,514	\$505.36
Bilingual Ed	\$351,956,953	162,545	\$2,165.28

Table 15

Changes in Per-Student Spending for Stable Enrollment Districts (10%)

Program	1993-1994	2003-2004	Change	% Increase
Overall	\$3,096.43	\$5,118.28	1.65	65%
Special Ed	\$3,057.87	\$5,625.51	1.83	83%
Career & Tech	\$4,177.87	\$4,845.98	1.15	15%
Comp Ed	\$487.69	\$505.36	1.03	3%
Bilingual Ed	\$1,282.17	\$2,165.28	1.68	68%

With the exception of special education spending in 1993-1994, per-student spending in the 10% category was higher than with the stable districts in the 5% category.

The 184 districts classified as decreasers collectively had 250,948.419 students in average daily attendance for the 1993-1994 school year with total expenditures of \$847,547,348, resulting in per-student expenditures of \$3,377.37. Ten years later, those districts had a decrease in ADA to 207,342.397. Even with the decrease in students, the costs of educating these students had increased, making total expenditures of \$1,106,113,632, resulting in per-student spending of \$5,334.72. That was a change of 1.5795 for an increase of 57.95%.

The decreasing-enrollment districts had special education expenses of \$109,097,426 with 33,381.24 FTEs, resulting in per-student expenditures of \$3,268.22 for 1993-1994. This increased in 2003-2004 to expenses of \$152,979,945 with 29,736.3488 FTEs. This was \$5,144.54 expended per special education FTE, a change of 1.5741 for an increase of 57.41%.

Career and technology FTEs went from 9,532.534 in 1993-1994 to 11,223.916 in 2003-2004. Expenses during this same period went from \$42,875,507 to \$60,162,329, resulting in expenditures of \$4,497.80 per career and technology FTE in 1993-1994 to \$5,360.19 per FTE in 2003-2004. This was a change of 1.1917, an increase of 19.17%.

The number of students qualifying for compensatory education decreased slightly from 148,452.7 to 147,810 while funding went from \$76,221,217 in 1993-1994 to \$83,482,981.82 in 2003-2004. Compensatory education funding differences were greater than those for increasing and stable districts, from \$513.43 to \$564.79 per student. This was a change of 1.10, an increase of 10% per compensatory education student. Bilingual education ADA in the decreasing districts dropped from 14,337.361 to 12,100.711 while total bilingual education expenses decreased from \$13,105,973 to \$10,988,885. The results were a decrease in per-ADA expenditures from \$914.11 to \$908.11, a change of .9934 for a decrease of .0065%. While slight increases were observed in this study, this was the first incident of a net drop being found in per-student budgets for a specific program. These results are illustrated in Tables 16 and 17.

Table 16

Budget Changes for Decreasing Enrollment Districts (10%)

Program	Expenditures	Students	Amount Per Student
1993-1994			
Overall	\$847,547,348	250,948	\$3,377.37
Special Ed	\$109,097,426	33,381	\$3,268.22
Career & Tech	\$42,875,507	9,532	\$4,497.80
Comp Ed	\$76,221,217	148,452	\$513.43
Bilingual Ed	\$13,105,973	14,337	\$914.11
2003-2004			
Overall	\$1,106,113,632	207,342	\$5,334.72
Special Ed	\$152,979,945	29,736	\$5,144.54
Career & Tech	\$60,162,329	11,223	\$5,360.19
Comp Ed	\$76,221,217	147,810	\$564.79
Bilingual Ed	\$10,988,885	12,100	\$908.11

Table 17

Changes in Per-Student Spending for Decreasing Enrollment Districts (10%)

Changes in the Stadent Opending for Decreasing Enrollment Districts (1070)					
Program	1993-1994	2003-2004	Change	% Increase	
Overall	\$3,377.37	\$5,334.72	1.57	57.00%	
Special Ed	\$3,268.22	\$5,144.54	1.57	57.00%	
Career & Tech	\$4,497.80	\$5,360.19	1.19	19.00%	
Comp Ed	\$513.43	\$564.79	1.10	10.00%	
Bilingual Ed	\$914.11	\$908.11	0.99	(.65%)	

(Negative numbers appear in parentheses.)

# Regrouping for 20% Change

When grouping the school districts based on a 20% change, the increasingenrollment group dropped to 272, ranging from Frisco ISD's overwhelming 608% enrollment increase down to Canyon ISD's more manageable 20.27% enrollment increase. The stable group increased to 598 districts, ranging from Rains ISD's enrollment increase of 19.9% to Happy ISD's decrease of 20%. The decreasing group dropped to a total of 72 districts, ranging from Crowell ISD's decrease of 20.36% down to Terrell County ISD's 40.8% enrollment decrease.

During the 1993-1994 school year, the 272 increasing enrollment districts (using 20%) had a collective overall ADA of 1,235,634.331 with total expenditures of \$3,557,687,094, resulting in \$2,879.23 in funds budgeted per student in average daily attendance. A decade later, the ADA in these districts had increased to 1,836,798.217 with total expenditures of \$9,206,440,079. This resulted in per-student expenditures of \$5,012.22. This was a change of 1.7408 for an increase of 74.08%.

Special education FTEs for this period increased from 159,508.2501 in 1993-1994 to 220,069.3105 in 2003-2004. Special education expenses increased from \$498,760,221 in 1993-1994 to \$1,402,509,373 in 2003-2004. The per-FTE expenditures increased from the 1993-1994 level of \$3,126.86 to the 2003-2004 level of \$6,373.03. This was a change of 2.0381 for an increase of 103.81%.

Career and technology education FTEs increased from 35,073.799 in 1993-1994 to 72,646.434 in 2003-2004. Career and technology expenditures increased from \$133,740,969 to \$326,758,813. The 1993-1994 per-student expenditure of \$3,813.13 increased to \$4,497.93 in 2003-2004. This was a change of 1.1795 for an increase of 17.95%.

Compensatory education enrollment in the increasing-enrollment districts increased from 436,377 to 784,598.9 while program funding increased from \$202,129,121 to \$372,137,203. This was a slight increase in funding per qualifying

student from \$463.19 in 1993-1994 to \$474.30 in 2003-2004, a change of 1.0239 for an increase of 2.39%.

Bilingual education expenditures in 1993-1994 were \$88,234,173 with a bilingual education ADA of 101,273.762. In 2003-2004, expenditures were \$374,282,219 with an ADA of 226,370.96. This was a per-ADA increase from \$871.24 to \$1,653.40, resulting in a change of 1.8977, an increase of 89.77%. Tables 18 & 19 illustrate the budgetary changes in the increasing schools using 20%.

Table 18

Budget Changes in Increasing Enrollment Districts (20%)

Program	Expenditures	Students	Amount Per Student
1993-1994			
Overall	\$3,557,687,094	1,235,634	\$2,879.23
Special Ed	\$498,760,221	159,508	\$3,126.86
Career & Tech	\$133,740,969	35,073	\$4,497.93
Comp Ed	\$202,129,121	436,377	\$463.19
Bilingual Ed	\$88,234,173	101,273	\$871.24
2003-2004			
Overall	\$9,206,440,079	1,836,798	\$5,012.22
Special Ed	\$1,402,509,373	220,069	\$6,373.03
Career & Tech	\$326,758,813	72,646	\$4,497.93
Comp Ed	\$372,137,203	784,598	\$474.30
Bilingual Ed	\$374,282,219	226,370	\$1.653.40

Table 19

Changes in Per-Student Spending for Increasing Enrollment Districts (20%)

Program	1993-1994	2003-2004	Change	% Increase
Overall	\$2,879.23	\$5,012.22	1.74	74%
Special Ed	\$3,126.86	\$6,373.03	2.03	103%
Career & Tech	\$3,813.13	\$4,497.93	1.17	17%
Comp Ed	\$463.19	\$474.30	1.02	2%
Bilingual Ed	\$871.24	\$1,653.40	1.89	89%

The stable enrollment schools using the 20% dividing line had a total ADA in 1993-1994 of 1,989,941.137 with total budgeted expenditures of \$6,344,778,214 resulting in per-ADA expenditures of \$3,188.42. For the 2003-2004 school year, the stable districts had an ADA of 2,060,925.277 with total expenditures of \$10,565,264,190, resulting in per ADA expenses of \$5,126.46. This was a change of 1.6078 for an increase of 60.78%.

During this decade, the special education FTEs increased from 263,974.1349 to 266,418.4354. Special education expenditures increased during this same period from \$828,868,252 to \$1,502,412,299. This resulted in a per-FTE increase of expenditures from \$3,139.96 to \$5,639.29. This was a change of 1.795 for an increase of 79.59%, an increase higher than the overall increase.

Career and technology FTEs for 1993-1994 totaled 61,516.717 with career and technology budgeted expenses totaling \$260,847,466. The resulting \$4,240.26 per-FTE total increased to \$4,908.56 ten years later when career and technology FTEs totaled 88,962.521 and expenses reached \$436,678,300. This was a change of 1.1576 for an increase of 15.76%.

Compensatory education enrollment for the stable (20%) districts was 1,150,064.9 in 1993-1994. With funding of \$562,061,855, this was \$488.72 per compensatory education qualifying student. For 2003-2004 compensatory education enrollment increased to 1,412,135.4 with funding of \$733,365,571. This was \$519.33 per student, a change of 1.0626 and an increase of 6.26%.

Bilingual education ADA in 1993-1994 for the stable schools was 224,404 with bilingual education expenditures of \$235,902,576. Ten years later, the bilingual education ADA had increased to 306,121,723 with an increase in funding to \$511,171,124. The resulting change in per-ADA spending increased from \$1,051.24 to 1,669.82, a change of 1.5884 for an increase of 58.84%. Tables 20 and 21 illustrate the spending changes in the 598 stable (20%) districts.

Table 20

Budget Changes In Stable Enrollment Districts (20%)

Program	Expenditures	Students	Amount Per Student
1993-1994			
Overall	\$6,344,778,214	1,989,941	\$3,188.42
Special Ed	\$828,868,252	263,974	\$3,139.96
Career & Tech	\$260,847,466	61,516	\$4,240.26
Comp Ed	\$562,061,855	1,150,064	\$488.72
Bilingual Ed	\$235,902,576	224,404	\$1,051.24
2003-2004			
Overall	\$10,565,264,190	2,060,925	\$5,126.46
Special Ed	\$1,502,412,299	266,418	\$5,639.29
Career & Tech	\$260,847,466	88,962	\$4,908.56
Comp Ed	\$733,365,571	1,412,135	\$519.33
Bilingual Ed	\$511,171,124	306,121	\$1,669.82

Table 21

Changes in Per-Student Spending for Stable Enrollment Districts (20%)

Program	1993-1994	2003-2004	Change	% Increase
Overall	\$3,188.42	\$5,126.46	1.60	60%
Special Ed	\$3,139.96	\$5,639.29	1.79	79%
Career & Tech	\$4,240.26	\$4,908.56	1.15	15%
Comp Ed	\$488.72	\$519.33	1.06	6%
Bilingual Ed	\$1,051.24	\$1,669.82	1.58	58%

There were 72 decreasing-enrollment school districts when the 20% dividing line was used. They ranged from Crowell ISD with a decline of 20.4% down to Terrell County ISD's 40.8% decrease. The overall collective ADA for these 72 districts in 1993-1994 was 64,579.64. This number decreased to 48,029.875 ten years later. During this same period, the overall collective expenditures increased from \$221,701,168 to \$278,249,899. This was a per-student increase from \$3,432.98 to 5,793.26. This change of 1.6875, an increase of 68.75%, was slightly more than the stable districts but less than the increasing districts.

The special education expenses in these declining (20%) districts for 1993-1994 were \$27,916,129 with FTEs totaling 9,004.7669. This was an expenditure of \$3,100.15 per special education FTE. For 2003-2004, there were expenditures of \$37,019,820 for 7,093.7509 FTEs. This was \$5,218.65 per FTE, a change of 1.6833 for an increase of 68.33% for special education.

Career and technology education FTEs in 1993-1994 totaled 2,570.346. This number increased to 2,606.393 for 2003-2004. CATE expenditures during this time increased from \$11,363,225 to \$16,477,883. This was an increase in expenditures

budgeted per career and technology FTE from \$4,420.89 to \$6,322.10. This was a change of 1.430, a 43% increase.

Compensatory education funding in these decreasing districts increased from \$19,685,002 to \$20,546,469 while compensatory education enrollment decreased from 37,521.9 in 1993-1994 to 33,792.1 in 2003-2004. The result was an increase in per student funding from \$524.62 to \$608.02, a change of 1.1589 (15.89%).

These 72 decreasing districts had a decrease between 1993-1994 and 2003-2004 in bilingual education ADA from 3,672.787 to 2,853.496. Total bilingual education expenditures during this decade dropped from \$4,470,891 to \$3,410,663. The perbilingual education ADA expenditures went from \$1,217.30 to \$1,195.25. This was a change of .9818, a decrease of 1.81%. Tables 22 and 23 illustrate these changes in the decreasing enrollment school districts

Table 22

Budget Changes in Decreasing Enrollment Districts (20%)

Program	Expenditures	Students	Amount Per Student
1993-1994			
Overall	\$221,701,168	64,579	\$3,432.98
Special Ed	\$27,916,129	9,004	\$3,100.15
Career & Tech	\$11,363,225	2,570	\$4,420.89
Comp Ed	\$19,685,001	37,521	\$524.67
Bilingual Ed	\$4,470,891	3,672	\$1,217.30
2003-2004			
Overall	\$278,249,899	48,029	\$5,793.26
Special Ed	\$37,019,820	7,093	\$5,218.65
Career & Tech	\$16,477,883	2,606	\$6,322.10
Comp Ed	\$20,546,469	33,792	\$608.02
Bilingual Ed	\$3,410,663	2,853	\$1,195.25

Table 23

Changes in Per Student Spending for Decreasing Enrollment Schools (20%)

Program	1993-1994	2003-2004	Change	% Increase
Overall	\$3,432.98	\$5,793.98	1.68	68%
Special Ed	\$3,100.15	\$5,218.65	1.68	68%
Career & Tech	\$4,420.89	\$6,322.10	1.43	43%
Comp Ed	\$524.62	\$608.02	1.15	15%
Bilingual Ed	\$1,217.30	\$1,195.25	0.98	(1.81%)

(Negative numbers appear in parentheses.)

When comparing the per-student budget changes for each program in relation to the overall change, some differences from the original group (5%) could be observed in the 10% and 20% dividing groups. However, there also seemed to be many similarities. For instance, in career and technology education, the change per-student was less than the overall change for all categories in all three enrollment groups. As illustrated on Tables 24 and 25, there were only minor changes for the career and technology increasing and stable categories.

The decreasing-enrollment category differences had a wider range of changes, from a high of 54% enrollment decrease to a low of 25.7% enrollment decrease. Special education appeared to have less expended per student in the decreasing enrollment schools regardless whether 5%, 10%, or 20% was used as the dividing line. The amount budgeted per-FTE in increasing-enrollment districts, however, was greater than the overall amount budgeted per student. This amount dropped as the dividing line was raised above 5%.

A dramatic increase in funding for compensatory education for the stable 5% schools turned into a tremendous decrease in the 10% and 20% districts, while there

was a milder fluctuation across the board for the increasing- and decreasing-enrollment districts, all seeing less in per-student expenditures than the overall funds budgeted..

Bilingual education did show a pattern as the group dividing percentage grew from 5% to 20%. Per-student spending changes differed from the overall amount budgeted by less than 1% in the 5% districts. The 10% and 20% had slight increases for stable enrollment schools with mild increases for increasing schools. The decreasing districts, however, had tremendous decreases in bilingual education budgets.

Table 24

Per-Student Budget Amount Comparisons (10%)

Category	Overall Change	Program Change	Difference	% Change
Special Education				
Increasers	1.66	1.96	0.295	29.5%
Stable	1.65	1.83	0.187	18.7%
Decreasers	1.57	1.57	(0.005)	(0.5%)
Career & Tech Edu	cation			
Increasers	1.66	1.16	(0.499)	(49.9%)
Stable	1.57	1.19	(0.388)	(38.8%)
Decreasers	1.65	1.15	(0.493)	(49.3%)
Compensatory Edu	cation			
Increasers	1.66	1.05	(0.615)	(61.5%)
Stable	1.65	1.03	(0.617)	(61.7%)
Decreasers	1.57	1.10	(0.479)	(47.9%)
Bilingual Education				
Increasers	1.66	1.79	0.128	12.8%
Stable	1.65	1.68	0.036	3.6%
Decreasers	1.57	0.99	(0.586)	(58.6%)

(Negative numbers appear in parentheses.)

Having already found no statistical significance in the dependent variables (special education, career and technology education, compensatory education, and bilingual education) when using the independent variable categories (increasing, stable, decreasing) that were established using the 5% boundary line, the same statistical methods were used to determine if any significance was apparent when using the 10% and 20% dividing lines. A MANOVA was used to determine statistical significance in the four dependent variables.

Table 25

Per-Student Budget Amount Comparisons (20%)

Category	Overall Change	Program Change	Difference	% Change
Special Education				
Increasers	1.74	2.03	0.290	29.0%
Stable	1.60	1.79	0.188	18.8%
Decreasers	1.68	1.68	(0.040)	(4.0%)
Career & Tech Edu	cation			
Increasers	1.74	1.17	(0.561)	(56.1%)
Stable	1.60	1.15	(0.450)	(45.0%)
Decreasers	1.68	1.43	(0.257)	(25.7%)
Compensatory Edu	cation			
Increasers	1.74	1.02	(0.717)	(71.7%)
Stable	1.60	1.06	(0.545)	(54.5%)
Decreasers	1.68	1.15	(0.529)	(52.9%)
Bilingual Education				
Increasers	1.74	1.89	0.157	15.7%
Stable	1.60	1.58	(0.019)	(1.9%)
Decreasers (Magativa numbers and	1.68	0.98	(0.706)	(70.6%)

(Negative numbers appear in parentheses.)

When evaluating the variables from the 10% group (Table 27), special education was found to have a p value of .400; career and technology education p value was .443; compensatory education p value was .334; and bilingual education p value was .154. None of these were significant.

Again, a small-effect size was found from this test. An Eigenvalue of .004 indicated very little sign of a shared relationship between variables. The *f* value was still too high to indicate statistical significance.

Enrollment groups separated by the 20% dividing line exhibited lower p values. As shown on Table 28, the p values were down to .215 for special education, .316 for career and technology education, and .170 for compensatory education. Only bilingual education, with a p value of .049, was determined to show statistical significance.

Table 26

Multivariate Test of Significance (Wilk's Λ) (10%)

Value	Exact f	Hdf	Error <i>df</i>	Significance of f
0.99572	1.00576	4.00	937.00	0.403

The effect size for the dependent variable in the 20% group remained small with an Eigenvalue of .009. The multivariate significance of f determined by Wilk's  $\Lambda$  (Table 28) was .089.

Table 27

Univariate f-tests for Dependent Variables (10%)

Variable	Sq. Mul. <i>R</i>	Adj. <i>R-sq</i> .	HMS
Special Ed	0.00075	0.00000	962098771.600000000000000
CATE	0.00063	0.00000	2094947.99000000000000
Comp Ed	0.00099	0.00000	734.71864000000000
Bilingual Ed	0.00216	0.00216	0.00110516995317
Variable	MSE	f	ρ
Special Ed	1358226889.00000	70835.00000	.400
CATE	3552195.67500	0.58976	.443
Comp Ed	785.20581	0.93570	.334
Bilingual Ed	253599836.60000	2.03863	.154

In addressing the research question, the three enrollment groups using the 5% dividing line did not show this significance in any of the four dependent variables. Only after regrouping the samples using a 20% dividing line was statistical significance found in bilingual education.

Table 28

Multivariate Test of Significance (Wilk's Λ) (20%)

Value	Exact f	Hdf	Error <i>df</i>	Significance of f
0.99140	2.02459	4.00	934.00	0.089

Table 29 *Univariate* f-tests for Dependent Variables (20%)

Variable	Sq. Mul. <i>R</i>	Adj. <i>R-sq</i> .	HMS
Special Ed	0.00164	0.00057	2094655474.00000
CATE	0.00135	0.00028	4497623.63500
Comp Ed	0.00201	0.00095	1485.85457
Bilingual Ed	0.00415	0.00308	990669958.60000
Variable	MSE	f	р
Special Ed	1361348321.000000	1.53866	.215
CATE	3560954.692000	1.26304	.261
Comp Ed	786.913000	1.88821	.170
Bilingual Ed	253902406.500000	3.90177	.049

### Regrouping into 10 Smaller Groups

In an attempt to look more closely at both increasing- and decreasing-enrollment school districts to determine if the results would be different, or if some pattern could be established even in some specific areas, the data were divided into 10 smaller groups and analyzed. The 10 groups were made up of those districts that had increased more than 20%, 15% to 20%, 10% to 15%, 5% to 10%, and those increasing 5% or less. The same was done with the decreasing-enrollment school districts. Those that decreased 5% or less were grouped together, as were those with decreasing enrollments of 5% to 10%, 10% to 15%, 15% to 20%, and those that decreased over 20%.

The districts that increased more than 20% remained the same as before. There were 272 increasing-enrollment schools in this category, ranging from Frisco ISD with an ADA of 12,805 down to Canyon ISD with an ADA of 7,095. There were 67 districts that had increases from 15% to 20%, ranging from Rains ISD with an ADA of 1,465 to

Valley View ISD with an ADA of 624. The 72 districts that increased from 10% to 15% ranged from Kopperl ISD with an ADA of 294 to Newcastle with an ADA of 178. There were 87 districts that increased 5% to 10% in enrollment: Lometa ISD with an ADA of 298 to Dalhart ISD with an ADA of 1,469. The 0% to 5% increasing-enrollment category consisted of 91 districts ranging from Burkburnett ISD with an ADA of 3,381 to Moulton ISD with an ADA of 333.

There were 95 districts that decreased in enrollment from 0% to 5%. They ranged from Memphis ISD with an ADA of 497 to Nueces Canyon CISD with an ADA of 310. The school districts decreasing from 5% to 10% numbered 74. They ranged from Halletsville ISD with an ADA of 971 to Vernon ISD with an ADA of 2,210. The districts decreasing from 10% to 15% totaled 62 schools. They ranged from Dekalb ISD with an ADA of 877 to Cross Plains ISD with an ADA of 371. There were 50 districts that decreased from 15% to 20%. They ranged from Balmorea ISD with an ADA of 188 to Happy ISD with an ADA of 208. The districts decreasing more than 20% were the same as before, numbering 72. This group ranged from Crowell ISD with an ADA of 278 to Terrell County ISD with an ADA of 163.

#### Enrollment Increases of More Than 20%

As determined earlier, the 272 districts with enrollments increasing more than 20% had an overall ADA of 1,235,634.331 in 1993-1994. These districts had total expenditures of \$3,557,687,094 with the resulting funds per student being \$2,879.23. In 2003-2004 the total ADA in these districts was 1,836,798.217 with expenditures of \$9,206,440,079. This resulted in \$5,012.22 being spent per student. This was a change of 1.7408 for an increase of 74.08%.

The special education FTEs for these school districts increased from 159,508.3 to 220,069.3 while special education expenditures increased from \$498,760,221 to \$1,402,509,373. The result was an increase in per FTE spending of \$3,126.86 to \$6,373.03 for a change of 103.81%.

There was an increase in career and technology FTEs for this group of schools also. For the 1993-1994 year career and technology expenditures were \$133,740,969 with 35,073.8 FTEs, and for 2003-2004 there were expenditures of \$326,758,813 and 72646.43 FTEs. This resulted in per-student expenditures jumping from \$3,813.13 to \$4,497.93. This was an increase of 17.95%.

Students being served by compensatory education funds increased from 436,377 to 784,598.9 while the expenditures for those programs increased from \$202,129,121 to \$372,208,789. This was a per-student increase in expenditures from \$463.19 in 1993-1994 to \$474.39 in 2003-2004 with the resulting change being 2.41%.

The ADA for bilingual education students for the over 20% increasing schools increased from 101,273.8 to 226,371. Bilingual education expenditures increased from \$88,234,173 to \$374,282,219. The resulting increase in spending per bilingual education ADA went from \$871.24 to \$1,653.40 or an increase of 89.77%.

Table 30

Budget Changes in Districts With Enrollment Increasing More Than 20%

Program	Expenditures	Students	Amount Per Student
1993-1994			
Overall	\$3,557,687,094	1,235,634	\$2,879.23
Special Ed	\$498,760,221	159,508	\$3,126.86
Career & Tech	\$133,740,969	35,073	\$3,813.13
Comp Ed	\$202,129,121	436,377	\$463.19
Bilingual Ed	\$88,234,173	101,273	\$871.24
2003-2004			
Overall	\$9,206,440,079	1,836,798	\$5,012.22
Special Ed	\$1,402,509,373	220,069	\$6,373.03
Career & Tech	\$326,758,813	72,646	\$4,497.93
Comp Ed	\$372,208,789	784,598	\$474.39
Bilingual Ed	\$374,282,219	226,371	\$1,653.40

Table 31

Per-Student Spending Changes in Districts With Enrollment Increasing More Than 20%

Program	1993-1994	2003-2004	Change	Increase
Overall	\$2,879.23	\$5,012.22	1.74	74%
Special Ed	\$3,126.86	\$6,373.03	2.03	103%
Career & Tech	\$3,813.13	\$4,497.93	1.17	17%
Comp Ed	\$463.19	\$474.30	1.02	2%
Bilingual Ed	\$871.24	\$1,653.40	1.89	89%

### Enrollment Increases of 15% to 20%

The 67 school districts with enrollments increasing 15% to 20% had an overall ADA of 334,516.012 in 1993-1994. This increased to 390,129.031 in the 2003-2004

school year. During this same period, total collective expenditures increased from \$1,110,084,452 to \$1,982,852,159. This was an increase in per-student expenditures from \$3,318.47 to \$5,082.55. The resulting change was 1.5315 for a 53% increase.

Special education expenditures in these 67 districts increased from \$116,939,060 to \$234,140,737 while FTEs increased from 37,736.98 to 43,459.08 during the same period. This resulted in per-FTE expenditures increasing from \$3,098.79 to \$5,387.61. The change in per-FTE expenditures was 1.7386, an increase of 73.8617%.

Career and technology FTEs increased from 9,825.479 to 14,890.39 while expenditures increased from \$39,783,815 to \$77,337,501. This resulted in an increase in expenditures per FTE of \$4,049.04 to \$5,193.78. The change was 1.2827, making the increase 28%.

Students eligible for compensatory education in these districts increased from 214,145.3 to 286,370.4. Compensatory education expenditures increased from \$104,639,148 to \$155,875,561. The increase on a per-student basis was from \$488.63 to \$544.31. This was a change of 1.1139 or an increase of 11.39%.

Bilingual education ADA began 1993-1994 at 61,168.44 with expenditures of \$35,497,266, resulting in per-ADA expenditures of \$580.31. Ten years later, there was an ADA of 88,159.04 and expenditures of \$55,536,497, making per-ADA expenditures \$629.95. The resulting change was 1.0855 for an increase of 8.55%.

Table 32

Budget Changes in Districts With Enrollment Increasing 15% to 20%

Program	Expenditures	Students	Amount Per Student
1993-1994		_	
Overall	\$1,110,084,452	334,516	\$3,318.47
Special Ed	\$116,939,060	37,736	\$3,098.79
Career & Tech	\$39,783,815	9,802	\$4,049.04
Comp Ed	\$104,639,148	214,145	\$488.63
Bilingual Ed	\$35,497,266	61,168	\$580.31
2003-2004			
Overall	\$1,982,852,159	390,129	\$5,387.61
Special Ed	\$234,140,737	43,459	\$5,387.61
Career & Tech	\$77,337,501	14,890	\$5,193.78
Comp Ed	\$155,875,561	286,370	\$544.31
Bilingual Ed	\$55,536,497	88,159	\$629.95

Table 33

Changes in Per-Student Spending for Districts With Enrollment Increasing 15% to 20%

Program	1993-1994	2003-2004	Change	Increase
Overall	\$3,318.47	\$5,387.61	1.28	28%
Special Ed	\$3,098.79	\$5,387.61	1.73	73%
Career & Tech	\$4,049.04	\$5,193.78	1.28	28%
Comp Ed	\$488.63	\$544.31	1.11	11%
Bilingual Ed	\$580.31	\$692.95	1.08	8%

### Enrollment Increases of 10% to 15%

The 72 districts that increased in enrollment from 10% to 15% saw a jump in collective ADA from 265,908.496 to 297,850.22. Total collective expenditures increased

from \$883,382,677 to \$1,542,825,562. The increase in total per-student expenditures went from \$3,322.13 to \$5,179.86. This was a change of 1.5592 for an increase of 55.92%.

Special education FTEs in the 72 schools for the 1993-1994 academic year were 37,788 with expenditures of \$129,035,096 resulting in \$3,414.71 being expended per FTE. Ten years later there were 38,400.02 special education FTEs with expenditures of \$241,445,637. The resulting increase to \$6,287.64 per FTE was a change of 1.8413 or an increase of 84.13%.

Career and technology FTEs were 6,941.457 in 1993-1994 and 11,942.29 in 2003-2004. The career and technology expenditures increased from \$31,679,596 to \$56,336,642 over the same time period. This was an increase in per FTE spending from \$4,563.82 to \$4,717.40 which was a change of 1.0336 or an increase of 3.36%.

Students being served by compensatory education funds increased from 135,134.6 to 182,232.3 while the expenditures for that program increased from \$64,444,924 to \$95,342,183. This was a per student increase in expenditures from \$476.8943 in 1993-1994to \$523.1903 in 2003-2004 with the resulting change being 1.0970 or an increase of 9.70%.

Bilingual education had an increase in ADA from 25,516.14 to 46,169.8. Bilingual expenditures increased from \$28,862,786 to \$96,099,452. The per-student ADA expenditure increase was from \$1,131.15 to \$2,081.43. The resulting change was 1.84 or an increase of 84%.

Table 34

Budget Changes in Districts With Enrollments Increasing 10% to 15%

Program	Expenditures	Students	Amount Per Student
1993-1994			
Overall	\$883,382,677	265,908	\$3,322.13
Special Ed	\$129,035,096	37,788	\$3,414.71
Career & Tech	\$31,679,596	6,941	\$4,563.82
Comp Ed	\$64,444,924	135,134	\$476.89
Bilingual Ed	\$28,862,786	25,516	\$1,131.15
2003-2004			
Overall	\$1,542,825,562	297,850	\$5,179.86
Special Ed	\$241,445,637	38,400	\$6,287.64
Career & Tech	\$56,336,642	11,942	\$4,717.40
Comp Ed	\$95,342,183	182,232	\$523.19
Bilingual Ed	\$96,099,452	46,169	\$2,081.43

Table 35

Changes in Per-Student Spending for Districts With Enrollment Increasing 10% to 15%

Program	1993-1994	2003-2004	Change	Increase
Overall	\$3,322.13	\$5,179.80	1.55	55%
Special Ed	\$3,414.71	\$6,287.64	1.84	84%
Career & Tech	\$4,563.82	\$4,717.40	1.03	3%
Comp Ed	\$476.89	\$523.19	1.09	9%
Bilingual Ed	\$1,131.15	\$2,081.43	1.84	84%

### Enrollment Increases of 5% to 10%

The 87 school districts that increased from 5% to 10% had an increase in collective ADA from 412,398.443 to 441,244.083. The total increase in collective

expenditures went from \$1,246,863,594 to \$2,289,616,216. The resulting increase in per-ADA spending was from \$3,023.44 to \$5,189.00, an increase of over 71%.

Enrollment in special education in these districts totaled 57,989.87 FTEs in 1993-1994. This number decreased to 54,687.41 for the 2003-2004 year. Total special education expenditures increased during this same time from \$159,398,032 to \$343,561,202. This was an increase in per-FTE spending from \$2,748.72 to \$6,282.27. The resulting change was 2.2855 for an increase of 128.55%.

Career and technology FTEs increased during this period from 12,748.14 to 19,064.65 while budgets increased from \$55,443,493 to \$94,542,908. This was a change in expenditures per-FTE from \$4,349.14 to \$4,959.06, a change of 1.14 for an increase of 14%.

Compensatory education expenditures for these school districts jumped from \$115,510,143 to \$151,207,053.1 while enrollments increased from 237,120 to 309,879.3. This was only a slight change in expenditures per student. In 1993-1994 the per-student cost was \$487.13. Ten years later it was \$487.95. This was an increase of less than 1%, less than any of the other categories of increasing enrollment districts.

The ADA for bilingual education students increased from 57,868.48 to 77,829.22 while the bilingual education budgets increased from \$86,609,286 to \$220,771,028.

This was a per-student increase of \$1,496.65 to \$2,836.60. The resulting change was 1.895 or an increase of 89.5% in per bilingual education student spending.

Table 36

Budget Changes in Districts With Enrollments Increasing 5% to 10%

Program	Expenditures	Students	Amount Per Student
1993-1994		_	
Overall	\$1,246,863,594	412,398	\$3,023.44
Special Ed	\$159,398,032	57,989	\$2,748.72
Career & Tech	\$55,443,493	12,748	\$4,349.14
Comp Ed	\$115,510,143	237,120	\$487.13
Bilingual Ed	\$666,092,286	57,868	\$1,496.65
2003-2004			
Overall	\$2,289,616,216	441,244	\$5,0189
Special Ed	\$343,561,202	54,687	\$6,282.27
Career & Tech	\$94,542,908	19,064	\$4,959.06
Comp Ed	\$151,207,053	309,879	\$487.95
Bilingual Ed	\$220,771,028	77,829	\$2,836.60

Table 37

Changes in Per-Student Spending for Districts With Enrollments Increasing 5% to 10%

Program	1993-1994	2003-2004	Change	Increase
Overall	\$3,023.44	\$5,189.00	1.710	71%
Special Ed	\$2,748.72	\$6,282.27	2.280	128%
Career & Tech	\$4,349.14	\$4,959.06	1.140	14%
Comp Ed	\$487.13	\$487.95	1.001	0.1%
Bilingual Ed	\$1,496.65	\$2,836.60	1.890	89%

## Enrollment Increases of 0% to 5%

The final group of increasing enrollment schools consisted of those that increased from 0% to 5%. These 91 school districts had a collective ADA that increased from 279,980.32 to 286,882.73. The total collective expenditures increased from

\$863,222,927 to \$1,454,953,601 resulting in a per-ADA increase from \$3,083.15 to \$5,071.59. This was a change of 1.644 for an increase of 64.4%.

Special education FTEs in the 0% to 5% group went from 37,088.99 to 38,598.19 while special education expenditures increased from \$115,241,600 to \$198,157,028. The result was an increase in spending per FTE from \$3,107.16 to \$5,133.84, an increase of 65.2%.

The increase for career and technology and compensatory education spending were similar in this group with career and technology spending increasing 24% per FTE and compensatory education increasing 21%. For the 1993-1994 school year, career and technology expenditures were \$32,429,312 for 8,259.97 FTEs; in 2003-2004, expenditures were \$61,600,430 for 12,611.92 FTEs. Compensatory education expenditures for 1993-1994 were \$66,751,192. An increase to \$96,751,599 in 2003-2004 corresponded with an increase in compensatory education enrollment from 156,906 to 187,189.7. The resulting funds budgeted per student increased \$3,930.36 to \$4,884.30 for career and technology and \$425.42 to \$516.86 for compensatory education This was an increase of 24.27% per FTE for career and technology education and 21.40% per student for compensatory education.

There was a substantial increase in bilingual education spending in the 0% to 5% group. A bilingual education ADA of 33,799.51 with expenditures of \$17,808,796 grew to an ADA of 43,525.68 with expenditures of \$69,806,676. This was a change in perstudent spending of \$526.89 to \$1,603.80, an increase of more than 200%.

Table 38

Budget Changes in Districts With Enrollments Increasing 0% to 5%

Program	Expenditures	Students	Amount Per Student
1993-1994		_	
Overall	\$863,222,927	279,980	\$3,083.15
Special Ed	\$115,241,600	37,088	\$3,107.16
Career & Tech	\$32,429,312	8,250	\$3,930.36
Comp Ed	\$66,751,192	156,906	\$425.42
Bilingual Ed	\$17,808,796	33,799	\$526.89
2003-2004			
Overall	\$1,454,953,601	286,882	\$5,071.54
Special Ed	\$198,157,028	38,598	\$5,133.84
Career & Tech	\$61,600,430	12,611	\$4,884.30
Comp Ed	\$96,751,599	187.189	\$516.86
Bilingual Ed	\$69 806 676	43,525	\$1,603.80

Table 39

Changes in Per-Student Spending for Districts With Enrollment Increasing 0% to 5%

Program	1993-1994	2003-2004	Change	Increase
Overall	\$3,083.15	\$5,071.59	1.64	64%
Special Ed	\$3,107.16	\$5,133.84	1.65	65%
Career & Tech	\$3,930.36	\$4,884.30	1.24	24%
Comp Ed	\$425.42	\$516.86	1.21	21%
Bilingual Ed	\$526.89	\$1,603.80	3.04	204%

### Enrollment Decreases of 0% to 5%

While 589 school districts had increasing enrollments, only 353 school districts had decreasing enrollments over the period studied. In the group of 95 schools that

experienced a decrease of 0% to 5%, the collective ADA decreased from 229,680.686 to 223,223.437 while the total collective expenditures increased from \$709,718,603 to \$1,124,135,811. This resulted in an almost 63% increase in per-ADA spending from \$3,090.02 being spent per student in 1993-1994 to \$5,035.92 spent per student in 2003-2004.

The number of special education FTEs in this group increased from 29,457.46 to 32,109.96. This was the only one of the five decreasing enrollment groups that had an increase in special education numbers. Special education expenditures increased from \$94,373,164 to \$162,758,020. The per-FTE spending increased from \$3,203.71 to \$5,068.77, an increase of more than 58%.

Career and technology FTEs in the 0% to 5% decreasing-enrollment group increased from 7,451.97 to 10,238.75. Career and technology expenditures increased from \$30,095,191 to \$48,678,601, resulting in an increase from \$4,038.55 to \$4,754.34 per student. This is a change of 1.18 for an increase of 18%.

Both compensatory and bilingual education had decreases in per-student expenditures. Students qualifying for compensatory education numbered 125,834.7 with expenditures of \$71,245,040 in 1993-1994. In 2003-2004, the number of students had increased to 148,498.8 with expenditures of \$77,561,483. The result was a decrease in per student spending of - 7.8%, dropping from \$566.17 to \$522.30.

Bilingual education had an even greater decrease at - 35%. While bilingual education ADA increased from 19,112.48 to 21,106.12, expenditures decreased from \$24,206,649 to \$17,375,794. This was a decrease in funds budgeted per ADA from \$1,266.53 to \$823.25.

Table 40

Budget Changes in Districts With Enrollments Decreasing 0% to 5%

Program	Expenditures	Students	Amount Per Student
1993-1994		_	
Overall	\$709,718,603	229,680	\$3,090.02
Special Ed	\$94,373,164	29,457	\$3,203.71
Career & Tech	\$30,095,191	7,451	\$4,038.55
Comp Ed	\$71,245,040	125,834	\$566.17
Bilingual Ed	\$24,206,649	19,112	\$1,266.53
2003-2004			
Overall	\$1,124,135,811	223,223	\$5,035.92
Special Ed	\$162,758,020	32,109	\$5,068.77
Career & Tech	\$48,678,601	10,238	\$4,754.34
Comp Ed	\$7,756,1483	148,498	\$522.30
Bilingual Ed	\$17,375,794	21,106	\$823.25

Table 41

Changes in Per-Student Spending for Districts With Enrollments Decreasing 0% to 5%

Program	1993-1994	2003-2004	Change	Increase
Overall	\$3,090.02	\$5,035.92	1.63	63%
Special Ed	\$3,203.71	\$5,068.77	1.58	58%
Career & Tech	\$4,038.55	\$4,754.34	1.18	18%
Comp Ed	\$566.17	\$522.30	.922	(7.8%)
Bilingual Ed	\$1,266.53	\$823.25	.65	(35%)

### Enrollment Decreases of 5% to 10%

The overall ADA for the group with enrollments decreasing 5% to 10% dropped from 281,088.394 to 262,283.251. Total expenses for these 74 districts increased from

\$905,659,781 to \$1,343,016,442. This resulted in an increase in funds budgeted per student from \$3,221.97 to \$5,120.48, an increase of almost 59%.

Special education FTEs in this group declined from 39,536.36 to 36,521.17 while expenditures increased from \$132,700,003 to \$206,389,550. The difference in per-FTE spending was an increase of 68.37% with \$3,356.40 increasing to \$5,651.23.

Career and technology education expenditures per FTE had considerably less of an increase at only 9.95%. Career and technology expenses went from \$39,903,777 to \$54,497,772 while FTEs also increased from 9,336.49 to 11,596.99. This was an increase from \$4,273.95 to \$4,699.30.

Compensatory enrollment numbers decreased from 169,993.5 to 183,947.

Expenditures increased from \$82,935,193 to \$93,691,177. The per-student compensatory education expenses for 1993-1994 were \$487.87. This number increased to \$509.33 for 2003-2004. The change was 1.04399 for an increase of 4.39%

There was an increase in bilingual education average daily attendance and expenditures. A bilingual education ADA of 16,275.32 with \$34,282,711 being spent in 1993-1994 increased to an ADA of 20,084.65 with \$44,003,455. The per-student change was from \$2,106.42 to \$2,190.89, an increase of 4%.

Table 42

Budget Changes in Districts With Enrollments Decreasing 5% to 10%

Program	Expenditures	Students	Amount Per Student
1993-1994			
Overall	\$905,659,781	281,088	\$3,221.97
Special Ed	\$132,700,003	39,536	\$3,356.40
Career & Tech	\$39,903,777	9,336	\$4,273.959
Comp Ed	\$82,935,193	169,993	\$487.87
Bilingual Ed	\$34,282,711	16,275	\$2,106.42
2003-2004			
Overall	\$1,343,016,442	262,283	\$5,120.4804
Special Ed	\$206,389,550	36,521	\$5,651.23
Career & Tech	\$54,497.772	11,596	\$4,699.30
Comp Ed	\$93,691,177	183,947	\$509.3304
Bilingual Ed	\$44,003,455	20,084	\$2,190.89

Table 43

Changes in Per-Student Spending for Districts With Enrollments Decreasing 5% to 10%

Program	1993-1994	2003-2004	Change	Increase
Overall	\$3,221.97	\$5,120.48	1.58	58%
Special Ed	\$3,356.40	\$5,651.23	1.68	68%
Career & Tech	\$4,699.30	\$4,273.95	1.09	9%
Comp Ed	\$487.87	\$509.33	1.04	4%
Bilingual Ed	\$2,106.43	\$2,190.89	1.04	4%

### Enrollment Decreases of 10% to 15%

Only 62 districts fell into the group that experienced an enrollment decrease of 10% to 15%. The overall ADA of these schools dropped from 110,739.961 to 96,406.808 with overall expenditures increasing from \$369,328,706 to \$502,357,566.

This resulted in a per-ADA increase of more than 56% with \$3,335.09 rising to \$5,210.81.

Special education enrollment also dropped from 14,570.34 FTEs to 13,755.36. Special education expenditures increased from \$48,606,252 to \$73,443,736, resulting in a per-FTE increase in spending from \$3,335.97 to 5,339.27. This was an increase of 60%.

Career and technology FTEs moved the opposite direction with an increase of 3,969.149 to 4,878.983. Career and technology spending increased more than 13% per FTE. Expenditures went from \$17,689,220 to \$24,603,846, causing the per-student FTE spending to rise from \$4,456.67 to \$5,042.82.

The number of students qualifying for assistance from state compensatory education funds increased from 69,639.4 to 72,094.6. Expenditures also increased. In 1993-1994 they totaled \$35,274,294; 10 years later the amount had risen to \$39,380,190. This was a per-student increase from \$506.52 to \$546.22, a 7.83% increase.

The number of bilingual education students in this group declined 30% from an ADA of 8,221.57 to 6,319.671. Bilingual education expenditures also declined, but at the lesser rate of 3.8%. Spending dropped from \$6,260,744 to \$6,029,650. This still resulted in an increase in per-ADA spending from \$761.50 to \$954.10, creating a change of 1.25 for an increase of 25.2%.

Table 44

Budget Changes in Districts With Enrollments Decreasing 10% to 15%

Program	Expenditures	Students	Amount Per Student
1993-1994			
Overall	\$369,328,706	110,739	\$3,335.09
Special Ed	\$48,606,252	14,570	\$3,335.97
Career & Tech	\$17,689,220	3,969	\$4,456.67
Comp Ed	\$35,274,294	69,639	\$506.52
Bilingual Ed	\$6,260,744	8,221	\$761.50
2003-2004			
Overall	\$502,357,566	96,406	\$5,210.81
Special Ed	\$73,443,736	13,755	\$5,339.27
Career & Tech	\$24,603,846	4,878	\$5,042.82
Comp Ed	\$39,380,190	72,094	\$546.22
Bilingual Ed	\$6,029,650	6,319	\$954.10

Table 45

Changes in Per-Student Spending for Districts With Enrollments
Decreasing 10% to 15%

Program	1993-1994	2003-2004	Change	Increase
Overall	\$3,335.09	\$5,210.81	1.55	55%
Special Ed	\$3,335.97	\$5,339.27	1.60	60%
Career & Tech	\$4,456.67	\$5,042.82	1.13	13%
Comp Ed	\$506.52	\$546.22	1.07	7%
Bilingual Ed	\$761.50	\$954.10	1.25	25%

## Enrollment Decreases of 15% to 20%

The school districts with enrollments decreasing 15% to 20% made up the smallest group, consisting of only 50 districts. The decrease in overall ADA was from

75,628.818 to 62,905.714. Overall funds expended by these districts increased from \$256,517,474 to \$325,507,933. This was an increase in spending per ADA of over 52% rising from \$3,391.79 to \$5,174.53.

Special education FTEs declined in these 50 districts from 9,806 in 1993-1994 to 8,887.23 in 2003-2004 while expenditures increased from \$32,575,045 to \$42,516,389. This was an increase in per FTE spending from \$3,321.90 to \$4,783.98, an increase of 44%.

Career and technology, compensatory, and bilingual education enrollments all increased in this group. Career and technology had an increase in FTEs from 2,993.039 to 3,738.54 with expenditures jumping from \$13,823,062 up to \$19,080,600. This resulted in a per FTE increase in spending of 10.5% rising from \$4,618.40 to \$5,103.75.

Compensatory education enrollment increased from 41,291.4 to 41,923.3 with expenditures increasing from \$21,261,921 to \$23,556,321. This was an increase of almost \$47 per student rising from \$514.92 to \$561.89, a change of 1.09 or an increase of over 9% per student.

Bilingual ADA increased from 2,444.004 to 2,927.544. Surprisingly, bilingual expenditures decreased from \$2,374,339 to \$1,548,573. The resulting decrease in expenditures was over 45% per student dropping from \$971.49 to \$528.96

Table 46

Budget Changes in Districts With Enrollments Decreasing 15% to 20%

Program	Expenditures	Students	Amount Per Student
1993-1994			
Overall	\$256,517,474	75,628	\$3,391.75
Special Ed	\$32,575,045	9,806	\$3,321.90
Career & Tech	\$13,823,062	2,993	\$4,618.40
Comp Ed	\$21,261,921	41,291	\$514.92
Bilingual Ed	\$2,374,339	2,444	\$971.49
2003-2004			
Overall	\$325,507,933	62,905	\$5,174.53
Special Ed	\$45,516,389	8,887	\$4,783.98
Career & Tech	\$13,823,062	2,993	\$5,103.75
Comp Ed	\$23,556,321	41,923	\$561.89
Bilingual Ed	\$1,548,573	2,927	\$528.96

Table 47

Per-Student Spending Changes for Districts With Enrollments Decreasing 15% to 20%

Program	1993-1994	2003-2004	Change	Increase
Overall	\$3,391.75	\$5,174.53	1.52	55%
Special Ed	\$3,321.90	\$4,783.98	1.44	44%
Career & Tech	\$4,618.40	\$5,103.75	1.10	10%
Comp Ed	\$514.92	\$561.89	1.09	9%
Bilingual Ed	\$971.49	\$528.96	0.54	(46%)

(Negative numbers appear in parentheses.)

## Enrollment Decreases of More Than 20%

The final group of schools had enrollment decreases of over 20%. These 72 schools had enrollment declines in every program studied except career and technology

education. The overall collective ADA began in 1993-1994 at 64,579.64 and ended the 10-year period with an ADA of 48,029.875. During this same period, total collective expenditures increased from \$221,701,168 to \$278,249,899. This was an increase in collective per-ADA spending of more than 68%, going from \$3,432.98 to \$5,793.26.

Special education FTEs dropped from 9,004.767 to 7,093.751. Special education expenditures increased from \$27,916,129 to \$37,019,820. As a result, the amount spent per FTE jumped from \$3,100.15 to \$5,218.65. This was a change of 1.683 or an increase of 68.3%.

Career and technology FTEs increased slightly going from 2,570.346 to 2,606.393. Career and technology expenditures increased from \$11,363,225 to \$16,477,883. This resulted in an increase in per-FTE spending of 43% jumping from \$4,420.89 to \$6,322.10.

Compensatory education enrollment in this group decreased from 37,521.9 to 33,792.1 while funding increased from \$19,685,002 to \$20,546,469. The result was funding per student being \$524.62 in 1993-1994 and \$608.02 in 2003-2004. This was an increase of almost 16%.

The ADA and expenditures for bilingual education decreased in this group. ADA dropped from 3,672.787 to 2,853.496 while expenditures dropped from \$4,470,891 to \$3,410,663. This was a decrease in per student spending of just under 2% dropping from \$1,217.30 to \$1,195.25.

Table 48

Budget Changes in Districts With Enrollments Decreasing More Than 20%

Program	Expenditures	Students	Amount Per Student
1993-1994	_		
Overall	\$221,701,168	64,579	\$3,432.98
Special Ed	\$27,916,129	9,004	\$3,100.15
Career & Tech	\$11,363,225	2,570	\$4,420.89
Comp Ed	\$19,685,002	37,521	\$524.62
Bilingual Ed	\$4,470,891	3,672	\$1,217.30
2003-2004			
Overall	\$278,349,899	48,029	\$5,793.26
Special Ed	\$37,019,820	7,093	\$5,218.65
Career & Tech	\$16,477,883	2,606	\$6,322.10
Comp Ed	\$20,546,469	33,792	\$608.02
Bilingual Ed	\$3,410,663	2,853	\$1,195.25

Table 49

Per-Student Spending Changes: Districts With Enrollments Decreasing More Than 20%

Program	1993-1994	2003-2004	Change	Increase
Overall	\$3,432.98	\$5,793.26	1.68	68%
Special Ed	\$3,100.15	\$5,218.65	1.68	68%
Career & Tech	\$4,420.89	\$6,322.10	1.43	43%
Comp Ed	\$524.62	\$608.02	1.15	15%
Bilingual Ed	\$1,217.30	\$1,195.25	0.98	(2%)

(Negative numbers appear in parentheses.)

Program Expenditure Changes Compared to Overall Expenditures

The changes in program expenditures compared to overall expenditures are shown in Table 50. Career and technology education and compensatory education funding increased at a lesser rate than overall spending, with career and technology

expenditures ranging from 21.8% to 57.6% less and compensatory education funding ranging from 41.7% to 71.6% less. Special education spending mostly increased and bilingual education spending was somewhat mixed.

In the 10 enrollment groups studied in special education, seven increased enrollments within a range from a slight 0.8% to 56.9% while three decreased within a range from 0.4% less to 8.55% less. Bilingual education enrollment had four increasing groups and six decreasing groups. The enrollment increases ranged from 15.6% to 139% while the decreasing groups ranged from a drop of 30.9% to 98%. There was no distinguishing pattern apparent that indicated any findings different from those earlier in the study.

Table 50

Per-Student Budget Amount Comparisons (All 10 Categories)

Category	Overall change	Program change	Difference	%
Special Education				
Increase Over 20%	1.74	2.03	0.298	29.8%
Increase 15% - 20%	1.53	1.73	0.207	20.7%
Increase 10% - 15%	1.55	1.84	0.282	28.2%
Increase 5% - 10%	1.71	2.28	0.569	56.9%
Increase 0% - 5%	1.64	1.65	0.008	00.8%
Decrease 0% - 5%	1.62	1.58	(0.047)	(04.7%)
Decrease 5% - 10%	1.58	1.68	(0.094)	(09.4%)
Decrease 10% -15%	1.56	1.60	(0.038)	(03.8%)
Decrease 15% - 20%	1.52	1.44	(0.085)	(08.5%)
Decrease Over 20%	1.68	1.68	(0.004)	(00.4%)
Career & Tech Education				
Increase Over 20%	1.74	1.17	(0.561)	(56.1%)
Increase 15% - 20%	1.53	1.28	(0.248)	(24.8%)
Increase 10% - 15%	1.55	1.03	(0.526)	(52.6%)
Increase 5% - 10%	1.71	1.14	(0.576)	(57.6%)
Increase 0% - 5%	1.64	1.24	(0.402)	(40.2%)
Decrease 0% - 5%	1.62	1.17	(0.452)	(45.2%)
Decrease 5% - 10%	1.58	1.09	(0.490)	(49.0%)
Decrease 10% - 15%	1.56	1.13	(0.431)	(43.1%)
Decrease 15% - 20	1.52	1.10	(0.420)	(42.0%)
Decrease Over 20%	1.68	1.43	(0.257)	(25.7%)

(table continues)

Table 50 (continued).

Category	Overall change	Program change	Difference	% Change
Compensatory Education	ı			
Increase Over 20%	1.74	1.02	(0.716)	(71.6%)
Increase 15% - 20%	1.53	1.11	(0.417)	(41.7%)
Increase 10% - 15%	1.55	1.09	(0.462)	(46.2%)
Increase 5% - 10%	1.71	1.00	(0.714)	(71.4%)
Increase 0% - 5%	1.64	1.21	(0.429)	(42.9%)
Decrease 0% - 5%	1.62	0.92	(0.706)	(70.6%)
Decrease 5% - 10%	1.58	1.04	(0.545)	(54.5%)
Decrease 10% - 15%	1.56	1.07	(0.483)	(48.3%)
Decrease 15% - 20%	1.52	1.09	(0.433)	(43.3%)
Decrease Over 20%	1.68	1.15	(0.529)	(52.9%)
Bilingual Education				
Increase Over 20%	1.74	1.89	0.156	15.6%
Increase 15% - 20%	1.53	1.08	0.446	44.6%
Increase 10% - 15%	1.55	1.84	0.280	28.0%
Increase 5% - 10%	1.71	1.89	0.179	17.9%
Increase 0% - 5%	1.64	3.04	1.39	139%
Decrease 0% - 5%	1.62	0.65	(0.979)	(97.9%)
Decrease 5% - 10%	1.58	1.04	(0.548)	(54.8%)
Decrease 10% - 15%	1.56	1.25	(0.309)	(30.9%)
Decrease 15% - 20%	1.52	0.54	(0.980)	(98.0%)
Decrease Over 20%	1.68	0.98	(0.706)	(70.6%)

(Negative numbers appear in parentheses.)

From a statistical standpoint, no significance was found with the 10 smaller groups. Wilks' lambda (Table 51) showed the percentage of the variance that could be explained to be very low.

Table 51
Wilks' Λ For Dependent Variables (10 Groups)

Test of function(s)	Λ	χ²	df	Sig.
1 through 4	0.968	30.203	36	0.740
2 through 4	0.985	14.024	24	0.946
3 through 4	0.994	5.626	14	0.975
4	1.000	0.030	6	1.000

Table 52

Analysis of Variance for Dependent Variables (10 Groups)

	Σ of squares	df	MS	f	Sig.
Special Ed					
Between Groups	4.7E+009	9	526584322.1	1.570	0.120
Within Groups	3.1E+011	928	335455152.1		
Total	3.2E+011	37			
Career & Technology					
Between Groups	28659600	9	3184400.047	1.049	0.399
Within Groups	2.8E+009	931	3036372.184		
Total	2.9E+009	940			
Compensatory Ed					
Between Groups	2973.830	9	230.426	0.291	0.977
Within Groups	736750.88	932	790.505		
Total	738824.71	941			
Bilingual Ed					
Between Groups	5.1E+008	9	56490849.480	0.363	0.952
Within Groups	1.4E+011	917	155664563.4		
Total	1.4E+011	926			

An analysis of variance (Table 52) showed all of the dependent variables to have a p value above .05, with special education having a p value of .120, career and

technology education with .399, compensatory education with .977, and bilingual education with .952.

It seems that no matter how small the size of the groups in which the school districts were placed, there was simply no statistical significance to be determined in comparing overall spending changes with spending changes in special education, career and technology education, compensatory education, and bilingual education. Dividing the school districts into large groups or small groups, based on enrollment changes, seemed to have little effect on the statistical findings.

#### **CHAPTER 5**

#### SUMMARY

Because enrollments in many Texas school districts are clearly shifting, some dramatically, the ability to plan and make good management decisions increases in importance. An administrator may face a tremendous challenge by following the advice of Keough (1978) in striving to maintain a keen sense of balance and proportion in the allocation of scarce resources.

The purpose of this study was to analyze budgets of 942 Texas school districts and determine how districts experiencing changing enrollments were impacted as opposed to districts with steady enrollments. Despite large enrollment increases or decreases, school budgets had to meet the educational needs of the students being served. This study identified how schools were spending funds in four categorical areas to meet those needs while dealing with enrollment changes, with the goal of providing information to assist school administrators in following Keough's advice.

This study described the changes in education funding by program in Texas public school districts between the years 1994 and 2004. One question guided the study: Is there a difference in the composite change in per-student budgets for categorically funded education programs compared to the overall per-student budget between districts whose average daily attendance has increased, decreased, or remained stable? The definitions for these three categories (independent variable) in the original research were: enrollment increasing by 5% or more (increasing), enrollment decreasing by 5% or more (decreasing), or enrollment changing less than 5% (stable). All of the 942 districts studied fell into one of these three groups.

There were 498 districts with increasing enrollments. They ranged from Dalhart ISD with an increase of 5.09% to Frisco ISD's dramatic increase of more than 608%. There were 186 districts classified as having stable enrollments. They ranged from Nueces Canyon CISD, which had a decline of 4.98%, to Burkburnett ISD, which had an increase of 4.92%. There were 258 districts falling into the declining enrollment category. They ranged from Terrell County ISD, with a decrease of 40.78%, to Hallettsville ISD, with a decrease of only 5.07%.

Table 53

Ranges of Enrollment Change

Enrollment category	Number of districts	Low Range	High Range
Increasing	498	5.09%	608.28%
Stable	186	(4.98%)	4.92%
Decreasing	258	(40.78%)	(5.07%)

(Negative numbers appear in parentheses.)

For the schools labeled as increasers, the amount budgeted per student for the total number of students in average daily attendance (ADA) during the 1993-1994 school year was \$3,023.41. For the 2003-2004 school year, this number had grown to \$5,064.60, an increase of 68%. In those same increasing school districts, the amount budgeted for special education full-time-equivalent students (FTE) for the 1993-1994 school year was \$3,085.53. Ten years later it was \$6,229.83. This was an increase of 102% in funds budgeted per special education FTE.

When comparing the change in overall per-student spending with the change in special education spending, it was determined that, while spending increases occurred in both, the increase in the special education budget was 34% greater than the overall increase. The same approach was used to determine the same kind of difference for

increasing, stable, and decreasing enrollment school districts in the areas of (dependent variables) special education, career and technology education, compensatory education, and bilingual education.

Using this same system, it was determined that, while special education budgets grew at a rate 34% greater than the overall per-student budget in increasing enrollment schools, special education budgets grew at a rate 1.8% less than overall budgets in stable enrollment schools and 5.3% less than overall budgets in decreasing-enrollment districts.

Table 54

Comparisons of Budget Changes (5%)

Program	Enrollment category	Program change compared to overall change
Special ed	Increaser	34.00% more
	Stable	1.80% less
	Decreaser	5.30% less
Career & technology ed	Increaser	51.00% less
	Stable	43.00% less
	Decreaser	54.00% less
Compensatory ed	Increaser	64.00% less
	Stable	57.00% less
	Decreaser	63.00% less
Bilingual ed	Increaser	0.07% more
	Stable	0.06% more
	Decreaser	0.58% less

Career and technology education student budgets grew at a lesser rate than the overall student budget across the board, with increasing-enrollment district budgets

growing at 51% less, stable districts at 43% less, and decreasing-enrollment district budgets growing at 54% less.

There was wide variation when comparing compensatory education student budget changes and the overall change. Increasing-enrollment districts grew at a rate 64% less, stable districts were 57% less, and decreasing-enrollment districts were 63% less.

Funds budgeted for bilingual education students were found to be much closer to the overall budgets when the percentage of change was determined. All three categories had less than 1% difference between them, with increasing-enrollment districts at 0.07% more, stable districts at 0.06% more, and decreasing-enrollment district budgets increasing 0.58% less.

While some trends appeared to be easy to follow, such as the per-student decrease in spending for career and technology education compared to the overall per-student spending pattern, there are other areas in which there seems to be no rhyme or reason for the patterns. Per-student special education spending appears to exceed the increase in overall spending in increasing enrollment districts, while it has decreased in decreasing enrollment districts. Are those students in decreasing districts lower in their need for this instruction? As the number of increasing-enrollment districts declines to those more extreme in their growth, the amount of the special education spending gap declines slightly. However, when the same adjustment is made with the decreasing enrollment districts, the change in the spending gap is very slight.

In an effort to determine the existence of any statistical significance in the four dependent variables (special education, career and technology education,

compensatory education, and bilingual education), multivariate analysis of variance was used. As can be seen in Table 55, special education had a *p* value of .996, career and technology education had a *p* value of .474, compensatory education had a *p* value of .561, and bilingual education had a *p* value of .332. A *p* value of .05 or less was used to indicate statistical significance.

Table 55 *Univariate* f-tests for Dependent Variables

Variable	Sq. Mul. <i>R</i>	Adj. R²	HMS
Special ed	0.00000	0.00000	29346.80613
CATE	0.00055	0.00000	1825332.58700
Comp ed	0.00036	0.00000	265.65521
Bilingual ed	0.00100	0.00000	239421623.90000
Variable	MSE	f	р
Special ed	1359250367.00000	0.00002	.996
CATE	3552482.50000	0.51382	.474
Comp ed	785.70112	0.33811	.561
Bilingual ed	253895127.80000	0.94299	.332

After the initial research was completed, second and third looks at the data were taken. The groups were broken down into smaller categories using increases and decreases of 10% (Table 56) and 20% (Table 57) followed by even smaller groups 5%, 10%,15%, and 20% both increasing (Table 58) and decreasing (Table 59). The results still showed a lack of statistical significance.

Table 56

Comparison of Per-student Budget Changes (10%)

Year	Total	Special ed	CATE	Comp ed	Bilingual ed
Increasers					
1993-1994	\$3,023.40	\$3,168.63	\$3,958.36	\$472.48	\$811.85
2003-2004	\$5,042.86	\$6,220.33	\$4,628.43	\$497.40	\$1,458.04
% gain/loss	66% gain	96% gain	16% gain	5% gain	79% gain
Stable					
1993-1994	\$3,096.43	\$3,057.86	\$4,177.87	\$487.69	\$1,282.17
2003-2004	\$5,118.28	\$5,625.51	\$4,845.98	\$505.36	\$2,165.28
% gain/loss	65% gain	83% gain	15% gain	3% gain	68% gain
Decreasers					
1993-1994	\$3377.37	\$3268.22	\$4497.80	\$513.43	\$914.11
2003-2004	\$5334.72	\$5144.54	\$5360.19	\$564.79	\$908.11
% gain/loss	57% gain	57% gain	19% gain	10% gain	0% gain

Table 57

Comparison of Per-student Budget Changes (20%)

Year	Total	Special ed	CATE	Comp ed	Bilingual ed
Increasers					
1993-1994	\$2,879.23	\$3,126.86	\$3,813.13	\$463.19	\$871.24
2003-2004	\$5,012.22	\$6,373.03	\$4,497.93	\$474.30	\$1,653.40
% gain/loss	74% gain	103% gain	17% gain	2% gain	89% gain
Stable					
1993-1994	\$3,188.42	\$3,139.96	\$4,240.26	\$488.72	\$1,051.24
2003-2004	\$5,126.46	\$5,639.29	\$4,908.56	\$519.33	\$1,669.82
% gain/loss	60% gain	79% gain	15% gain	6% gain	58% gain
Decreasers					
1993-1994	\$3,432.98	\$3,100.15	\$4,420.89	\$524.62	\$1,217.30
2003-2004	\$5,793.26	\$5,218.65	\$6,322.10	\$608.02	\$1,195.25
% gain/loss	68% gain	68% gain	43% gain	15% gain	1% loss

Table 58

Comparison of Per-student Budget Changes (5%, 10%, 15%, 20% Increase)

Year	Total	Special ed	CATE	Comp ed	Bilingual ed
Over 20% Increase					
1993-1994	\$,2879.23	\$3,126.86	\$3,813.13	\$463.39	\$871.24
2003-2004	\$,5012.22	\$6,373.03	\$4,497.93	\$474.39	\$1,653.40
% gain/loss	74% gain	103% gain	17% gain	2% gain	89% gain
15% to 20% Increase					
1993-1994	\$3,318.47	\$3,098.79	\$4,049.04	\$488.63	\$580.31
2003-2004	\$5,082.55	\$5,387.61	\$5,193.78	\$544.31	\$629.95
% gain/loss	53% gain	73% gain	28% gain	11% gain	8% gain
10% to 15% Increase					
1993-1994	\$3,322.13	\$3,414.71	\$4,563.82	\$476.89	\$1,131.15
2003-2004	\$5,179.86	\$6,287.64	\$4,717.40	\$523.19	\$2,081.43
% gain/loss	55% gain	84% gain	3% gain	9% gain	84% gain
5% to 10% increase					
1993-1994	\$3,023.44	\$2,748.72	\$4,349.14	\$487.13	\$1,496.65
2003-2004	\$5,189.00	\$6,282.27	\$4,959.06	\$487.95	\$2,836.60
% gain/loss	71% gain	128% gain	14% gain	0% gain	89% gain
0% to 5% increase					
1993-1994	\$3,083.15	\$3,107.16	\$3,930.36	\$425.42	\$526.89
2003-2004	\$5,071.59	\$5,133.84	\$4,884.30	\$516.86	\$1,603.80
% gain/loss	64% gain	65% gain	24% gain	21% gain	204% gain

Table 59

Comparison of Per-student Budget Changes (5%, 10%, 15%, 20% Decrease)

Year	Total	Special ed	CATE	Comp ed	Bilingual ed
0%-5% decrease					
1993-1994	\$3,090.02	\$3,203.71	\$4,038.55	\$566.17	\$1,266.53
2003-2004	\$5,035.92	\$5,068.77	\$4,754.34	\$522.30	\$823.25
% gain/loss	62% gain	58% gain	17% gain	7% loss	35% loss
5% to 10% decrease					
1993-1994	\$3,221.97	\$3,356.40	\$4,273.95	\$487.87	\$2,106.42
2003-2004	\$5,120.48	\$5,651.23	\$4,273.95	\$509.33	\$2,190.89
% gain/loss	58% gain	68% gain	9% gain	4% gain	4% gain
10% to 15% decrease					
1993-1994	\$3,335.09	\$3,335.97	\$4,456.67	\$506.52	\$761.50
2003-2004	\$5,210.81	\$5,339.27	\$5,042.82	\$546.22	\$954.10
% gain/loss	56% gain	60% gain	13% gain	7% gain	25% gain
15% to 20% decrease					
1993-1994	\$3,391.79	\$3,321.90	\$4,618.40	\$514.92	\$971.49
2003-2004	\$5,174.53	\$4,783.98	\$5,103.75	\$561.89	\$528.96
% gain/loss	52% gain	44% gain	10% gain	9% gain	45% loss
Over 20% decrease					
1993-1994	\$3,432.98	\$3,100.15	\$4,420.89	\$524.62	\$1,217.30
2003-2004	\$5,793.26	\$5,218.65	\$6,322.10	\$608.02	\$1,195.25
% gain/loss	68% gain	68% gain	43% gain	15% gain	1% loss

# Conclusion

In conclusion, there was no overall trend discovered in the composite change in per-student budgets for categorically funded education programs compared to the

overall per-student budget between districts whose average daily attendance had increased, decreased, or remained stable. While there were increases in nearly every program, no set pattern was observed. Each group of school districts appeared to exhibit unique characteristics in expenditures, sometimes similar to others, sometimes not. School administrators may not be able to make accurate predictions based solely on enrollment increases or decreases when it comes to changes in the budget needs of educational programs. There may be other factors indicative of future financial needs that can be used along with enrollment changes, but enrollment changes alone will probably not be reliable. Characteristics of each individual school district may make one district unique from others of the same size or with similar enrollment patterns.

#### Recommendations

A recommendation for future study would be to use a similar approach while breaking school districts down into more groups based not only on enrollment changes, but also on average daily attendance. This could enable a researcher to compare small schools to small schools and larger schools to other schools of a similar size. Another consideration for a future researcher might be to choose to limit a particular study to special education, career and technology education, and bilingual education. The wide range in methods of serving compensatory education students, comingling of funds, and the fact that all students generating compensatory education funds do not necessarily require compensatory education services may cause a need for that program to be evaluated in a different manner. Compensatory funding is based on the socioeconomic conditions of families. While this is often an indicator of the need for extra educational services, it is not always the case.

## Summary

The lack of any statistical significance apparent in the changes in budgeted funds for categorically funded programs only emphasizes the importance of management in school districts. Bellon (1977) wrote that long-range planning was difficult because resources and enrollments were out of an administrator's control. This could very well be a factor in managing for enrollment change. It is unlikely that there is one solution for dealing with these challenges. Rist (1983) might have been correct when he wrote that superintendents of declining-enrollment districts need to be managers who are unafraid to take risks. Being bold with careful attention to planning might very well be the only way to manage for problems such as shifting enrollments.

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