

**Resource Allocation Practices and Student Achievement:
An Examination of District Expenditures by Performance
Level with Interviews from Twenty-One Districts**

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December 4, 2000

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The Charles A. Dana Center, The University of Texas at Austin produced this publication with funds from Southwest Educational Development Laboratory (SEDL) and the Office of Educational Research and Improvement, U.S. Department of Education, under contract #RJ96006801. The content herein does not necessarily reflect the views of the Department of Education, any other agency of the U.S. Government, or any other source. The Charles A. Dana Center and Southwest Educational Development Laboratory are Equal Employment Opportunity/Affirmative Action Employers and are committed to affording equal employment opportunities to all individuals in all employment matters. Any opinions, findings, conclusions, or recommendations expressed in this material are those of the authors and do not necessarily reflect the views of these institutions.

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First printing December 2000

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Acknowledgements

This study was greatly enhanced by the willingness of the leadership and personnel from the twenty-one districts to share their time and knowledge throughout the interview process. Additionally, the expertise shared by Lynn Moak, Partner Moak, Casey, and Associates, LLP, during the development of the interview protocols was also invaluable.

The researchers acknowledge with appreciation all the members of the Dana Center Communications Team who provided assistance in the production of this report:

Amy Dolejs, Editor and Designer

Phil Swann, Senior Designer

Dale W. Tope, Senior Administrative Associate

Resource Allocation Practices and Student Achievement: An Examination of District Expenditures by Performance Level with Interviews from Twenty-One Districts

Introduction

Distributing dollars to schools is an important part of supporting instruction and improving student learning. Financial resources pay teacher and administrator salaries, provide equipment and supplies for classrooms, fund professional development, and pay for buildings and their upkeep. Educators, as well as policymakers and researchers, want to know what level and mix of expenditures are most likely to produce high academic performance for all students. More than two decades of research studies address this issue of optimal resource allocation in education, but researchers have not solved the problem.¹ One possible explanation as to why this issue continues to elude researchers is the nature and complexity of the problem. It is difficult to attribute an increase in student learning to any one factor because so many forces influence student learning, including factors outside the school environment. Additionally, an increase in expenditures may take years to result in higher student performance, at which time it becomes difficult to demonstrate a causal relationship between the resources and improved performance. Despite these difficulties, numerous researchers and educators believe this type of research should continue because it may lead to more effective resource allocation to achieve the goal of high academic performance for all students.

Many researchers have struggled to understand the precise relationship between education spending and student performance. Among recent studies that link education resources and student performance two patterns emerge. One pattern shows a steady increase in federal, state, and local resources for education. The other pattern reveals generally weak increases in student achievement as measured by standardized tests.² Researchers have failed to reach consensus about what these findings mean, and they have been hampered in their efforts by poor or inconsistent data sources as well as arguments about what constitutes appropriate research methodology.³ This study

¹ See the following publications for an overview of this research: Gary Burtless, ed., *Does Money Matter? The Effect of School Resources on Student Achievement and Adult Success* (Washington, DC: Brookings Institution Press, 1996); Allan Odden and Sarah Archibald, *Reallocating Resources: How to Boost Student Achievement Without Asking for More* (Thousand Oaks, CA: Corwin Press, 2001); and Allan Odden and Carolyn Busch, *Financing Schools for High Performance: Strategies for Improving the Use of Educational Resources* (San Francisco, CA: Jossey-Bass Publishers, 1998).

² Lawrence O. Picus, *The Allocation and Use of Educational Resources: School Level Evidence from the Schools and Staffing Survey* (Los Angeles, CA: USC Center for Research in Education Finance, Working Paper No. 37, 1993) and Allan R. Odden and Carolyn Busch, *Financing Schools for High Performance* (San Francisco, CA: Jossey-Bass Publishers, 1998), pp. 3-25.

³ Eric A. Hanushek, *Making Schools Work: Improving Performance and Controlling Costs* (Washington, DC: Brookings Institution Press, 1994); Larry V. Hedges, Richard D. Laine, and Rob Greenwald, "Does Money Matter? A Meta-Analysis of Studies of the Effects of Different School Inputs on Student Outcomes," *Educational Researcher*, 23(3), 5-14; Rob Greenwald, Larry V. Hedges and Richard D. Laine.

attempts to contribute new information to the dialog about the relationship between education expenditures and student performance by using more recent data and multiple methods of analysis.

The purpose of this study is to gain a better understanding of the relationship between resource allocation in Texas public school districts and student academic performance. The study explores the relationship between academic performance levels and expenditures, including expenditures on certain types of educational programs. The study also examines the expenditure patterns of districts that had improvement in performance over a three-year period. Researchers used Texas school finance data available on the Internet as one resource for studying state and district expenditure patterns.⁴ They requested PEIMS data from the Texas Education Agency. Information about student performance in Texas was also accessed through the Internet.⁵ To gather information about the dynamics of school district resource allocation, researchers conducted interviews with administrators in twenty-one school districts.

Researchers used financial and accountability data for 1,042 school districts for three years: 1996-97, 1997-98 and 1998-99. Researchers created a subset of 774 target school districts using the state data set. The target districts had three years of finance data as well as three years of student performance data as measured by the Texas accountability system. In addition, researchers isolated twenty-one school districts—referred to as focus districts—for in-depth study. They had complete financial and performance data, and the districts agreed to participate in interviews about budgeting, salary and program costs, and financial incentives for improved student academic performance. Finally, researchers created a data set of financial and student performance data for nine districts with exemplary accountability ratings.

With these data sources, researchers sought answers to three questions. What is the current pattern of resource allocation among Texas school districts as measured by expenditures? Do Texas school districts with higher levels of student performance allocate resources in distinctive or unique ways? And, how do school administrators characterize their budget and resource allocation decisions, and do these characteristics differ between school districts that are high performing and those that are not?

Methodology

Researchers gathered data from the Texas Education Agency, from data bases available on the Internet and from interviews of public school officials familiar with school finance and resource allocation. The quantitative or financial data permitted researchers to

“The Effect of School Resources on Student Achievement,” *Review of Educational Research*, 66(3), 361-396; and Eric A. Hanushek, “A More Complete Picture of School Resource Policies,” *Review of Educational Research*, 66(3), 397-410.

⁴ Financial data are available at www.tea.state.tx.us/peims/.

⁵ Information about accountability and accountability ratings is available at www.tea.state.tx.us/perfreport/account/.

conduct comparative studies of resource allocation and examine the relationship of spending to student academic performance. The qualitative or interview data provided a context for understanding how school districts make budget decisions to address instructional needs, and how districts seek to stimulate improved student academic performance using financial resources.

Researchers constructed five data sets for use in the analysis.

- *State-level* data from PEIMS were used to describe the allocation of public school expenditures among functions and programs on a statewide basis.
- Researchers identified 774 *target districts* that could be organized into three levels related to student performance—*level three* districts have the lowest relative performance, *level two* districts have the next highest performance, and *level one* districts have the highest overall performance. Once researchers grouped districts by performance level, they had information to compare resource allocations among the levels and to examine patterns or relationships between performance and resource allocation.
- Researchers identified seven districts in each of the three levels created for the target district data set. These twenty-one districts are referred to as *focus districts*. Data on expenditure functions and programs for focus districts were analyzed to identify relationships between resource allocation and student academic performance.
- Researchers identified nine school districts that moved from accountability ratings of acceptable in 1996-97 to exemplary in 1998-99. These districts are referred to as *strong-improvement districts*. Researchers explored expenditures in these districts and compared the findings to results obtained from the analysis of focus districts and target districts.
- Researchers interviewed administrators in the twenty-one focus districts to learn more about general funding, salary costs, other staffing costs, professional development, special program costs, and financial awards related to improved student performance. Researchers transcribed *interview data* for use with software tools for qualitative analysis.

State-Level Data

The Texas Education Agency provided researchers with expenditure data from the Public Education Information Management System (PEIMS) for three years—1996-97, 1997-98 and 1998-99. These data reflect actual (not budgeted) expenditures from all funds, reported by school districts at the end of the fiscal year. Researchers used PEIMS expenditure data organized by function and program intent.

Expenditure function. School expenditure functions are general categories of expenditure. For this study researchers selected ten function codes: instruction, instructional resources, staff development, instructional leadership, school leadership, guidance and counseling, social work, co-curricular and extracurricular activities, and general administration. All other function codes were aggregated to create a tenth function category labeled “other.” A description of the types of expenditures represented by the functions appears below. Appendix B presents a more detailed description of the codes.

Function Codes:

- Instruction—classroom teachers and teacher aides.
- Instructional resources—librarians, library books, videos, software, resource center personnel.
- Staff development—staff who prepare and/or conduct in-service training or staff development for instructional staff.
- Instructional leadership—instructional supervisors, special population program coordinators or directors, and other educational program coordinators or directors.
- School leadership—principals, assistant principals, and related staff.
- Guidance counseling—counselors and related staff; staff who research and evaluate the effectiveness of programs.
- Social work—truant/attendance officers, social workers, personnel transferring migrant student records.
- Co-curricular and extracurricular activities—Salary supplements for coaches, athletic directors, athletic supplies and equipment, band uniforms, sponsors for UIL speech, debate, science competitions, etc.
- General administration—salaries related to the superintendent, budgeting, and human resources; salaries associated with planning and research.
- Other—transportation, facilities and plant maintenance, security and monitoring, community services, data processing, and other functions.

Program intent. School districts report expenditures according to the program or activity they are intended to support. Program intent expenditures show researchers how school districts plan to fund regular education, gifted and talented education, career and technology education, special education, compensatory education (sometimes referred to as “accelerated instruction”), bilingual education, and athletics and related co-curricular education. A description of program intent codes appears below.

Program Intent Codes:

- Regular education—services directed toward basic, regular education students; includes honors and college preparatory courses
- Gifted and talented education—services directed towards students participating in a state-approved gifted and talented program
- Career and technology education—services directed towards students participating in a state-approved career and technology education course as an

- elective, as a participant in the district's career and technology coherent sequence of courses program, or as a participant in the district's tech prep program.
- Special education—services directed towards students participating in special education programs.
 - Compensatory education—services directed towards increasing the amount and quality of instructional time for students in at-risk situations.
 - Bilingual education—services directed towards students participating in a state-approved bilingual education programs which is a full-time program of dual-language instruction.
 - Athletics/related education—costs for co-curricular/extracurricular activities.

Performance rating. Texas has an accountability system for rating school districts that incorporates information gathered from student attendance, dropout rates, and test scores. Tests used within the accountability system are called the Texas Assessment of Academic Skills (TAAS).⁶ TAAS tests in reading, writing, and mathematics are aligned with Texas learning standards that describe what students should know and be able to do. The state combines attendance rates, dropout rates, and TAAS performance in a rating system that produces a designation of exemplary, recognized, acceptable, or low performing for each Texas school district. Charts that summarize the standards for ratings appear in Appendix A of this report.

Researchers added a variable to each school district record to indicate the district's accountability rating in 1996-97, 1997-98, and 1998-99. For this study districts rated exemplary were assigned the numeral 1, districts rated recognized were assigned the numeral 2, districts rated acceptable were assigned the numeral 3, and districts rated low performing were assigned the numeral 4. Many districts had ratings that varied from year to year. For example, a district might have a rating of 2 for 1996-97, and a rating of 1 for 1997-98 and 1998-99. Researchers were unable to assign every district a rating for each of the three years because of missing data or reporting problems.⁷

Target District Data

Researchers examined district performance ratings for 1996-97, 1997-98, and 1998-99 and created a composite or average score for each district for which there were three years of accountability ratings. The composite score is the sum of the assigned numeric designations for three years. For example, a district with a rating of 2 each year had a composite score of 2. A district with a rating of 2 in 1996-97 and 1997-98 and a rating of 1 in 1998-99 had a composite score of 1.66 (5 divided by 3). Lower composite scores reflect higher student performance levels. A district with a composite score of 4 would have been low performing for all three school years and a district with a composite score

⁶ College admissions test participation and scores serve as supplemental indicators for higher performance ratings.

⁷ The Accountability Manuals for 1997, 1998, and 1999 describe situations in which ratings are absent, preliminary, or revised in some manner. Manuals are available at www.tea.state.tx.us/perfreport/account/YEAR/manual/ where YEAR represents the four-digit year desired. For example, the *1997 Accountability Manual* is at www.tea.state.tx.us/perfreport/account/1997/manual/.

of 1 would have been exemplary for all three school years. Once the composite scores were constructed and assigned to each school district, researchers divided the districts into three levels based on the following criteria:

Level one districts are defined as those with

- A composite score of 2.0 or lower
- A 1998-99 accountability rating of recognized or exemplary

Level two districts are defined as those with

- A composite score greater than 2.0 and less than or equal to 3.0
- A 1998-99 accountability rating of acceptable
- A 1998-99 TAAS passing rate for all students in the top 60 percent of districts with composite scores between 2.0 and 3.0 and with an accountability rating of acceptable

Level three districts are defined as those with

- A composite score of 3.0 or greater
- A 1998-99 accountability rating of acceptable or low performing
- A 1998-99 TAAS passing rate for all students in the bottom 20 percent of districts with composite scores of 3.0 or greater and with an accountability rating of acceptable or low performing

Seven hundred and seventy-four (774) school districts met one of the three definitions. This group of 774 districts is called the target districts: 283 are at *level one*, 320 are at *level two*, and 171 are at *level three*. The purpose for identifying a level associated with student performance is to aid in the comparison of resource allocations and to assist researchers in determining whether student academic performance is related to resource allocation.

Focus District Data

Researchers identified twenty-one districts for further study—seven districts from each of the three levels constructed for the target district data set. Selection was based on four criteria: campus performance, geographic distribution, student demographic profile, and willingness to participate in interviews. Researchers looked first to individual campus performance to select districts for further study. Within *level one* they selected districts that had at least one-third of their campuses with a rating of recognized or exemplary. They selected *level two* districts that had 33 percent or fewer of their campuses rated recognized or exemplary. They selected *level three* districts that had no schools with an exemplary rating. Once schools in each of the three levels were selected, researchers chose districts to represent all Texas regions. When researchers completed the selection of districts according to campus performance and geography, they chose districts that represented a range of demographic profiles. Finally, they contacted the superintendent and business office of each selected district to secure permission to interview, with a goal of having twenty-one focus districts equally distributed among levels one, two, and three.

Strong-Improvement District Data

Researchers examined the state-level data set and identified school districts that had upward or positive accountability ratings changes. They selected nine districts that had accountability ratings of acceptable in 1996-97 and exemplary ratings in 1998-99. These districts are referred to as *strong-improvement districts*.

Interview Data

Researchers constructed interview questions covering six broad topic areas: general funding, salary costs, other staffing costs, professional development, special program costs, and fiscal awards related to student academic performance. Questions under these topic areas were divided into separate protocols that could guide interviews with finance officers, personnel directors, and superintendents of small districts. Researchers pilot-tested the interview questions with two school districts that were not included among the focus districts. Next, the questions were refined with the assistance of an educational finance consultant from the private sector. Appendix C presents the interview questions.

Researchers arranged to conduct interviews at the focus district sites. In three small districts only the superintendent was interviewed because the superintendent served as both the finance officer and personnel director. In the remaining eighteen districts, finance officers and personnel directors were both interviewed. All but three interviews were completed individually. Researchers conducted the remaining interviews using a group discussion format.⁸ Interviews took from 45 to 90 minutes to complete. Researchers taped interviews and later transcribed them for analysis with software appropriate for analyzing interview data.

Resource Allocation Among Texas School Districts Measured by Expenditures

This section provides an overview of per-pupil⁹ expenditures for selected expenditure functions and programs in 1,042 Texas public school districts.¹⁰ The state-level overview is intended to provide a general picture of spending patterns using state-level data with functions and program intent codes. Appendix C provides additional information about selected function codes.

Percentage of Total Operating Expenditures by Function

Figure 1 shows the average percentage of total operating expenditures for the ten expenditure functions over a three-year period from 1996-97 to 1998-99. During this period, the average annual expenditures for instruction and instructional resources accounted for sixty percent of expenditures. School leadership, guidance, and counseling

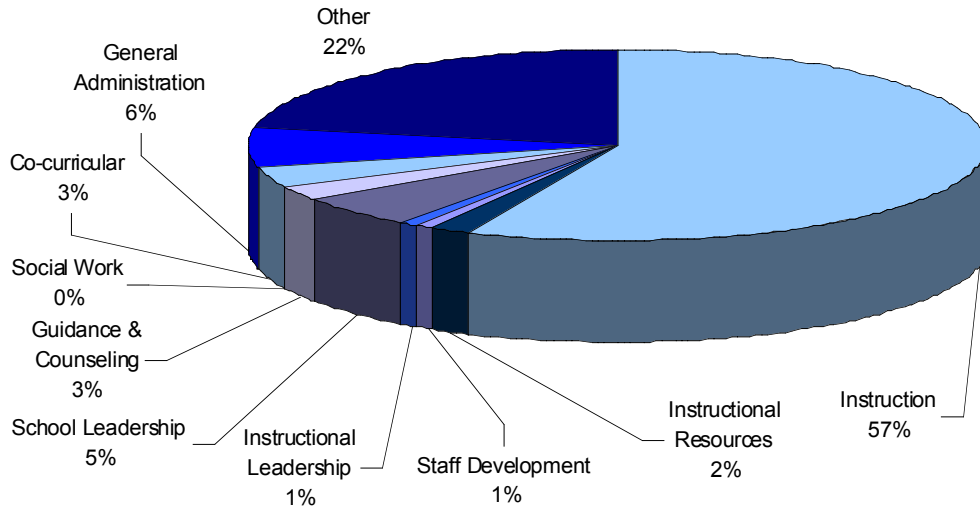
⁸ Interview subjects requested this arrangement.

⁹ Student counts are based on total membership (similar to enrollment), not average daily attendance.

¹⁰ Charter schools are excluded from the analysis.

account for another seven percent of expenditures. Other expenditures represent twenty-two percent of operating expenditures.

Figure 1: Operating Expenditures (All Funds) by Function, Averaged for Three Years (1996-97 to 1998-99)



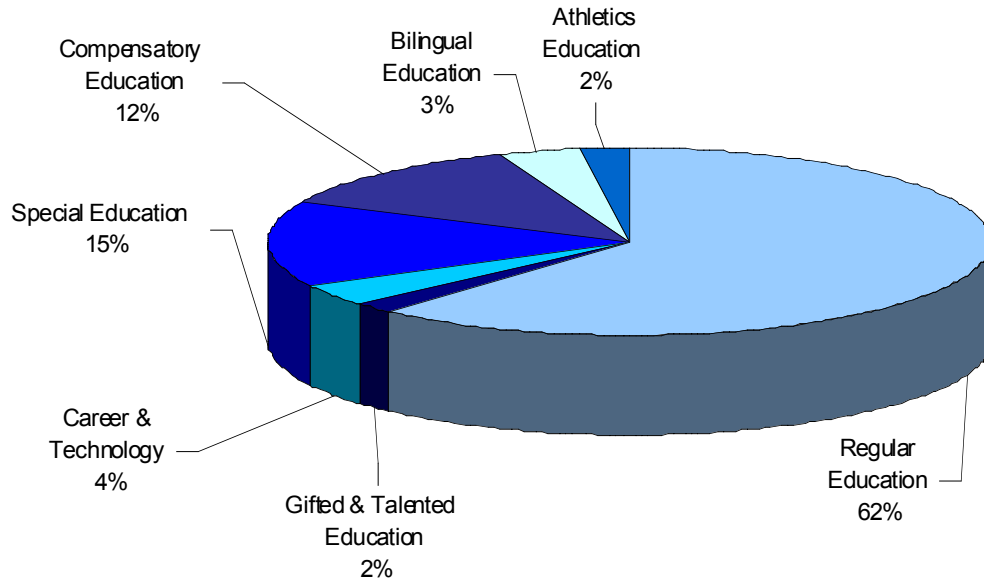
Source: Texas Education Agency, PEIMS data.

Figure 1 illustrates the importance of instructional expenditures compared to other expenditure functions.

Percentage of Total Operating Expenditures by Program

Figure 2 shows average operating expenditures for each of the program intent areas. Researchers computed the average using state-level data for 1996-97, 1997-98 and 1998-99.

Figure 2: Operating Expenditures (All Funds) by Program Averaged for Three Years (1996-97 to 1998-99)



Source: Texas Education Agency, PEIMS data.

On average, Texas school districts report plans to allocate nearly two-thirds of program expenditures to the regular program. Together, compensatory education and special education make up an additional twenty-seven percent of program expenditures. The pattern of allocations has changed only slightly over the three years for which data were examined. The percentage allocated to special education decreased slightly and the percentage allocated to career and technology education and to bilingual education increased slightly.

Summary

Expenditures on instruction account for the majority of Texas school district operating expenditures. Program expenditures for regular education account for nearly two-thirds of program expenditures. Researchers next examined whether school districts with higher levels of student academic performance allocate resources in patterns that differ from the state average or from districts with lower levels of student academic performance.

Differences in Spending by Performance Category

Researchers assembled a target data base of 774 districts that had complete financial data and performance ratings for three years (1996-97, 1997-98, and 1998-99). As explained above, researchers separated the target data base into three groups based on district performance as measured by the Texas accountability system. *Level one* districts were the highest performing districts. *Level two* districts had somewhat lower performance overall but still performed at or above minimum performance standards. *Level three* districts were the lowest performing districts. Table 1 shows expenditures by function for districts within each level and compares those expenditures with the state average for the three-year period.

Table 1: Average Per-Pupil Expenditures for Target Districts by Function and Performance Level (1996-97 to 1998-99)

Function	Per-Pupil Expenditures for Target Districts, All Funds			
	Level One Districts N=283	Level Two Districts N=320	Level Three Districts N=171	State N=1,042
Instruction	\$3,747	\$3,375	\$3,568	\$3,590
Instructional Resources	\$120	\$94	\$102	\$108
Staff Development	\$37	\$44	\$53	\$42
Instructional Leadership	\$36	\$63	\$73	\$55
School Leadership	\$361	\$303	\$337	\$334
Guidance & Counseling	\$149	\$162	\$165	\$157
Social Work	\$3	\$7	\$13	\$6
Co-/Extracurricular	\$232	\$205	\$210	\$220
General Administration	\$481	\$318	\$393	\$408
Other	\$1,548	\$1,286	\$1,367	\$1,414
Total	\$6,714	\$5,857	\$6,281	\$6,334

Source: Texas Education Agency, PEIMS data.

Table 1 fails to show strong or unambiguous patterns of expenditures associated with student performance. *Level one*, the group of highest performing districts, spends more than the other categories and the state average. *Level two*, however, is the lowest spending of the three levels.

Table 2 shows program expenditures by performance level. High-performing *level one* districts spend more for regular education and less for compensatory education and bilingual education. *Level three* districts have expenditures for compensatory education and bilingual education that exceed the state average.

The information presented so far shows that *level one* districts spend a greater percentage of their resources on instruction and regular education, suggesting a connection between resource allocation and performance. But these results require further analysis to determine if the findings are the result of decisions by school districts or just differences that occur by chance.

Table 2: Average Per-Pupil Program Expenditures (All Funds) for Target Districts by Performance Level (1996-97 to 1998-99)

Program	Per-Pupil Program Expenditures, All Funds			
	Level One Districts N=283	Level Two Districts N=320	Level Three Districts N=171	State N=1,042
Regular Education	\$3,095	\$2,646	\$2,630	\$2,845
Gifted and Talented Education	\$55	\$54	\$48	\$51
Career and Technology Education	\$238	\$209	\$228	\$230
Special Education	\$642	\$672	\$613	\$657
Compensatory Education	\$516	\$522	\$782	\$571
Bilingual Education	\$33	\$42	\$104	\$55
Athletics/Related Activities	\$159	\$142	\$141	\$151

Source: Texas Education Agency, PEIMS data

Typically in analysis of academic performance and its relationship to resources, researchers attempt to model the effect of certain inputs (like teacher salary and instructional expenditures) on the achievement outcomes of individual students. The outcome is often specified using a single standardized test or measure of academic achievement. Resources may include financial information, school characteristics (such as size and percent of low-income students), and teacher characteristics. Researchers use linear regression to determine the contribution of resource input to increases in test performance. In this study, the goal was to understand differences in spending patterns among districts that were classified into three different performance levels. In other words, the “outcomes” or dependent variables are expenditures (expressed as functions or as program expenditures) and the independent variation is expressed in the three

performance levels. Researchers used multivariate analysis of covariance (MANCOVA) to test the hypothesis that there are significant differences among the performance groups (levels one, two, and three). Statistically significant results would reveal important relationships between resource allocation and academic performance levels.

Researchers conducted two separate analyses using data for the 774 target districts. The first analysis used expenditure functions (instruction, instructional related, etc.) and the second analysis used program intent codes (regular education, gifted and talented education, etc.).¹¹ The dependent variable was adjusted for differences in the percent of low-income students and the district size in terms of enrollment.

Researchers compared *level one* with *level two*. Then they compared *level one* with *level three*. In a third step, they compared *level two* with *level three*. These are referred to as pairwise comparisons, and they confirm the finding that expenditure allocations for instruction are positively related to student academic performance. Statistically significant differences occur between *level one* districts and *level two* districts as well as between *level one* districts and *level three* districts. The differences between *level two* districts and *level three* districts are not statistically significant. The table of results for pairwise comparisons appears in Appendix D.

Table 3 displays results of this analysis of expenditures by function using MANCOVA. There are statistically significant differences among the three performance levels, meaning that the differences among the levels are not simply the result of chance. Significant relationships (shown with an asterisk on the table) are revealed for instructional expenditures, instructional resources, school leadership, co-curricular activities, and general administration expenditures. In all of these areas, *level one* districts are spending more than their *level two* and *level three* counterparts. Significant relationships are also revealed for social work expenditures and instructional leadership expenditures. However, in these areas *level one* districts spend less than their *level two* and *level three* counterparts.

It is important to note that the MANCOVA analysis confirms what Table 1 suggested about a direct and positive relationship between high performance (*level one* districts) and higher instructional expenditures.

¹¹ Researchers conducted two separate analyses because function codes and program intent codes overlap. Expenditures within a program are comprised of numerous functions. Using separate analyses enabled researchers to examine both areas while avoiding the problem of duplicating expenditures.

Table 3: Results of MANCOVA Analysis Using Per-Pupil Function Expenditures

Function	P value	F	R^{2**}
Instruction	.000*	23.17	.129
Instructional Resources	.000*	7.78	.028
Staff Development	.398	.922	.068
Instructional Leadership	.000*	9.76	.078
School Leadership	.000*	17.98	.082
Guidance & Counseling	.556	.587	.014
Social Work	.003*	5.96	.132
Co-Curricular	.004*	5.49	.091
General Administration	.000*	32.10	.151

* Significant at the 0.006 level, which adjusts for the number of tests conducted

** R² Represents variance accounted for by performance group and covariates.

Omnibus F=5.486, p<.001

Researchers performed the second MANCOVA analysis on the expenditures in seven program areas: regular education, gifted and talented education, career and technology education, special education, compensatory education, bilingual education, and athletic programs. Descriptive statistics for these programs appeared previously in Table 2.

The MANCOVA results appear in Table 4. There were statistically significant differences among the performance categories program expenditures only for regular education and career and technology education, but not for the other categories.

Table 4: Results of MANCOVA Using Per-Pupil Program Expenditures

Program	P value	F	R ^{2**}
Regular Education	.000*	28.90	.096
Gifted & Talented Education	.832	.184	.03
Career & Technology Education	.001*	6.760	.086
Special Education	.206	1.582	.006
Compensatory Education	.108	2.233	.459
Bilingual Education	.019	3.991	.193
Athletics/Related Education	.035	3.369	.061

* Significant at the 0.007 level which adjusts for the number of tests conducted

** R² Represents variance accounted for by performance group and covariates.

Omnibus F=5.588, p<.001

Pairwise comparisons were made for the program areas. The significant results occur only between *level one* districts and the other two levels. There were not significant differences between *level two* and *level three* districts. Results are significant only for regular education and career and technology education. These findings reinforce the previous results suggesting that there is a relationship between resource allocation and high levels of student performance. Specifically, it suggests that resource allocation decisions have an important role in helping school districts achieve student learning goals. The table of results for pairwise comparisons appears in Appendix D.

Summary

Level one districts consistently spent more per-pupil than *level two* and *level three* districts on instruction, instructional resources, school leadership, general administration, co-curricular activities, and total operating expenditures. The expenditure differences were statistically significant, indicating a direct and positive link between resource allocation and academic performance that does not occur by chance.

Program intent areas where *level one* districts consistently spent significantly more per-pupil than both *level two* and *level three* districts are regular education and career and technology education. Expenditures for programs designed to serve the unique educational needs of special populations (gifted and talented education, special education, compensatory education, and bilingual education) are not positively related to overall performance levels measured by the Texas accountability system. Allocations to the regular program are the most strongly linked to performance.

Expenditures by Strong-Improvement Districts

Strong-improvement districts are defined as ones that had an accountability rating of acceptable in 1996-97 and an accountability rating of exemplary in 1998-99. These districts are relatively small, serving from 734 to 2,000 students.

The information in Table 5 shows that the strong-improvement districts have total expenditures that exceed the state average. Instructional expenditures for strong-improvement districts are about 26 percent higher than the state average.¹² These results for strong-improvement districts reinforce the observations made in previous analyses—that resource allocation is positively related to student academic performance. One explanation for the apparent link between high performance and higher resources for instruction could be that budget decisions in these districts were made specifically with the goal of improving student learning. Other reasons for the higher expenditures could be related to district size (expenditures in smaller districts are generally higher on a per-pupil basis), to district tax rates (higher tax rates generally result in higher total revenue), or to qualification for federal program spending.

Table 5: Average Per-Pupil Expenditures for Strong-Improvement Districts, by Function (1996-97 to 1998-99)

Function	Nine Strong-Improvement Districts	State Average Per-Pupil Expenditures
Instruction	\$4,536	\$3,590
Instructional Resources	\$114	\$108
Staff Development	\$31	\$42
Instructional Leadership	\$22	\$55
School Leadership	\$377	\$334
Guidance & Counseling	\$116	\$157
Social Work	\$6	\$6
Co-curricular	\$314	\$220
General Administration	\$416	\$408
Other	\$2,416	\$1,414
Total	\$8,348	\$6,334

Source: Texas Education Agency, PEIMS data.

¹² Researchers did not report program intent expenditures for this data set.

Introduction to Focus Districts

Twenty-one districts comprise the focus districts that participated in interviews. As described earlier in this report, researchers grouped the districts by performance characteristics. Seven districts in *level one* demonstrated the highest performance levels. The seven districts in *level two* demonstrated the mid-range of performance among the focus districts, and seven districts in *level three* demonstrated the lowest student performance among the focus districts. This section includes descriptive information about these districts to set the context for the section on interview findings which follows.

Table 6 shows characteristics of students in the focus districts. Districts are coded with a letter and a number. Groupings by letter represent geographic location. For example, districts identified with “A” are in the same region of the state. Numerals after the alphabetic designation represent the performance level constructed for this study. Number 1 represents the highest performance level, number 2 the next-highest performance level, and number 3 is the lowest performance level. For example, district B1 is a high-performing district located in geographic region B. As a group the districts are representative of Texas as a whole as shown by the range of minority enrollments, low-income student enrollments, and enrollments in second language and special education programs. In general, the twenty-one districts are more representative of mid-size and larger school districts. Among the group, only three districts would be classified as small because they enroll fewer than 1,600 students. The twenty-one school districts serve over one-quarter of a million students.

Table 6: Student Characteristics in Focus Districts, 1999

District	Students	% White	% Black	% Hispanic	% Low Income	% Bilingual	% Special Ed
A1	646	54	9	36	63	11	18
A2	373	47	12	40	61	2	19
A3	345	49	31	17	69	6	20
B1	2,072	89	3	7	36	4	12
B2	2,560	84	8	8	42	3	13
B3	2,729	93	1	5	44	1	21
C1	2,010	0	0	100	95	60	9
C2	2,808	5	1	94	84	15	12
C3	2,925	5	0	95	82	45	10
D1	3,068	45	2	52	45	4	11
D2	3,392	41	6	52	53	6	15
D3	4,339	45	6	48	54	3	12
E1	13,247	56	9	33	39	7	15
E2	12,947	68	11	19	35	9	13
E3	16,453	39	37	23	43	12	11
F1	49,453	14	36	47	71	21	12
F2	41,056	14	36	33	48	25	11
F3	79,496	36	17	44	49	14	12
G1	6,566	57	15	27	35	5	13
G2	5,844	62	10	26	42	4	14
G3	5,895	55	13	28	50	12	10

Focus district performance characteristics are displayed in Table 7. The table documents the high performance of *level one* districts.

Table 7: Performance in Focus Districts, 1997-1999

District	Accountability Rating*			Percent of Students Passing All TAAS Tests 1999
	1997	1998	1999	
A1	Recognized	Exemplary	Recognized	92
A2	Acceptable	Recognized	Acceptable	77
A3	Low performing	Acceptable	Low performing	46
B1	Recognized	Recognized	Recognized	81
B2	Acceptable	Acceptable	Acceptable	79
B3	Acceptable	Acceptable	Acceptable	67
C1	Recognized	Recognized	Recognized	86
C2	Acceptable	Acceptable	Acceptable	75
C3	Acceptable	Acceptable	Acceptable	69
D1	Recognized	Recognized	Recognized	85
D2	Acceptable	Acceptable	Acceptable	80
D3	Acceptable	Acceptable	Low performing	76
E1	Recognized	Exemplary	Exemplary	90
E2	Acceptable	Acceptable	Acceptable	82
E3	Acceptable	Acceptable	Acceptable	74
F1	Recognized	Recognized	Recognized	78
F2	Acceptable	Acceptable	Acceptable	75
F3	Acceptable	Acceptable	Acceptable	68
G1	Recognized	Recognized	Exemplary	93
G2	Acceptable	Acceptable	Acceptable	81
G3	Acceptable	Acceptable	Acceptable	68

Tables 8 and 9 report student and performance characteristics aggregated by level for the focus districts. On average, the groups have student demographics that reflect the state as a whole, although the focus districts as a whole have slightly higher percentages of low-income students. The statewide average for low-income students is about 49 percent.

Table 8: Student Characteristics of *Level One, Two and Three* Focus Districts, 1999

Level	Total Students	% White	% Black	% Hispanic	% Low Income	% Bilingual
<i>One</i>	11,008	45.00	10.57	43.14	54.86	16.00
<i>Two</i>	9,854	45.86	12.00	38.86	52.14	9.14
<i>Three</i>	16,026	46.00	15.00	37.14	55.86	13.29

Table 9 shows the percentage of students passing all TAAS tests taken, by student group. The information confirms that *level one* districts have the highest performance among the twenty-one focus districts. *Level three* districts have the lowest performance.

Table 9: Performance of *Level One, Two and Three* Focus Districts, 1999

Level	% Passing: All TAAS Tests	% Passing: All TAAS Tests, White	% Passing: All TAAS Tests, Black	% Passing: All TAAS Tests, Hispanic	% Passing: All TAAS Tests, Low Income
<i>One</i>	86.71	91.17	80.13	77.07	82.20
<i>Two</i>	78.43	89.14	59.46	68.64	69.39
<i>Three</i>	65.20	73.53	59.50	61.50	45.25

Table 10 shows expenditure patterns by function for focus districts averaged over a three-year period. *Level one* districts spent more than *level two* and *level three* districts, both in total dollars and in the instruction function. The information shown here does not permit conclusions about the relationship between resource allocation among education functions and performance level of the district.

Table 10: Average Per-Pupil Expenditures (All Funds) for Focus Districts by Performance Level (1996-97 to 1998-99)

Function	Per-Pupil Expenditures for Focus Districts, All Funds		
	level one districts n=7	level two districts n=7	level three districts n=7
Instruction	\$3,068	\$3,365	\$2,990
Instructional Resources	\$89	\$84	\$86
Staff Development	\$47	\$62	\$33
Instructional Leadership	\$76	\$133	\$71
School Leadership	\$290	\$293	\$307
Guidance & Counseling	\$178	\$242	\$163
Social Work	\$9	\$11	\$15
Co-Curricular	\$171	\$183	\$147
General Administration	\$216	\$251	\$271
Other	\$1151	\$1,205	\$1,237
Total	\$5,295	\$5,829	\$5,320

Source: Texas Education Agency, PEIMS data

Focus districts spend somewhat less for all functions than does the target data set (see Table 1). Total expenditures are also roughly 18 percent lower than statewide average total expenditures.

Results of Interviews with Focus District Personnel

Researchers gained information through interviews that could not be discovered in the PEIMS financial data. Interviews with chief financial officers, personnel directors, and superintendents enabled researchers to gain insight into different philosophies behind resource allocation practices, systems of communication, budget collaboration processes, and innovations developed by districts to raise student achievement. Seven common themes emerged from the interviews. These were:

- Teacher supply, recruitment, and retention
- Collaborative decision making
- Needs-based budgeting
- Use of data in decision making
- Performance pay
- Characteristics of finance officers
- Equity issues

Teacher Supply, Recruitment, and Retention

The concern expressed most often by superintendents, personnel directors, and financial officers centered around teacher supply. Many interview subjects felt this was not only an issue in Texas, but also nationwide, with one personnel director stating, “There are so many teacher needs that they tend to overshadow anything else that may be happening in a school year. We are just lucky to get a teacher anywhere.” This statement is supported by literature on teacher supply (State Board for Educator Certification, 1999; Fetler, 1997).

Interview subjects offered multiple views on why teacher supply appears to be diminishing. One personnel director attributed the reduction of entrants into the teaching field to the perception that changes in characteristics of school children and their families make the field less desirable. Children of school age may be considered difficult to work with, and families may appear to be unsupportive or overly demanding. A personnel director of a large district attributed the diminished teacher supply in Texas to the requirement of state-imposed tests like the Examination for Certification of Educators in Texas (ExCET) exam.

In addition to fewer entrants into the teaching field, interviewees cited teacher turnover as a growing problem. One personnel director of a large district stated that his district experienced teacher turnover every day. He attributed this to factors such as “stress, perceived lack of support, incorrigible student populations, incorrigible parents, new requirements for certification, noncompetitive salaries, and increased costs for health care.” Numerous other interview subjects from all three performance levels also stated the same concerns. Rural districts were concerned about the availability of local housing and the flight of new teachers to metropolitan areas. Other interview subjects noted that small districts located in regions where people tend to settle and stay did not seem to have

as much teacher turnover, except in specialized areas such as bilingual education or foreign language instruction.

According to some interview subjects, scarcity of teachers has created competition for high-quality teachers amongst neighboring districts. Almost half of the districts interviewed mentioned that they set their teacher salaries according to what surrounding districts pay. One large *level one* district attracts teachers by offering one of the highest paying salaries in the area for beginning teachers. The administrator stated, “We’re above \$30,000 starting pay, and if you look at the market, that’s pretty high compared to other school districts of our size in our market.” However, this district still reports problems retaining teachers because of high housing costs and the amenities offered by communities in surrounding areas. This was illustrated in one personnel director’s comment:

You get a teacher that comes in the first year, they live in the district, and then decide to get married and buy a house. Well, there’s not very many homes out here left, so they move to areas where housing is growing.

This district offset new-teacher attrition by offering an attractive pre-tax retirement plan in addition to the plan provided through the state. The district matches contributions teachers make, making those matching contributions subject to a five-year vesting schedule. The structure of this program, with additional benefits and a vesting period, makes it more attractive for teachers with six or fewer years of experience to stay in the district. If they leave before they are vested, they lose some or all of the matching portion of the plan.

Financial incentives and stipends are a common mechanism for increasing teacher supply in shortage areas like special education, mathematics, science, and bilingual education (Texas Center for Educational Research, 1999; Fetler, 1997). Many interview subjects said that they offered bonuses to teachers in these high demand areas. However, when asked if this method was effective, some felt the bonus was not large enough to attract enough teachers or retain them in fields of demand. One finance officer postulated the following:

Offering stipends was effective when schools first started doing it, because not everybody was doing it. But now that everybody is doing it, it is not effective. If we all stopped, it would be a tremendous savings to us and we’d all get the same number of employees. Everybody’s chasing math, science, bilingual, and special education teachers, offering \$300 to \$1,000 [stipends]. Is it effective? Not truly.

Another personnel director said that his district does not offer many stipends to reduce teacher shortages because “I’d be increasing somebody else’s shortage, and so, locally, we’ve all not offered much in the way of stipends.”

The topic of recruitment yielded a variety of approaches. Small districts with stable communities tended to rely on recruiting applicants locally. Mid-size and large districts spent more time and effort recruiting, often going out of state and to the Internet to find applicants. To obtain minority teachers, one large *level two* district recruits heavily out of state, with a particular emphasis on universities with high African American and Hispanic enrollment as well as conferences and conventions that African American and Hispanic educators attend.

In addition to looking outside for recruits, many districts have initiated internal programs to “grow” their own candidates. One large district’s internal growth program paid teacher aides to attend school and obtain teacher certification:

They get full aide salary, but only have to work 20 hours a week. The other 20 hours they must go to school and we pay for all their tuition and all their books.

This district also encourages personnel to serve on boards at different universities to find out about grants and other programs to assist their recruitment efforts. This effort has led to a field-based program designed for pre-service teachers. Field-based programs are ones in which a classroom is set up for university student-teacher programs so that some of the university coursework is conducted on a public school campus. Other popular internal programs used by districts are alternative certification programs and partnerships with local universities to help pull in qualified recruits needing additional training for certification.

Districts also focused on retaining existing teachers to maintain teacher supply. One large *level two* district initiated a program to help new employees by inviting different organizations in town to describe the programs and services they offer to teachers and the community. This information dissemination service tells teachers “what’s available in the community, hoping that as they make these relationships and friendships they like the community.”

Providing mentors for beginning teachers was another frequently used technique to retain teachers. However, some districts mentioned that state-mandated mentoring programs do not work. One personnel director attributed the problem to the mentor requirement being an unfunded mandate. He added that mentor duties extend teachers’ already numerous responsibilities. One large *level one* district reported having a successful mentoring program that truly supports new teachers. The program pays mentors \$500 per year. This district also felt it retained teachers by offering 26 instead of 24 pay periods. These incentives are offered, according to the personnel director, because, “if we care for the teachers, it’s our hope that they’ll care for the kids. Our business is very service oriented.”

One district personnel administrator also discussed administrator supply shortages. Small districts did not report concerns over administrator shortages, except in districts where large cohorts are near retirement age. However,

personnel in mid-size and large districts saw a decrease not only in the number of administrators, but also in the quality of applicants. One personnel director attributed this to lack of experience, lack of support for professional growth of administrators, and competition from the non-education labor market. Several interview subjects mentioned having difficulty finding minority administrators, particularly Hispanic principals.

An insufficient supply of well-prepared teachers and administrators is an obstacle for many districts as they struggle to provide quality instruction for their students. Districts of all other sizes continue to work to find solutions for supplying, recruiting, and retaining qualified teachers.

Collaborative Decision Making

The school board and superintendent retain primary responsibility for developing and adopting a budget, but other activities occur before the board and superintendent begin final budget deliberations, usually in late summer. Districts frequently convene a community budget committee during the winter or spring to identify budget priorities for the coming year. The process of implementing the priorities and working through the details may first fall to individual campus and program administrators who prepare draft budgets. This work may then be combined into a draft budget for the entire district. Some districts convene staff committees to work out differences among campuses and programs, but many more do not engage in collaborative budget work.

Many of the districts interviewed expressed concern over the inability of staff members to place the overall needs of the district above the needs of their individual campuses, programs, or classrooms. The chief financial officer from one *level three* district noted that campus principals are “always complaining [that] a certain campus gets more [resources] than others.” The focus on individual campuses is reflected in budgeting processes where campus administrators review their needs or draft budgets only with the finance office, and not in a structured committee setting. The majority of the focus districts described this type of budget process. Within this framework there is little room for staff members to develop a deep understanding of the needs of the district as a whole, because they never have access to information about other parts of the system.

Some focus districts described processes that were more open and collaborative. Sometimes these processes were structured and other times unstructured, but generally the free exchange of ideas through conversations among individuals from different parts of the system is viewed to be important. Administrators reported that these conversations also included discussion of the educational impact of resource allocation. Odden and Archibald (2001) documented similar processes at the campus level, noting that many of the successful schools they studied engaged school-level educators as well as parents and community members in a self-study process. Such a process can enable individuals to better understand the needs of the district as well as their individual school.

One rural *level one* district reported making tremendous strides in creating a culture in which everyone attempts to place the good of the district above the good of their particular program, campus, or classroom. This district's chief administrator employed this principle when scheduling an interview with researchers, recommending that a group interview be conducted with the entire central office staff. The administrator explained that staff members could not separate their resource allocation duties, and, to understand how things work in their district, researchers would have to expand the number of interview subjects. During the interview, district staff members described ways in which their job duties overlapped, making it difficult even to assign titles and isolate responsibilities. One staff member noted, "We all are pretty much interchangeable, when it comes to budget, curriculum, personnel, or finance."

This district's budgeting process includes all district stakeholders. They meet as a group to determine the most effective way to allocate resources. In this district, the finance officer identifies the available resources and then works to involve others in the district in determining how to allocate those resources. Each campus is then granted a minimum amount of discretionary funds, and they may make requests above that amount. All of the information about the requests is available to representatives from other campuses. Individuals from campuses and programs meet to prioritize their requests based on the needs of the district as a whole. This district maintains that teamwork is a unique characteristic of the budget work in their district, and they attribute the ability to work in teams to open communication and to the stability of leadership:

From the beginning there's nothing hidden. There are no secret agendas, we all just work together. I think longevity has played an important part, with all of us having worked together over a long time, and our campus leadership remaining very, very stable.

Another *level one* district with a collaborative approach explained the change of attitude that he has seen over the past few years:

We as a district have convinced people to see the big picture. I understand the interest that any individual or principal has about their site. But when they get in the group and they talk, they really realize that this district is more than just "A" Elementary. You know, there's "B" Elementary there and there's "C" Elementary. And they've got needs just like I do. So they've realized what the big picture's all about and will probably work together more today than ever before.

Staff members from this district with a collaborative approach were unable to define specific guidelines under which allocation decisions were made, but they could explain that each decision was based on whether or not that allocation was necessary for student academic success. Although this district found it difficult to articulate exactly how it has been able to foster systemic thinking among the staff, they did attribute part of their success to leadership from the superintendent:

I don't know how we've done it. We've done it for over ten years. But I think we've employed conscientious people that really care about the big picture. You know? This total quality theme of providing customer satisfaction, we realize at some point, we're all customers. So we've got to be quality customers, if we're going to provide a quality service. [Our superintendent] was a big stickler on that. You know, all systems—all components of the system working together, for the entire system.

The third district that serves as an excellent model of collaborative decision making is also a rural district. This district began using a collaborative approach in 1997, and is currently in the process of formalizing that collaboration. During the past three years, each campus presented their needs to the entire district decision making team, and the team then developed the district budget. The finance officer explained that this collaboration has helped individuals in this district think more systemically:

There are certain people who are protective of their area, and until they can see the whole picture, they aren't going to be willing to work in the system ... And that's what we've been trying for the last several years, trying to get people to look at the whole spectrum as Styles ISD as a whole and not just think about your students today, but those students tomorrow.

In a continuing effort to improve, this district is now trying to ensure that it carefully evaluates budget decisions. This desire has led it to formalize the process. Staff members now organize their budget process using a team of teachers, administrators, parents, and members of the business community. Each campus is represented on the team. The district decision making team handbook describes the duties as “reviewing expenditures and preparing a budget that will best utilize available funds to create a systematic approach for managing accounts,” and notes that this may include planning, conducting needs assessments, reviewing expenditures, helping with the preparation of campus budgets, making sure that purchase orders are correctly submitted, and tracking expenditures.”

In the future, interview subjects report that this team will analyze proposals submitted from different groups across the district describing what they believe they could accomplish with specific amounts of money. The budget will be developed around these proposals. Individuals from this district expressed hope that the new process will help them keep the positive elements of collaboration that have existed in the district for some time, while moving to a more “scientific” approach to decision making.

Districts with collaborative budget processes involve many individuals from different parts of the district. All three districts profiled above are performing at high levels. Their leaders express the belief that collaboration has helped individuals in their district gain a deeper understanding of the total system. They also all expressed the importance of student academic need driving the budget process. Needs-based budgeting is discussed in the next section.

Needs-Based Budgeting

Interview subjects at successful focus districts were able to describe district goals for student learning. These districts reported more flexibility in approaches to resource allocation, whereas other districts used allocation formulas to distribute most resources. All focus districts reported using site-based budgeting and allowing campuses to have control over their budgets, but the degree to which campuses exercised real decision making authority varied greatly. For example one chief financial officer who described a site-based decision making process in his district also estimated that the amount of money over which campuses had control was somewhere around one half of one percent of the total district budget.

Districts that could be described as “formulaic” in their approach typically allocated personnel units based on enrollment. Other expenditure functions such as funds for maintenance, supplies, and professional development may also be allocated based on staffing or student counts. Some districts allocate resources to campuses based on the previous year’s allocations, and one finance officer from a *level three* district explained that even when monies were allocated to campuses for decentralized decision making, departments within campuses also typically used a historical approach to building their budgets. Another *level three* district noted that when it faced a budget shortfall, it used an across-the-board cut rather than engaging in an assessment of where resources were needed most to support student academic performance. The chief financial officer reported that across-the-board cuts helped keep the peace, but did not mention efficient or effective use of educational dollars as an important goal.

Many *level one* and some *level two* districts described flexible and outcome-oriented budgeting. These districts also reported that they were unique in this approach. The finance officer from one of these *level one* districts noted that “we make the decisions based on the business efficiency and effectiveness [model]” and said that two campuses with similar enrollments can have very different needs:

Where you have at-risk children, you may need more resources. And I think, traditionally, we have offered those campuses additional resources to use on whatever they’ve felt they needed to have to be successful.

Another *level one* district also discussed the importance of providing additional resources to campuses that may serve high-need students. These equity issues reveal some of the problems with formula-based allocation within districts. One *level one* district noted that it would have been unable to enforce the high standards that it had set without allowing for some flexibility in expenditures. An interview subject commented on this by noting that campuses without the power to manage resources in meaningful ways can use this lack of control as an excuse for failure.

Before districts can implement needs-based budgeting, they must have accurate information regarding performance. The next section of this report describes the ways in which districts are gathering information to help them identify areas of need.

The Use of Data in Decision Making

Districts that are engaging in needs-based budgeting (as opposed to formula-based budgeting) are also using data to measure the effectiveness of their programs and identify areas for growth. According to many of the twenty-one focus districts, the implementation of the state accountability system and state-mandated tests may have served as a catalyst for change to a more data-driven approach to decision making. Although many focus districts were unable to point to formal evaluation processes, they could describe the importance of using data in decision making, and virtually all of them mentioned the TAAS as an important measure of success. Others, including the districts described as engaging in collaborative decision making, could articulate more formal evaluation processes. The personnel director from a *level one* district described how the accountability system has changed both the role of campus leaders and the types of individuals that fill those positions:

The accountability measures from the state over the past seven or eight years have weeded out the . . . campus managers as opposed to instructional leaders. . . . I think when that big shift came with all the accountability, people became aware of what is needed [to be successful].

The finance officer from another *level one* district described how information from TAAS performance has helped move district personnel toward a more equity-focused approach to education. The information has forced them to examine performance data disaggregated by racial/ethnic group and by income level. He explained that “TAAS has put accountability. . . into the system. No longer can you educate [only] a specific segment of the population and get away with it. . . . We are going to show that we educate [all students].”

However, TAAS performance information was not the only data that district personnel reported examining to help them make decisions. Two *level one* districts described other information-gathering techniques (such as survey research) conducted on a broad variety of topics. These districts were examining the reasons for teacher turnover by surveying teachers who had decided to leave the district, measuring the attitudes of current teachers with respect to work climate, and measuring the attitudes of students who had graduated from the district.

All three focus districts whose information gathering techniques were described above reported that information gathering was part of the planning and budgeting process. They used it to identify problems and to measure their successes. These districts also spent time recognizing those successes, sometimes through simply acknowledging one another’s work and sometimes through monetary awards.

Performance Pay

There is growing acceptance both in the educational community and among the general public of performance-based pay, with districts across the nation beginning to experiment with the idea of moving away from the single salary schedule (Odden and Busch, 1998, p. 197). Though many of the focus districts reported considering the use of performance pay, only three were using a form of merit pay, and the merit pay systems were based on the Texas accountability system.

A school-based compensation system may provide a salary bonus to individuals employed in a school that meets or exceeds student performance improvement targets. According to school finance experts, performance awards can be beneficial not only because they provide motivation, but also because they clarify district goals (Odden & Archibald, 2001, pp. 59-72). Two of the three focus districts had implemented a school-based performance award system, and both of these were *level one* districts. These districts allowed the campuses to determine how to spend their awards, although there were norms established in both districts that strongly encouraged campuses to spend this money on bonuses for all staff. In fact, one of these districts reported that last year, between 1,100 and 1,200 of the district's 1,600 employees (about 70 percent) received some form of monetary compensation linked to performance.

The performance award system for schools in one *level one* district had been in existence for three years and involved paying salary bonuses to schools that were rated either exemplary or recognized by the state's accountability system. In this district, campuses had money to distribute as they saw fit based on the campus ratings, the percentage of students participating in the accountability system, the percentage of students passing all parts of the TAAS, and the percentage of students whose performance exceeded a certain score. The specific amounts of money to be allocated to each campus are presented in Appendix E. This district was unique among the focus districts because it also used a form of sanctions. All administrators whose campuses did not achieve a rating of recognized or above (new administrators were given a three-year period to achieve this goal) had their salaries frozen until they were able to improve performance. However, none of the other districts interviewed used any form of sanction.

Another *level one* district using performance-based awards was also allocating money to campuses based on campus accountability ratings. However, this district made adjustments to their awards based on campus demographics. Awards were dependent, in part, on performance of specific student populations (performance results for racial/ethnic and low-income populations are reported by campus). For example, campuses that serve larger numbers of economically disadvantaged students receive larger awards. An administrator from this district also noted that some campuses had elected to use their awards to buy technology or other needed equipment for their campuses.

The third district using a performance-based award program was a *level three* district and also granted awards based on campus-wide TAAS performance. However, this award was available only to principals and was only \$300 to \$400 per campus. The finance

officer for that district did not believe that these awards were large enough to provide significant motivation, but thought that they probably did send a message to those principals that they were appreciated by the district.

Finally, one of the *level two* districts is currently in the process of formulating a performance-based pay plan. However, this district has met with considerable resistance from staff. The district established a committee to study the possibility of implementing performance pay, but was unable to reach consensus regarding the criteria by which staff would be evaluated. This district also felt the need to use some measure other than TAAS for assessing the performance of non-teaching faculty. Although the personnel officer believed that all staff in the district were involved in the performance of students on the TAAS, she said, “It’s hard to tell a plumber, ‘you don’t get a raise because the school that you’re assigned to didn’t do well on the TAAS.’”

It appears that individuals in this district view merit pay as a punitive measure, whereas personnel from other districts seem to see it as a reward, at least with respect to non-administrative employees. It also appears that this *level two* district was experimenting with individual merit pay, whereas the two districts that reported having performance pay programs that were successful had implemented school-wide incentive plans.

Although the majority of the focus districts have no merit pay system in place, four had either implemented it or were studying the possibility of implementing it. Two of these districts reported that merit pay had a positive affect, while one reported a modest benefit and the fourth reported failure to gain sufficient support among staff members. The two districts that saw their programs as successful used whole-school success as the criterion for awards and also allowed successful campuses to determine how to allocate their awards. Many of the focus districts were able to name other Texas school districts that were using performance pay in some form. These reports suggest a developing trend in Texas schools.

Characteristics of Finance Officers

Several finance officers, particularly those in *level one* districts, displayed a high level of enthusiasm and dedication to their work. These individuals were knowledgeable about the state accountability system as well as the ratings their districts and schools were receiving. They expressed a commitment to district and state goals and showed a deep interest in the students that they serve and in broader educational issues. They were opinionated about educational issues and policies and had educational philosophies. Moreover, these finance officers reported that their work was directly related to student achievement in their districts, and often they were able to describe, in depth, the academic performance of their district’s students on state-mandated TAAS exams.

The finance officer from a *level one* district worked to change his district’s performance award system so that it would include central office staff as well as campus-level staff because he believed that all members of the district had an impact on student performance. He noted:

In the business office we were excluded from [performance rewards], which I didn't feel very good about because I'm part of the student performance. It took me a while to get them convinced that we were part of it too and we needed to be included.

This finance officer expressed pride in the district's performance, noting that "we keep raising the bar. We set a goal and we reach it and we raise the bar."

However, this finance officer was not only passionate about providing adequate resources for the students of his district but also explained that it is important to spend taxpayer money in an efficient and effective way. When he was new to his position in the business office, he explained, he spent one day at the tax office, watching people come in to pay their property taxes:

We had all these retired people coming in and paying taxes with bags of coins. In other words they were giving me, or giving the district, the money they need to eat. They were not eating because they had to pay their taxes so they could keep their house, or that was the impression that I had. . . . But that just really brought to light what I was doing, that . . . there's a human side to what we do.

Another finance officer expressed a commitment to district and state goals and showed a deep interest in students by saying,

In order for the students to be successful you need to provide them with the proper resources, and that's not only human resources, but also finance . . . anything that makes the process work. So, I really feel that the main purpose, or the main objective of the business office is to support students.

In other focus districts, the finance officers seemed detached from concerns and operations of the school district that were not strictly finance-related issues. These administrators deferred questions about student performance, issues of equity, and special programs to others in the district. They were often unable to describe how their districts were performing compared to others in the state, and were less able to articulate an educational philosophy related to school and district goals for student learning.

Equity Issues

One recurring theme in the interviews was administrator concern over the relationship between economically disadvantaged students, resource allocation practices, and achievement. While most focus districts tend to allocate resources on the basis of school enrollment, researchers found some exceptions, primarily among *level one* districts that tried to ensure that economically disadvantaged students were successful. One finance officer at a large *level one* district reported that he factors in economically disadvantaged

students in the allocations by changing the focus of his compensatory education funds. He explained his approach this way:

You've got at-risk students. The state funds compensatory education funds based upon the best six months' free and reduced lunch count. But I allocate the funds based upon the at-risk students because the money comes in for at-risk students.

In an effort to see that compensatory education funds support at-risk students, this district now allocates these monies based on academic need. This type of distribution was also found in another *level one* district.

Other districts have solved the issue of equalizing resources by re-drawing boundary lines. A large *level two* district re-drew attendance boundaries to correct a situation where a single campus was homogeneous. The interview subject stated, "When you have four elementary campuses, you can't have one that's totally different from the others." Once the campuses had a more equal demographic distribution, the district was able to set up programs "based on the same thing at each campus, without looking at specific populations." The finance officer said the end result was that "the teachers are happy and the parents are happy." He admitted that re-drawing attendance boundaries was a difficult process to go through, but explained, "You have to do what's best for the kids and look at it from the district perspective and not build campuses that aren't the same."

A *level three* district also re-drew boundary lines to equalize the number of students receiving free and reduced lunches on each campus. The finance officer of that district also found some opposition to the process but explained, "the bottom line was, we had four very comparable campuses in the end, so we didn't have concerns over which campuses children attended."

Equity also became a factor when districts discussed the accountability ratings. Most *level one* districts did not take issue with the rating system, making statements like, "We don't worry about districts around us. We want to be the best in the state." Other *level one* districts felt the rating system was acceptable, seeing themselves as competitive. When discussing economically disadvantaged students, these districts felt that some students need more resources, but did not perceive this to be a problem. One *level one* personnel director illustrated the point this way:

There're no excuses. We've actually eliminated excuses. With our data points and our performance continuing to rise, we no longer have the skeptics that say you can't teach a kid because he's economically disadvantaged or he's of color or whatever.

However, the discussion of the rating system with some *level two* and *level three* districts not only revealed negative reactions to the system, but also the perception that the main influence on district ratings was the students in the system rather than the instructional approach or teacher expertise. One personnel director stated "you're going to have a

little less chance making an at-risk child successful than the child that comes from the home where both parents are educated. It's just a difference and it makes your job harder.”

Overall, many of the focus districts were aware of equity issues in their districts and were taking positive steps, despite instances of opposition, to distribute resources to support high academic performance for all students. Some districts budgeted resources based on need, and others worked to restructure attendance boundaries or instructional programs to equalize the entire system. The districts that focused on maintaining high expectations for their students and staff, regardless of whom they were compared to, were most likely to be in the *level one* category. Other districts, mostly large *level two* or *level three* districts, felt that some of their students provided an overwhelming challenge to the district, and felt the rating system highlighted such disadvantages.

Summary

Based on interviews, researchers found that all districts recognize the teacher shortage in Texas and most have implemented some type of financial incentive to improve teacher recruitment or retention. A few districts have experimented with financial awards related to student performance, but most are hesitant to venture into this arena because it is controversial, even among teachers whom the awards are intended to benefit. *Level one* districts tend to focus more directly on finding ways to serve all students and achieve higher academic performance levels. They accomplish this using data to identify needs, planning collaboratively within the district, allocating resources to campuses in a manner dictated by student needs rather than allocation formulas, and making efforts to address past financial inequities among campuses.

In addition, the higher-performing *level one* districts were more willing to reallocate funds if there was evidence that a change would yield positive results. Personnel interviewed in the *level one* districts viewed their role in the district as an integral part of a larger system, and reported practicing student-centered administrative practices approaches such as needs-based budgeting. It is important to add that all three levels of focus districts displayed varying aspects of the same traits. The distinctions among higher and lower performing districts are shades of gray rather than black and white.

Conclusion

This study yielded consistent findings regarding how Texas school districts allocate resources with respect to the amounts of money spent for expenditure functions and program areas and with respect to district budget processes. Districts with higher student academic performance spend more per-pupil on instruction and regular education programs. Expenditures on instruction account for almost sixty percent of operating expenditures statewide. Program expenditures for regular education account for nearly two-thirds of program expenditures.

The analysis reported here provides evidence of a direct and positive relationship between resource allocation and district performance. Districts with the highest student performance, as measured by the Texas accountability system—the *level one* districts—spend more on resources (measured in terms of per-pupil expenditures) than districts with lower student performance. Specifically, *level one* districts spend more on instruction, instructional resources, school leadership, general administration, and co-curricular activities. Their total operating expenditures per-pupil are also higher than those of districts with lower levels of student performance. In terms of instructional programs, *level one* districts spend more per-pupil on regular education and career and technology education.

A separate analysis of nine strong-improvement districts (districts that dramatically increased their accountability ratings between 1996-97 and 1998-99) also demonstrated a link between resource allocation and student achievement. Expenditures for strong-improvement districts are higher than the state average for most expenditure functions and higher than the expenditures for the group of 283 *level one* districts as well.

Interview data show that *level one* districts are more likely to use a needs-based budgeting approach than other districts. These high-performing *level one* districts often involve teachers and other staff and community members in their district-level budgeting process. They consider student performance data when developing priorities and establishing program and budget goals. Administrators in *level one* districts expressed a commitment to making decisions that ensure success for all students, even if that involves spending more on student groups that have greater needs as revealed in performance data.

Many focus districts also seek innovative ways to alleviate teacher shortages. Some are working within their own districts to help aides and paraprofessionals attend college and gain certification. Some focus districts explained that they are examining ways to retain the teachers already working in their districts by implementing mentoring programs. A few *level one* districts have also begun using campus-wide performance incentive programs that they believe help their districts maintain a focus on achievement.

These findings show that open and collaborative decision making processes can be used to support improved student performance. In addition, the research suggests that school administrators who participate in data-driven, student-centered, and results-oriented budget processes may be able to make more effective use of resources than administrators who follow more rigid allocation formulas for distributing resources to campuses and programs. Districts seeking to improve student academic performance should examine levels of expenditures for instruction (particularly in the regular program) to direct adequate resources to this function. Educators, administrators, and local policymakers should make every effort to examine the relationship between spending and student outcomes in their own districts and campuses with the goal of allocating (or reallocating) resources so that they directly support improved student achievement.

Implications for Further Research

While this study has revealed some important district-level practices that support student achievement, some of the findings point to a need for further investigation.

In-depth district case studies might be helpful to gain better understanding of district resource allocations among campuses. Several focus districts report that they are in the process of implementing large-scale changes that they hope will positively impact their performance. It would be very useful to study these districts during the implementation phase to determine the impact of the changes.

An investigation of links between resources such as instructional materials and student academic performance at the campus level could yield important information about resource equity and approaches that improve student learning.

Appendices

Appendix A Texas Accountability Rating Standards 1997–1999

Accountability Rating Standards for 1997

	Exemplary ¹	Recognized ¹	Academically Acceptable / Acceptable	Academically Unacceptable / Low-Performing
Base Indicator Standards				
Spring '97 TAAS <ul style="list-style-type: none"> • Reading • Writing • Mathematics 	At least 90.0% passing each subject area (all students and each student group ²)	At least 75.0% passing each subject area (all students and each student group ²)	At least 35.0% passing each subject area (all students and each student group ²)	Less than 35.0% passing any subject area (all students or any student group ²)
1995–96 Dropout Rate	1.0% or less (all students and each student group ²)	3.5% or less (all students and each student group ²)	6.0% or less (all students and each student group ²) ³	Above 6.0% (all students or any student group ²) ³
1995–96 Attendance Rate	At least 94.0% (grades 1-12) ⁴	At least 94.0% (grades 1-12) ⁴	At least 94.0% (grades 1-12) ⁵	Less than 94.0% (grades 1-12) ⁵

Source: *1997 Accountability Manual*, Texas Education Agency.

¹ A district cannot be rated Exemplary or Recognized if it has one or more low-performing campuses.

² Student groups are African American, Hispanic, White, and Economically Disadvantaged.

³ If a district or campus would be rated Academically Unacceptable/Low-Performing solely because of a dropout rate exceeding 6.0% for a single student group (not all students), then the district or campus will be rated Academically Acceptable/Acceptable if that single dropout rate is less than 10.0%, and has declined from the previous year.

⁴ Districts may appeal to use 1996–97 attendance rates if failure to meet the attendance rate standard is the sole reason that the district or one of its campuses did not earn the Exemplary or Recognized rating.

⁵ If failure to meet the attendance rate standard is the sole reason that a district would receive an accreditation status of Academically Unacceptable or a campus rating of Low-Performing, then that requirement will be waived.

Accountability Rating Standards for 1998

	Exemplary ¹	Recognized ¹	Academically Acceptable / Acceptable	Academically Unacceptable / Low-Performing
Base Indicator Standards				
Spring '98 TAAS <ul style="list-style-type: none"> • Reading • Writing • Mathematics 	At least 90.0% passing each subject area (all students and each student group ²)	At least 80.0% passing each subject area (all students and each student group ²)	At least 40.0% passing each subject area (all students and each student group ²)	Less than 40.0% passing any subject area (all students or any student group ²)
1996–97 Dropout Rate	1.0% or less (all students and each student group ²)	3.5% or less (all students and each student group ²)	6.0% or less (all students and each student group ²) ³	Above 6.0% (all students or any student group ²) ³
1996–97 Attendance Rate	At least 94.0% (grades 1-12) ⁴	At least 94.0% (grades 1-12) ⁴	At least 94.0% (grades 1-12) ⁵	Less than 94.0% (grades 1-12) ⁵

Source: *1998 Accountability Manual*, Texas Education Agency

¹ A district cannot be rated Exemplary or Recognized if it has one or more low-performing campuses.

² Student groups are African American, Hispanic, White, and Economically Disadvantaged.

³ If a district or campus would be rated Academically Unacceptable/Low-Performing solely because of a dropout rate exceeding 6.0% for a single student group (not all students), then the district or campus will be rated Academically Acceptable/Acceptable if that single dropout rate is less than 10.0%, and has declined from the previous year.

⁴ Districts may appeal to use 1997–98 attendance rates if failure to meet the attendance rate standard is the sole reason that the district or one of its campuses did not earn the Exemplary or Recognized rating.

⁵ If failure to meet the attendance rate standard is the sole reason that a district would receive an accreditation status of Academically Unacceptable or a campus rating of Low-Performing, then that requirement will be waived.

Accountability Rating Standards for 1999

	Exemplary ¹	Recognized ¹	Academically Acceptable / Acceptable	Academically Unacceptable / Low-Performing
Base Indicator Standards				
Spring '99 TAAS <ul style="list-style-type: none"> • Reading • Writing • Mathematics 	At least 90.0% passing each subject area (all students and each student group ²)	At least 80.0% passing each subject area (all students and each student group ²)	At least 45.0% passing each subject area (all students and each student group ²)	Less than 45.0% passing any subject area (all students or any student group ²)
1997–98 Dropout Rate	1.0% or less (all students and each student group ²)	3.5% or less (all students and each student group ²)	6.0% or less (all students and each student group ²) ³	Above 6.0% (all students or any student group ²) ³
1997–98 Attendance Rate	At least 94.0% (grades 1-12) ⁴	At least 94.0% (grades 1-12) ⁴	At least 94.0% (grades 1-12) ⁵	Less than 94.0% (grades 1-12) ⁵

Source: 1999 *Accountability Manual*, Texas Education Agency

¹ A district cannot be rated Exemplary or Recognized if it has one or more low-performing campuses.

² Student groups are African American, Hispanic, White, and Economically Disadvantaged.

³ If a district or campus would be rated Academically Unacceptable/Low-Performing solely because of a dropout rate exceeding 6.0% for a single student group (not all students), then the district or campus will be rated Academically Acceptable/Acceptable if that single dropout rate is less than 10.0%, and has declined from the previous year.

⁴ Districts may appeal to use 1998–99 attendance rates if failure to meet the attendance rate standard is the sole reason that the district or one of its campuses did not earn the Exemplary or Recognized rating.

⁵ If failure to meet the attendance rate standard is the sole reason that a district would receive an accreditation status of Academically Unacceptable or a campus rating of Low-Performing, then that requirement will be waived.

Appendix B

Expenditure Function Descriptions

The quantitative indicators used in this report are based on functions and program intent codes from the TEA *Financial Accounting and Reporting Resource Guide*, which group general operational expenditures in a school district. This report examines per-pupil operating expenditures for the following functions as listed in the TEA *Financial Accounting and Reporting Resource Guide*:

- Instruction—activities that deal directly with the interaction between teachers and students, such as salaries for classroom teachers, teacher aides, and substitute teachers.
- Curriculum development and instructional staff development (referred in text as *staff development*)—expenditures that are directly and exclusively used to aid instructional staff in planning, developing and evaluating the process of providing learning for students, such as expenses for teacher training and staff that research and develop new and innovative instruction.
- Instructional leadership—expenditures used for managing, directing, supervising, and providing leadership for staff who provide instructional services, such as instructional supervisors, special population or educational program coordinators or directors and related staff.
- School leadership—expenditures that are used to direct and manage a school campus, such as principals, assistant principals and related staff.
- Guidance, counseling and evaluation (referred in text as *guidance and counseling*)—expenditures used for counseling students with respect to career and educational opportunities and assessing and testing students’ abilities, aptitudes and interests, such as counselors and related staff, psychologists, and diagnosticians and staff who research and evaluate the effectiveness of program intent codes.
- Social work—expenditures for investigating and diagnosing student social needs, such as truant officers, social workers, and non-instructional home visitors.
- Co-curricular/extracurricular activities (referred in the text as *co-curricular*)—expenditures for school-sponsored activities during or after the school day that are not essential to the delivery of services for *instruction* (as described above), such as athletic salary supplements paid for coaching, athletic directors and trainers, athletic supplies and equipment and student groups such as Future Farmers of America and National Honor Society.
- General administration—expenditures for purposes of managing or governing the school district as an overall entity, such as salary of the superintendent, budgeting and fiscal affairs, and human resources.

Appendix C

Interview Protocols

Financial and Personnel Questions

Introduction

In this study we are examining resource allocation practices at the district level that support student achievement. We hope to identify effective policies that we can share with other districts across the state. Specifically, we are interested in

- Decision making practices
- Teacher and administrator selection and retention
- The use of achievement data
- General resource allocation practices

1. Talk about your responsibilities in the district and how long you've been in this position.
2. What did you do prior to this that prepared you for the position?
3. Part of this study involves comparing districts to one another in order to identify spending patterns. Are there any districts that you think are appropriate to match to yours, and why would you choose those districts?
4. Describe your budgeting process. Who is involved in decision making and how is consensus reached?
5. How do you report to the Board?
6. How many times a year do you amend the budget?

General Funding

1. What is special or unique about your district that influences how you allocate resources that may be different from other districts?
Note: anything specific to being small?
2. How do you generate other funds for your district? (Grants, other resources)
3. How accurately have you been able to project and plan for changes in enrollment from year to year? What challenges has your district faced in light of these changes?

Salary Costs

1. How are teachers recruited, selected, and assigned?
 - a) who recruits
 - b) what are the recruiting methods
 - c) who makes assignment decisions (campus or district decision?)
2. How are administrators recruited, selected, and distributed across the district?
 - a) Where are positions advertised?
 - b) How would you describe your district's supply of administrators and turn-over?
 - c) How do you supply new administrators?
3. Can you talk about teacher and administrator turnover in your district?
 - a) Do you think turnover is a significant issue in your district?
 - b) If so, what are the implications of high turnover for a particular campus?

- c) How do you attempt to prevent turnover?
4. Do you feel that you have an adequate pool of applicants to select from for teachers and administrators?
 5. Do you offer teachers bonuses or stipends to encourage them to teach particular subject areas?
 6. Outside of state mandates, how is class size determined?
Note: may be different at different grade levels.
 7. We understand that enrollment changes from year to year and even during the course of the school year. How do you handle staffing in light of this?
Note: Find out about surplus policy
 8. Do you keep track of teacher quality indicators such as experience levels, certification in subject area, and advanced degrees?
 9. How do you support and encourage teachers and administrators as they pursue higher education?

Other Staff Costs

1. How do you determine how many aides and assistants to hire for each campus?

Professional Development

1. Describe the professional development required of your teachers.
2. How do you evaluate your professional development program?
3. We know that professional development occurs at different levels (district, campus teacher). How does your district decide how much of the budget to allocate at these levels?

Special Programs General

1. What additional special programs does your district offer outside of the typical school program? (after school programs, tutoring, etc.)
2. How are these programs funded?
3. How are these programs staffed?
4. Is there an evaluation system for your district's programs, and how is this system used to help make resource allocation decisions?
Note: includes all programs (bilingual, special ed., etc)
5. How do you make decisions about how you allocate resources to campuses, such as additional counselors, diagnosticians, compensatory education money, Title I money, and grants like the ninth grade initiative?

Fiscal Awards

1. What type of performance-based awards or incentives are provided within your district?
 - a) district-wide
 - b) campus-wide
 - c) teachers
 - d) administrators
2. Are any incentives awarded specifically for TAAS performance? (describe)

3. What fund sources are used for these awards? Are there documents that supply this information?
4. What are the criteria for awards and how are they used?
5. What do you think has been the impact of these awards?

General Closing

1. Has your district experienced any changes over the last few years in the allocation of resources? (prompt: demographics, finance system)
2. How does your district monitor student progress over time?
3. What measures do you use besides TAAS?
4. How do you use this data to make decisions about how to allocate resources (both staff and non-staff resources)?
5. Before we end the interview, what other information do you think might be important for us to know about resource allocation in your district?

Financial/Business Interview Questions

Introduction

In this study we are examining resource allocation practices at the district level that support student achievement. We hope to identify effective policies that we can share with other districts across the state. Specifically, we are interested in

Decision making practices

Teacher and administrator selection and retention

The use of achievement data

General resource allocation practices

1. Talk about your responsibilities in the district and how long you've been in this position.
2. What did you do prior to this that prepared you for the position?
3. Part of this study involves comparing districts to one another in order to identify spending patterns. Are there any districts that you think are appropriate to match to yours, and why would you choose those districts?
4. Describe your budgeting process. Who is involved in decision making and how is consensus reached?
5. How do you report to the board?
6. How many times a year do you amend the budget?

General Funding

1. What is special or unique about your district that influences how you allocate resources that may be different from other districts?
2. How do you generate other funds for your district (grants, other resources)?
3. How accurately have you been able to project and plan for changes in enrollment from year to year? What challenges has your district faced in light of these changes?

Salary Costs

1. Outside of state mandates, how is class size determined?
Note: may be different at different grade levels.
2. How do you determine how many aides and assistants to hire at each campus?
3. Do you offer teachers bonuses or stipends for certain areas?
(subject areas, additional assignments, tenure in district, low SES)
4. If so, has this been successful in increasing supply as needed?
5. Do you offer administrators bonuses or stipends to encourage them to work in particular areas of the district?
6. If so, has this been successful in increasing supply as needed?
7. How or where are these monetary incentives tracked in your budget?
8. What else do you do to address areas of shortage in your district?

Other Staff Costs

1. How do you determine how many aides and assistants to hire at each campus?

Professional Development

1. We know that professional development occurs at different levels (district, campus teacher). How does your district decide how much of the budget to allocate at these levels?

Special Programs General

1. How do you make decisions about how you allocate resources to campuses such as additional counselors, diagnosticians, compensatory education money, Title I money, and grants like the ninth grade initiative?
2. What additional special programs does your district offer outside of the typical school program? (after school programs, tutoring, etc.)
3. How are these programs funded?
4. Is there an evaluation system for your district's special programs, and how is this system used to help make resource allocation decisions?

Fiscal Awards

1. What type of performance-based award or incentives are provided within your district?
 - a) district-wide
 - b) campus-wide
 - c) teachers
 - d) administrators
2. Are any incentives awarded specifically for TAAS performance? (describe)
3. What fund sources are used for these awards? Are there documents that supply this information?
4. What are the criteria for awards and how are they used?
5. What do you think has been the impact of these awards?

General Closing

1. Has your district experienced any changes over the last few years in the allocation of resources? (prompt: demographics, finance system)
2. How does your district monitor student progress over time?
3. Do you think that TAAS is a good measure of student achievement, and what other measures do you use?
4. How do you use this data to make decisions about how to allocate resources?
5. Before we end the interview, what other information do you think might be important for us to know about resource allocation in your district?

Personnel Questions

Introduction

1. Describe your position in the district. How long have you held this position?
2. What did you do prior to this position?

General Funding Questions

1. What is special or unique about your district that influences how you allocate resources that we may not see in other districts?

Teacher Costs and Teacher Resources

1. How would you describe the teacher turnover rate in your district?
2. Do you think turnover is a problem in your district?
3. How do you prevent turnover?
4. What is your district transfer policy for teachers?
5. Who makes transfer decisions?
6. Outside of state mandates, how is class size determined?
7. How does your district address changes in enrollment? (surplus, etc.)
8. How are teachers recruited, selected, and assigned?
 - a) who recruits
 - b) what are the recruiting methods
 - c) who makes assignment decisions (campus or district decision?)
9. What qualities do you seek in teachers for your district?
10. How does your district ensure equal distribution of experienced teachers? (are experienced teachers in mostly high SES schools?)
 - a) location of newly hired teachers
 - b) location of experienced teachers
 - c) distribution among grades
11. Do you offer bonuses or stipends for certain areas? (subject areas, additional assignments, tenure in district, low SES)
12. If so, has this been successful in increasing supply as needed?
13. Do you use any non-monetary methods to address areas of shortage in your district?

Professional Development

1. How much professional development is required of your teachers?
2. Who decides what type of professional development to offer?
3. How do you evaluate your professional development program?

Program Costs

1. Have you noticed any changes over the past few years in the following special programs?
 - a) special education
 - b) bilingual
 - c) compensatory education
 - d) career and technology

- e) gifted and talented
- 2. To what do you attribute these changes? (enrollment changes, costs, etc.)

Special Programs General Questions

1. What additional special programs does your district offer outside of school? (after school programs, tutoring, etc.)
2. What is the purpose of these programs?
3. What type of annual review process does the district use to determine effectiveness of different programs (outside of compliance reviews) (bilingual, special education, comp ed., after school etc)?
4. How is this information used and reviewed?
5. What actions do you take if a program is failing to meet its intended goals?

Non-Teacher Salaries: Other Staff Costs

1. How are administrators recruited, selected, and distributed across the district?
 - a) Where are positions advertised?
 - b) How would you describe your district's supply of administrators and turn-over?
 - c) How do you supply new administrators?
2. What qualities do you seek in administrators for your district?
3. Some districts have difficulty recruiting and retaining high quality administrators in low SES schools. Do you think this is an issue for your district?
4. If so, how do you deal with it?
5. Are there any financial incentives for administrators to work in particular areas of the district?
6. If so, how are these incentives tracked on the budget?

Non-Teacher Salaries: Other Staff Costs

1. How are teacher's aides and assistants salaries determined?
2. How do you determine how many to hire?
3. Who makes those hiring decisions?
4. Is there an ample pool of qualified aides and assistants for hiring?
5. Describe your turnover rate for these positions.
6. What do you do to prevent turnover?

Fiscal Awards

1. What type of performance-based awards or incentives are provided within your district?
 - a) district-wide
 - b) campus-wide
 - c) teachers
 - d) administrators
2. Are any incentives awarded specifically for TAAS performance? (describe)
3. What are the criteria for awards and how are they used?
4. What do you think has been the impact of these awards?

General Closing

1. Do you have any specific type of performance management system in place to track and analyze student performance? (describe)
2. a) If not, do you have any future plans to develop one?
b) If so, how long has this system been in place?
3. Is this information given to administrators? Teachers? Parents?
4. Describe training personnel receive in interpreting/using your performance management system?
5. Have you found this system to be useful to your district?

Appendix D Results of Pairwise Analyses

Pairwise Comparisons of Per-Pupil Expenditures by Function

Dependent Variable	Comparison	Mean Difference	Standard Error	Significance
Instruction	Level one to two	388.46	62.25	.000*
	Level one to three	447.36	86.05	.000*
	Level two to three	58.90	80.91	.467
Instructional Resources	Level one to two	28.21	8.31	.001*
	Level one to three	37.94	11.49	.001*
	Level two to three	9.73	10.80	.368
Instructional Leadership	Level one to two	-22.77	5.32	.000*
	Level one to three	-21.12	7.35	.004*
	Level two to three	1.64	6.91	.812
School Leadership	Level one to two	64.27	11.68	.000*
	Level one to three	73.79	16.15	.000*
	Level two to three	9.52	15.18	.531
Social Work	Level one to two	-3.11	1.11	.005*
	Level one to three	-4.67	1.53	.002*
	Level two to three	-1.56	1.44	.279
Co-curricular	Level one to two	23.97	8.90	.007*
	Level one to three	35.94	12.30	.004*
	Level two to three	11.97	11.56	.301
General Administration	Level one to two	161.01	20.54	.000*
	Level one to three	140.78	28.39	.000*
	Level two to three	-20.22	26.70	.449

* Significant at the 0.006 level which adjusts for the number of tests conducted

Pairwise Comparisons of Per-Pupil Expenditures by Program

Dependent Variable	Comparison	Mean Difference	Standard Error	Significance
Regular Education	Level one to two	427.66	58.50	.000*
	Level one to three	412.65	80.86	.000*
	Level two to three	-15.02	76.03	.844
Career & Technology Education	Level one to two	30.45	10.42	.004*
	Level one to three	47.46	14.41	.001*
	Level two to three	17.01	13.55	.210

* Significant at the 0.05 level.

Appendix E

Performance Pay Plan of a Level One District

Exemplary Schools

For recognized schools, funds shall be allocated to each campus in the following manner:

\$400.00 shall be allocated for each classroom teacher unit

\$ 75.00 shall be allocated for each paraprofessional unit

Additional funds shall be allocated for the following categories:

A. Percentage of youngsters in accountability system: (*tested*)

70% to 79% \$25.00 – allocated for each classroom teacher unit

80% to 89% \$50.00 – allocated for each classroom teacher unit

90% to 100% \$75.00 – allocated for each classroom teacher unit

1/3 of classroom teaching allocation allocated for paraprofessionals

B. Percentage of youngsters passing all tests:

80% to 89% \$25.00 – allocated for each classroom teacher unit

90% to 100% \$50.00 – allocated for each classroom teacher unit

1/3 of classroom teaching allocation allocated for paraprofessionals.

C. Percentage of youngsters passing at the 90 TLI:

50% to 59% \$25.00 – allocated for each classroom teacher unit

60% to 69% \$50.00 – allocated for each classroom teacher unit

70% to 79+% \$75.00 – allocated for each classroom teacher unit

Recognized schools receive \$200.00 for each classroom teacher unit and about 25% to 50% of what exemplary schools receive for each of the categories.

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